An Overview of Migrant Marine and Coastal Birds

Synthesis and Analysis of Recent Data

Biotope éditions

Parc naturel régional des Caps et Marais d'Opale

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Editorial

When we talk about bird migration, we immediately think of Cap Gris-Nez, not only as one of the best observation sites in the region but also in France, a nation which is an important crossroads for birds migrating in North-West Europe. It is no doubt for this reason that English, Belgium and German birdwatchers come here to enjoy the show that nature puts on for them every year. It is crucial to improve our understanding of this natural phenomenon and help preserve the sites which the birds pass through or where they spend the winter.

Efforts made by the authorities for a number of years have already started to pay off, improving the quality of key migratory stopover sites and enabling us to explore natural sites without harming them. The work on the "Great Natural Site", managed by the Pas-de-Calais Department, is a major example. The Regional Natural Park has helped finance this publication in acknowledgement of the fascinating work done by a handful of specialists over a number of decades to describe and analyse the passage of migratory birds. The data gathered is both rich and precious, giving rise to a number of important findings.

Wishing you an enjoyable read.

Hervé Poher
President of the Regional Natural Park

Parc naturel régional des Caps et Marais d'Opale

This study has been made possible thanks to the thousands of hours of observations made over many years by ardent bird-watchers. To mention them all by name is an impossible task but we wish them to know that without their enthusiasm for studying the extraordinary migration of birds this book could not have been written. This book is dedicated to every one of them.

This book has been made possible thanks to the financial support of the Parc Natural Regional des Caps et Marais d'Opale.

It has been written by volunteers of several regional naturalist groups: Cap Ornis Baguage, la Station Ornithologique du cap Gris-Nez et le Groupe Ornithologique et Naturaliste du Nord– Pas-de-Calais.

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Prefaces

On the 4-5 April 2014 I was privileged to be invited to take part in a conference, organised by the Parc naturel regional des Caps et Marais d'Opale, on the bird migrations in the Strait of Dover with many references to Cap Gris-Nez which I had first visited fifty-nine years earlier, almost to the day. It was a great pleasure to find that, not only some 80,000 records made by British birdwatchers between 1955 and 1990 and archived with Ludovic Scalabre had been computerized, but that they were of value to the current generation of professional and amateur ornithologists working in the Dover Strait. Over the years many changes have taken place from the impact of man on the environment to changes in the climate which become more apparent each day.The Parc is to be congratulated not only for producing an English edition of this book which has already been published in French but for starting the co-ordination of the observations from the 'funnel' between the North Sea and the English Channel, one of, if not the most important flyway in Western Europe. It is to be hoped that the observatories and major observation points on the coasts of Kent, Sussex and Hampshire together with those in southern Holland, Belgium, and as far west as Normandy, France, will soon join together to co-ordinate and interchange observations in the 'funnel' and thus create a greater understanding of the migrations which take place annually.The coast of northern France from the Belgian border to the Somme has changed tremendously since my first visit in 1955, but for me the attraction of Cap Gris-Nez has never ceased. The magic is in going out at dawn on an autumn morning and hearing the cries of the night migrants, the thrushes, Robins, crests and warblers mingling with those of the diurnal migrants such as the Chaffinches, redpolls and Siskins. Later to go out to the cliffs and watch geese, ducks, shearwaters, skuas, terns and auks migrating, often in impressive numbers is still a wonderful experience.

Philip S. Redman
British ornithologist and initiator of the Cap Gris-Nez monitoring study

Dawn has hardly broken at Cap Gris-Nez but it looks to be a promising day for observations. This early October morning with a wind from the north-west blowing on the cliffs of the Cap has followed on from the passage of a deep depression in the Atlantic. The ornithologists are already in place for a day of sea-watching which, if all goes well will continue until sunset. Between dawn and dusk several thousand birds will pass by: Brent Geese, ducks, skuas, Kittiwakes and Little Gulls as well as terns and auks For those who look up into the sky, numerous passerines may be flying above the cliffs. Perhaps a Long-tailed Skua, a Sabine's Gull, a Leach's Petrel or a Grey Phalarope will pass or, and why not, Little Auks or some other rarity to reward the patience and endurance to the cold, the wind and rain showers. This is Cap Gris-Nez. A magic spot where bird-watchers and birds meet, and bird- watchers inter-mingle under 'unfavourable' weather conditions. It is by far THE best site in France for sea-watching and one of the finest in all of Europe. On these days it is possible to hear Flemish, Dutch and English spoken as well as French. It must be said that Cap Gris-Nez is wonderfully sited being at the narrowest point where the North Sea passes into the English Channel, there being only 34 kms.(22 miles) between the Cap and Dover as the closest point in England.. Birds are drawn into the Strait and pushed by the north-west wind towards the French cliffs. Some come directly from Scandinavia and Siberia such as the Brent Geese and most of the ducks, while others, such as the Great Northern Diver have followed the eastern coasts of Britain and continued southwards to rejoin the Atlantic by the English Channel. Perhaps driven by the winds, as surely is the case for the Sooty Shearwater which passes along the English Channel coasts having flown against the wind in the high latitudes of the North Atlantic. SinceWorld War II ornithologists have been observing at Cap Gris-Nez. The British were the pioneers but have now been succeeded by French sea-watchers (also the Belgians). They are the ones who have taken the initiative to analyse the tens of thousands of hours of observations and the millions of birds which have been patiently counted for several decades. They pay homage to the collective efforts, unique in France by their breadth and duration. And we, the ardent readers, are immensely grateful to them.

P.J Dubois
Ornithologist

Summary of contents

Introduction

A clear understanding of biodiversity is crucial to its preservation. Regional naturalist groups have been studying biodiversity for many decades, with assistance from government organisations, since the beginning of the 1990s.

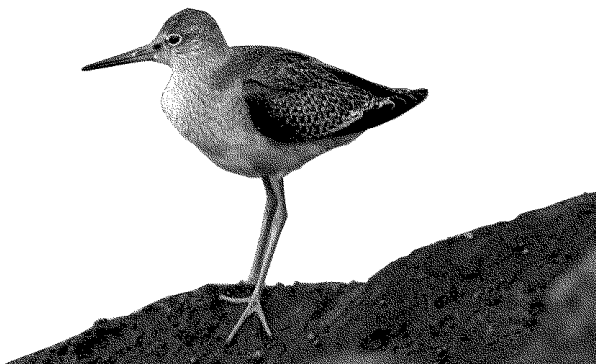
Bird migration is one subject which is studied by both enthusiastic amateur and professional observers.

The aim of this publication is to compile and call attention to data collected by enthusiasts from different local groups, little such data has been published in a single work before. The challenge has been to gather data from seawatching, ringing and visual monitoring of active migration for a large variety of species that pass through the Strait of Dover and fly not only over the Regional Natural Park of the Caps and Marais d'Opale but the region as a whole.

The work has been financed by the European Regional Development Fund (ERDF) as part of a local biodiversity study, action and promotion programme, led by the Regional Natural Park of the Caps and Marais d'Opale.

Other publications will perhaps follow to extend our knowledge of migration in the region, or on a wider North-West European scale, and could provide new insights, especially on global changes.

All the contributors to this first publication hope that it will help make our accumulated knowledge available to a wider naturalist public, whether ornithologist or layman, beginner or expert, who wish to learn more about this fascinating phenomenon.



The responsible governmental partners

Le Parc naturel régional des Caps et Marais d'Opale

The Caps and Marshes of the Opale Regional Natural Park was created in March 2000 as the result of a reorganisation of parks in the Boulonnais and Audomarois regions. The park covers a large area (130,000 hectares, 186,000 inhabitants) and endeavours to maintain a balance between development and the protection of its rich heritage. The 23-kilometre long coast line includes Cap Gris-Nez and Cap Blanc-Nez, the wooded countryside, orchards and the hedgerow banks of the Boulonnais area which, together with the Audomarois marshlands, are the emblematic features of the Park. 154 local communities, 13 intercommunities, 5 Chambers of Commerce, the Councils of the Pas-de-Calais and Nord Departments and The Regional Council of the Nord– Pas-de-Calais have all signed a joint charter for the Park. Numerous partners have also joined the project. The Regional Natural Park both initiates and supports actions that contribute towards regional sustainable development.

The priority and main objective is to increase awareness and the preservation of biodiversity.

Le Conseil général du Pas-de-Calais

Laws on decentralisation have given French departments powers for the protection of biodiversity and rural areas. This comes under the Sensitive Natural Areas policy. The objective of this land acquisition policy, which works in conjunction with that of the Conservatory of the Littoral, is the preservation of natural areas which are open to the general public.

Financing is assured by the levying of a tax on planning permission (Regional Tax for Sensitive Natural Areas - TDENS). The Department owns 600 hectares in the Park. These areas are managed by Eden 62. In 2012 the Department was awarded the title of "Great Natural Site" for the 'Deux Caps'. It coordinates the quality planning programme for the protected site with its local communities which are all covered by the title.

EDEN 62

EDEN 62 is the technical service for the management of Sensitive Natural Areas in the Pas-de-Calais Department. The service manages land belonging to The Conservatory of the Littoral and the Pas-de-Calais Department as well as certain local authority land. Its mission is to preserve and enrich the natural heritage of sites and to welcome and inform the public about protecting this heritage.

The managed sites are open to the public as long as the ecological balance of the site is not put at risk.

Guided discovery tours are available free of charge. Co-operation between the service and naturalist groups ensures the continuous monitoring of migration within the park.

Parc naturel marin des estuaires picards et de la mer d'Opale

The Natural Marine Park of the Estuaries of Picardy and Opal coasts was created by decree on 11 December 2012. It is the first marine park of the English Channel – North Sea and the fifth French National Marine Park. It is located in the waters of the departments of the Seine-Maritime (76), Somme (80), and the Pas-de-Calais (62) and extends northwards to the separation zone for the International shipping which uses the route between the English Channel and the North Sea. The total area of sea covered is 2,300 sq.kms. and extends from the mouth of the River Seine north-eastwards along the coast for 118 kms. to Ambleteuse in the Pas-de-Calais.

A natural marine park is an integrated management tool which takes into account the function of the environment at all levels from global to local. Those functions are to respond to three fundamental objectives:

- Protection of eco-systems,
- Knowledge of the marine environment,
- Development of activities related to the sea.

Placed under the supervision of the Minister of Ecology, the Agency of Protected Marine Zones is a national public institution for the protection of the marine environment. One of the principal missions of the agency is the direct management of the marine parks and is responsible for the availability of the necessary technical, financial and human resources.

Le Conservatoire de l'Espace Littoral et des Rivages Lacustres

The Conservatory of the Littoral is a public and state institution, created in 1975, which oversees land policy for the permanent protection of natural areas and green spaces along coastlines, lake shores, river banks and estuaries throughout France.

It manages coastal areas as well as areas around estuaries, deltas and lakes of over 1,000 hectares.

The Conservatory acquires vulnerable or threatened land, by agreement, by exercising the right of pre-emption or very occasionally, by expropriation. It can also accept donated or bequeathed real estate

In the Park it owns almost 2,000 hectares, which extend from Sangatte to Dannes. After having carried out the land restoration work that was necessary, it entrusted the management of the land to local authorities or associations and defined, with the help of experts, the usages, not only agricultural but also leisure activities compatible with the preservation of biodiversity.

In the Pas-de-Calais, the management of such sites is assured by Eden 62, a joint association.

Contributing groups to the project

Station ornithologique du cap Gris-Nez

The "Cap Gris-Nez Ornithological Station Group" was created in 2009 to organise the collection and analyse the existing data on marine migration (since 1956) as well as to ensure annual monitoring of marine migration from Cap Gris-Nez. The group's work is based on data collected by several hundred voluntary observers who take part in monitoring migration from Cap Gris-Nez, both occasionally and on a more regular basis.

Although the majority of observers are French, there are also enthusiasts from across Europe (Great Britain, Belgium and the Netherlands). The site and the Clipon Jetty site are renowned for their importance at European level.

The association indeed maintains a close relationship with its fellow group "Le Clipon" whose objective is the monitoring and study of the migration of seabirds off the coast of Dunkirk (France). The data collected at both sites gives us a better understanding of migratory patterns along the Nord– Pas-de-Calais coastline.
You can find more information on the group's blog:
www.seawatchcgn.free.fr

Groupe ornithologique et naturaliste du Nord– Pas-de-Calais

Since its creation in 1968, the Nord– Pas-de-Calais Ornithological and Naturalist Group (GON) has played a central and key role in the study and protection of wildlife in the Nord– Pas-de-Calais region. GON initially specialised in ornithology, but gradually diversified to study all vertebrate and some invertebrate wildlife of the region. As part of the "Participative Network for Naturalist Information" (RAIN) database project for regional natural heritage, GON collects and analyses wildlife data (Wildlife Hub).

GON has been collecting data gathered by its local members for many years.

The members have had a long-standing interest in migration, which they have followed for many years, and have written numerous articles on the topic, mainly in the regional magazine, "Le Héron". Their contributions have been invaluable in the context of the present publication.

For more information, please go to the group's website:
http://www.gon.fr

Cap-Ornis baguage

The Cap-Ornis Ringing Group was created in 2000.
Most ringers and all assistant ringers in Nord– Pas-de-Calais belong to the group. There are around fifty members in total, including about thirty ringers licensed by the National Natural History Museum in Paris (MNHN).

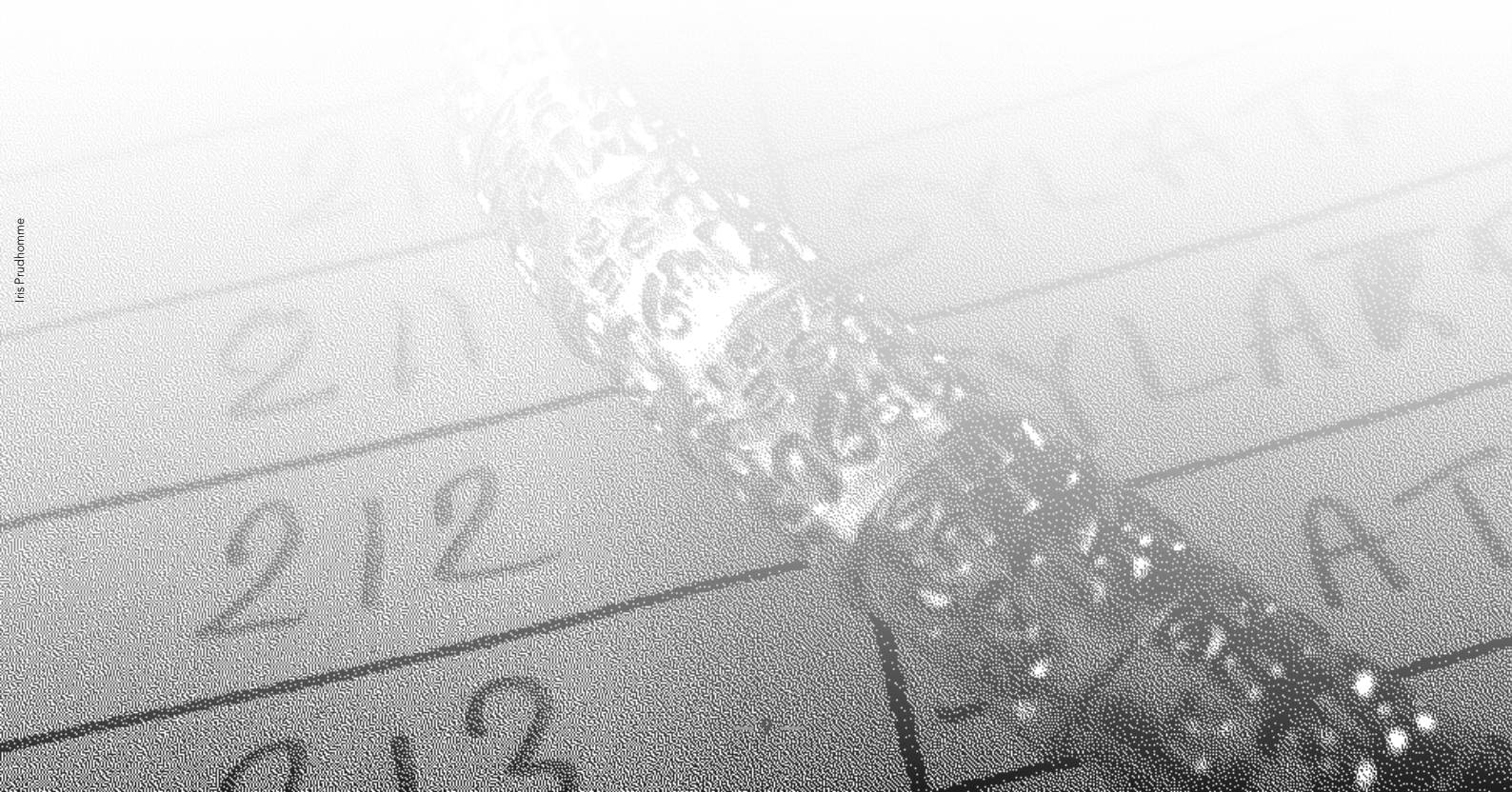
In addition to collecting data on bird migration using scientific marking techniques, the group aims to:
- promote ringing as a scientific activity,
- train future ringers,
- organise and run different ringing programmes at regional level,
- organise conferences with different partners,
- pool resources needed for certain programmes (e.g., ringing gulls…) or respond to certain requests such as monitoring avian influenza.

The ringers form a regional delegation that is one of the most active in France in terms of dynamism and innovation. The delegation is subject to the regulations of the Ringing Research Centre for Bird Populations (CRBPO) department of the National Natural History Museum in Paris, which provides rings, coordinates study protocols at national level and pools data.

For more information, please consult the group's blog:
https://sites.google.com/site/capornisbaguage5962
or the CRBPO site:
http://www2.mnhn.fr/crbpo

Yves Dubois

Methodology & Techniques



Iris Prudhomme

Presentation of monitoring migration sites

The Nord– Pas-de-Calais is a remarkable region for migration studies being located at a crossroads for bird migration. Every spring and autumn vast numbers of land birds of a wide variety of species travel from their wintering grounds in Africa, and the Mediterranean basin to spend the summer months breeding in northern Europe and Scandinavia and then return south in autumn. Other European birds spend their winter in the milder climates of the British Isles, France and the Iberian peninsula. At the same time many of the same species are involved in crossing the Strait of Dover to breed in the British Isles and even Iceland and further north. The effect is to create in the area two axes, one south-west/north-east and the other, to a lesser extent, south-east/north-west. At the same time important movements of seabirds, ducks, geese and wading birds pass through the area from and to the Atlantic Ocean and the North Sea. Occasionally the numbers and variety of land and seabirds which can be seen at the major sites in the region are, to say the least, exciting!

The Regional Natural Park is fortunate In having a number of sites where migration is regularly monitored, particularly on the coast.

Location map of the main sites

Cap Gris-Nez is probably the most remarkable site in the region for studying bird migration. It is a headland mainly composed of clay and sandstone. Being only 34 kms. (22 miles) from Dover, Kent in England makes it the nearest point between the two countries. In the 1950s Cap Gris-Nez was explored by ornithologists in order to follow bird migration. The Cap, with the headland at Dungeness in Kent, form a bottleneck 42 kms (26 miles) wide through which most seabirds, ducks, geese and wading birds must pass. Both sites are ideally placed to follow the spring and autumn migrations on land and sea.

The Dungeness Bird Observatory which was established in 1952 and has been in continuous operation for 62 years observing and ringing birds. Equally with Cap Gris-Nez it has a reputation for seawatching. The Observatory covers a range of natural history activities and for further information see:
http://www.dungenessbirdobs.org.uk

Today, other regional sites in the Nord– Pas-de-Calais also carry out monitoring on a more or less regular basis, mainly in autumn: the dike at Malo-les-Bains, Clipon Jetty, Sangatte beach or the Port of Calais (with limited access) and, in spring, Marchand Dune in the Dunkirk region. However, as these sites are monitored less frequently or are simply too recent, they have not been taken into account in this publication.

Located 50 km to the north of Cap Gris-Nez, the Clipon site at Loon-Plage (Nord), has long been one of the most popular seawatch sites. Its dike juts out more than 1 km into the sea, ensuring excellent observations of pelagic species. Today, with its reduced access, reliable monitoring is difficult and many observers have moved to Cap Gris-Nez.

Cap Gris-Nez, like Le Clipon, is of renowned importance on a European scale. Many observers from other regions or countries come here, especially in autumn, to enjoy the observation conditions that the site has to offer and to help monitor.

If the cliffs of Cap Gris-Nez are very interesting for seawatch, the area of the two caps in a wider sense, (Cap Blanc-Nez and Cap Gris-Nez) is equally important in terms of migration and stopover points for land birds. The great diversity of habitats to be found makes it an important resting area for a wide range of different species.

The dune sites are also particularly interesting at migration time. They welcome very large numbers of passerines that take advantage of the shrubby vegetation rich in fruits and insects which provides both food and shelter during their stopovers. The Caps and Marshes of the Opale Regional Natural Park includes three dune sites where regular monitoring is carried out, mainly by ringing.

The marshes of Tardinghen and Wissant are located between Cap Gris-Nez and Cap Blanc-Nez. They are part of a natural ecosystem of approximately 100 ha composed of a dune ridge that harbours a peat bog with a vast reed bed and neighbouring wet meadows. Only the north-east part is public property. The site offers favourable habitats as a stopover for marshland birds that appreciate wetland habitats.

Between Boulogne-sur-Mer and Cap Gris-Nez, the coastline mainly consists of cliffs. The Slack Dunes site (200 ha), wedged between the Pointe aux Oies cliffs and the Slack Estuary is a most remarkable natural site. It is relatively isolated from the other dune belts and plays the role of "oasis" for species that do not like to stop in more open terrain.

Located in the southernmost part of the Regional Natural Park, Mont Saint-Frieux Dunes (550 ha) are part of the extensive system of dunes (>2,000 ha.) spread out in the form of a dune ridge that is a few kilometres long and runs between the the Canche Estuary, itself a Natural National Reserve, and the first cliffs of Equihen-plage to the south of Boulogne-sur-Mer.

Further inland, Guînes Marsh and the Audomarois marshlands complete the network of sites in the park. Other ringing sites are scattered around the Caps and Marshes of the Opale Regional Natural Park: to the north, Fort-Vert Dunes in the Calais region and Clipon Dunes in the Dunkirk region; to the south, Merlimont dunes.

This high-coverage network of ringing stations is capable of accurately mapping the use made of the coastal fringe by migrant species in the region.

Cap Gris-Nez seen from the sky. Arnaud Boulanger

Statute of Sites

The value of the study sites is recognised by different protective statutes. All monitoring operations carried out by the naturalist groups cited in this publication are performed while respecting the environment and in partnership with the owners and administrators.

All the coastal observation sites are located on protected public property belonging to the Coastline Conservatory, managed by Eden 62, a joint association. The "Deux Caps" site is also a protected site under French law since 1913.

The sites also form part of the European Network of Special Areas of Conservation (SACs), Natura 2000.

Those located inland, such as the Guînes Marshes or the Romelaëre Pools in the Audomarois marshlands are generally the property of the Pas-de-Calais Departmental authorities.

It should also be noted that the marine zone under the administration of the Regional Natural Park is listed both as a marine park and as a Natura 2000 area protected site. The Agency for Protected Marine Zones, is a public state institution under the authority of the Ministry of Ecology, and is responsible for drawing up management plans for such zones.

Wissant Marshes seen from the sky. François Cavalier

Seawatching: Who? Where? When? How?

Who?

To observe the impressive spectacle of bird migration costs nothing and is available to any birdwatcher, but to carry out extensive observations regularly is a more demanding discipline.

Identifying and counting migrating birds accurately can only be achieved after studying books on identification and theory of migration together with many hours of practical fieldwork. Many factors have to be taken into consideration in identification, such as age, sex, type of plumage according to season, general impression often referred to as 'jizz', flight type, light conditions, etc. Often observers have little time to recognise a bird as flies quickly by. To learn in the company of experienced birdwatchers is the best and surest way to learn identification skills and avoid the traps which are not often obvious.

Where and when?

It is possible to follow marine migration from any point on the coast. Some sites do however offer more interesting or even exceptional observation conditions as is the case for Cap Gris-Nez, an internationally renowned site. Port zones that have a jetty are also of particular interest, such as the one that can be found at the Clipon (Port of Dunkirk), today closed to the public.

Contrary to the majority of French seawatch sites, it is possible to follow spring and autumn migrations from Cap Gris-Nez. This double monitoring is richly informative with its seasonal dependent particularities.

In spring, an intense and very dense passage compensates for the absence of a few autumn flagship species such as the Sooty Shearwater and Sabine's Gull. However, the Leach´s Storm Petrel and the Long-tailed Skua, for example, are known to take an Atlantic route to their breeding sites.

From the end of winter (February, sometimes the end of January), the first large groups of Brent Geese on their way to Denmark mark the beginning of the spring migration. At the same time, the passage of auks, divers and other waterfowl begins before diminishing at the end of April, quickly followed by a marked and often intense passage of terns and shorebirds from the beginning until the middle of May.

The respite is of short duration as the ornithological autumn calendar starts from the end of June for some shorebirds, and more generally in July for numerous species whose first trail blazers have already started their return journey southwards. Nonetheless, passage only becomes regular from mid-August, particularly for terns and shorebirds as well as for some predominantly pelagic species (Arctic Skua, Balearic Shearwater and Manx Shearwater). The happiness of seawatchers reaches its climax in September and October.

During this period, and with the lightest of north-westerly breezes, the fabulous show comes to town' under the admiring gaze of ornithologists who have come from all over France, Belgium, the Netherlands and the United Kingdom. Passage remains intense in November for a few species such as divers, auks, Northern Gannets and other waterfowl. It finishes at the beginning of December with the last divers.

The hardiest ornithologists do not however hang up their binoculars before the end of December/beginning of January. Whether caused by winter storms or a particularly bitter cold front, very marked movements of birds that normally winter in the North Sea may be recorded. These movements of birds forced into the English Channel are considered as hard weather movements as birds fleeing extreme weather conditions elsewhere in Europe.

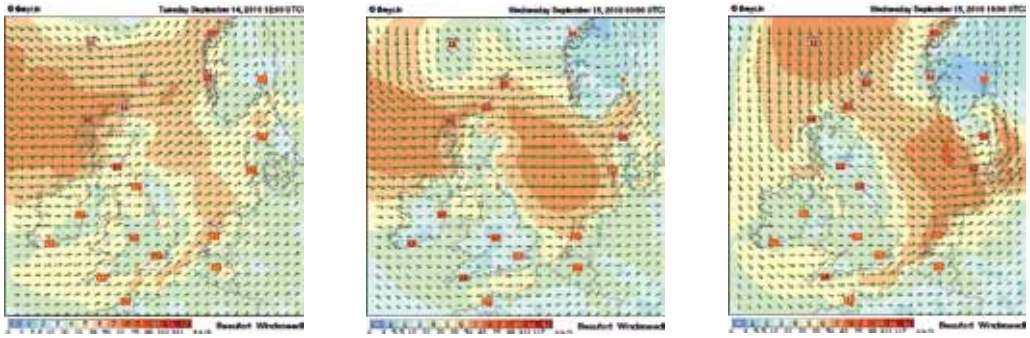
Whatever the season, the direction and strength of the wind are key factors for the intensity of the movement: a well-orientated wind has the effect of funnelling the migration flow towards the coast. To a lesser extent, cloud cover and even light rain are elements to be taken into consideration as they favour the passage of species that normally migrate at high altitudes.

Surprising, in spring, a north-easterly wind is the best for birdwatchers as it forces birds inclined to migrate at high altitudes to fly lower due to headwinds. Migration may remain intense for several consecutive days in certain conditions. North-westerly winds are also important to ornithologists as they blow predominantly pelagic seabirds towards the coast.

In autumn, a north-westerly wind is considered to be THE ideal wind but even north to north-easterly winds may have some pleasant surprises in store. Failing that, light to moderate west to south-westerly winds are preferable. Meteorological conditions are evaluated globally; it is essential not to limit observations to local conditions but to study the wind map globally (Scotland, Norway, the Netherlands, the Strait of Dover). An interesting local wind without favourable conditions elsewhere can be disappointing, even at the best time of the season. On the other hand, conditions that may be described as average can prepare the way for a very good passage of birds from the North-East Atlantic or Norwegian coastline some 12 hours before the actual observations.

The analysis of meteorological maps over several years, together with experience gained in the field, make it possible to anticipate the expected passage for each session even if there remains, and happily so, a large element of surprise. However, this knowledge enables us to describe with certainty the necessary conditions for a rush of pelagic birds in autumn.

Between the end of August and mid-November, a change of Atlantic wind direction towards the North Sea, combined with a cold front that descends from the North and strong north-westerly winds sweeping across the entire North Sea as far as the Dover Strait will produce an unforgettable spectacle a few hours later. These conditions may occur several times in some years. Other years, this set of conditions is not encountered, which has a strong impact on data collected throughout the season. Hence the passage of the Sooty Shearwater may vary between 250-3,000 birds per year depending on weather conditions.



Charts showing typical weather pattern for seabird passage. Theyr.tv

How?

Although the weather is important to seawatchers, it can sometimes impose severe observation conditions.

It is therefore necessary to be well-equipped to confront these conditions: warm clothes, waterproofs and a windcheater. A fisherman's umbrella can also come in handy in case of rain.

Observer stability is a key element for the identification of seabirds that often pass by some distance off. Binoculars are indispensable but not enough to observe details that leads to identification. It is therefore necessary to have a telescope mounted on a good tripod. A travel chair is recommended to increase stability. Shelter from the wind is equally important.

Also, having the means to wipe sea spray off lenses.

The ideal position for an observer is about five meters above sea level as, at this height, almost all birds skimming over the sea will be within the same field of view of a telescope.

In heavy seas, it may be useful to raise the field of view by a few meters to ensure better vision of birds coming out of the hollow of a wave.

It is often not possible for a lone observer to fully follow the volume of migration taking place as the passage can be so varied.

The presence of several observers is necessary to follow the major part of the movement.

"Clickers" (manual counters) help count species present in large numbers more efficiently without losing time noting down numbers.

You may consult the monitoring results of this site at:
http://www. trektellen.nl
or on the blog of the site
seawatchcgn.free.fr
or also on the site
http://www.migraction.net

"La Vie du Nord", a recently created group, welcomes the public in order to introduce them to migration monitoring.

Sea-watchers at Cap Gris-Nez. Yves Dubois

Ringing: Who? Where? When? How?

Who?

Only licensed ringers are allowed to catch and ring all bird species in France. This license to catch is granted by The Ringing Research Centre for Bird Populations (CRBPO), a department of the National Natural History Museum (MNHN). It is awarded after several years of training in the company of experienced ringers (minimum two years), a theoretical course and a qualifying course. The candidates must show their skills at catching and handling birds in complete safety and be able to identify them, together with their sex and age. The ringers are often accompanied by assistant ringers who may be candidates doing their qualifying course or persons who do not wish to become ringers but who actively take part in ringing operations. Some ringers, known as "specialists", only have the right to ring certain species within the framework of particular programmes (gulls, Woodcocks...).

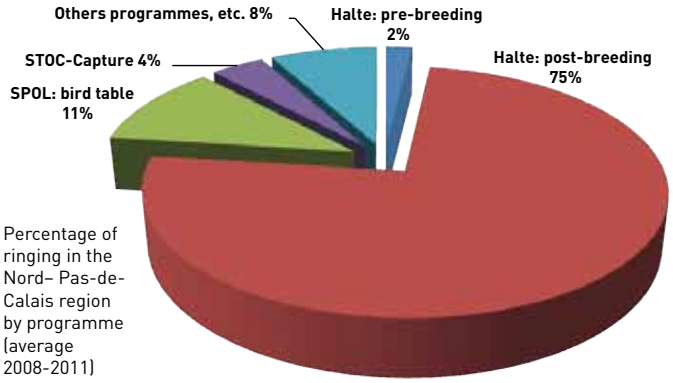
The ringers are represented by a CRBPO regional delegation. The CAP-ORNIS Ringing Group was created in 2000 and the majority of ringers and assistant ringers in the Nord– Pas-de-Calais are members, as do other interested persons. A professional insurance and the right to take part in a number of regional ringing operations are included in the membership.

Where and when?

More than 35 regional ringers are spread throughout the Nord–Pas-de-Calais and take part in different regional and national programmes:

- from November to March, the SPOL Bird Table programme (SPOL)is popular with ringers. The programme collects data on winter movements, influxes of granivorous species at bird tables and how faithful they are to the same winter feeding site. The programmes have a large coverage on a regional scale and represent between 9–12% of regional catches (4,000+ catches made each year).
- from February to May, only a few ringing stations are open during the pre-breeding migration (HALTE programme). The results obtained during this period are often disappointing (1-3% of regional catches), and the availability of ringers is often low. Moreover, the programme can disturb early nesting birds. Regrettably a lot of information is missing concerning the unfolding of spring migration.
- from April to July, STOC-CAPTURE (in-time monitoring of common birds) sessions are organised throughout the region. The programme is sensitive, taking place during the nesting period, and needs to be carried out with care. It only accounts for 4-5% of regional catches but its scientific interest is undeniable and makes it possible to evaluate nesting success. It is also during this period that ringing and colour marking operations take place on colonies of laridae (adults and chicks). These are often specific programs that demand well-planned and rapid action by a team.
- from July to November, ringers are highly active. Numerous stations, for the most part on the coast but also further inland, monitor post-breeding migration (HALTE programme). This period accounts for 70-75% of catches (i.e. 25,000-30,000 birds per year).

Other programmes exist but are carried out on a less regular basis in the region. You can consult them on the site: http://www2. mnhn.fr/crbpo



Percentage of ringing in the Nord– Pas-de-Calais region by programme (average 2008-2011)

The CRBPO keeps ringers informed of controls (birds caught elsewhere) or of recoveries (birds found dead) of birds that they had initially ringed. This is possible due to international cooperation between the ringing centres in different countries and thanks to information sent in by people who recover a ringed bird (dead or alive).

On the Internet site previously mentioned, you can find the procedure to follow under the heading "You have found a ringed bird?" Out of some twenty ringing sites in the region, three ringing stations are operational in the migration period on the coastal stretch managed by The Caps and Marshes of the Opale Regional Natural Park in the Sensitive Natural Areas of the Pas-de-Calais, property of The Conservatory of the Littoral and run by EDEN 62. From north to south:

- Wissant-Tardinghen marshes;
- Slack Dunes in Wimereux;
- Mont Saint-Frieux Dunes in Dannes.

The three sites accounted for 30-40% of catches in the region (8,000-17,000 catches) between 2008-2011. In recent years, the Guînes Marshes a site located just a few kilometres inland has joined the above sites.

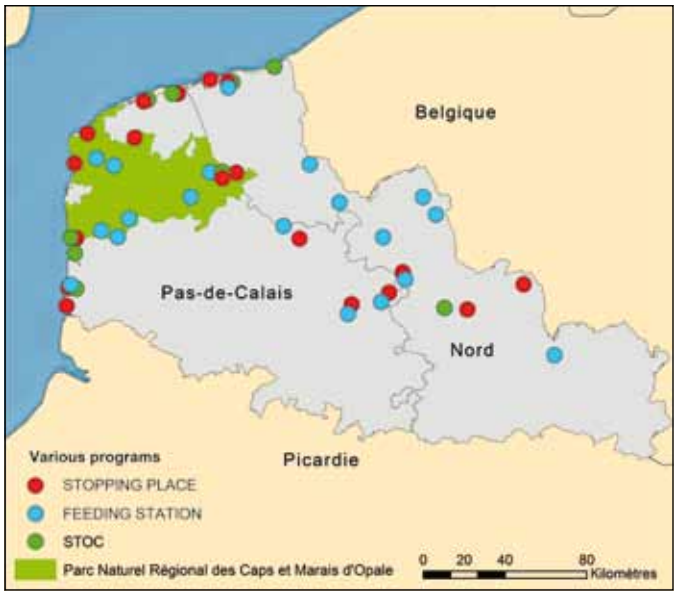
For the safety of the birds, the sessions are only organised when the meteorological conditions are favourable: light to moderate winds, no heavy rain.

How?

The most used catching method in the region is the vertically strung (mist) net, which is of low-cost and portable. Some stations (not within the Regional Natural Park) are specialists in other methods of catching (snare net, clap trap, cannon net, Helgoland or funnel trap).

These less-used methods are able to catch bird species for which we have little data on a regional scale.

There are no minimum requirements to start the training course even if some basic ornithological knowledge help trainees to progress more quickly. Ringers accept persons interested within the limits imposed by the number of places available. Be aware that it is in no way a form of entertainment but scientific research to be taken seriously.



Location map of ringing sites.

Ringers do not need any special physical aptitudes but the majority of operations are carried out at daybreak (possibly arriving on the site at 4 am.) and sometimes in freezing conditions.

Anyone interested may contact the delegation at:
capornis_baguage@yahoo.fr

You may also consult the monitoring results of certain stations at:
http://www.trektellen.nl

Mist nets in situ. Charles Gosset

Chiffchaff. Iris Prudhomme

Ageing a bird. Jean Delannoy

Ringing Operation. Iris Prudhomme

Land bird migration and stop overs: Who? Where? When? How?

Who?

As with seawatching, the observation of land migration is open to all keen ornithologists. Although most coastal and marine seabirds migrate over water, it is not the case for the majority of land birds that prefer to migrate over 'terra firma'. For those species that are diurnal migrants, it is possible to follow and count bird numbers in the important movements that take place during daylight. For species that are nocturnal migrants, it is a question of observing their daytime stopovers in different natural habitats. The identification of migrating birds demands great experience and competence. Actively migrating birds are often only observable for a short length of time: it is therefore necessary to be very familiar with identification criteria in order to know what to look for when a bird is sighted. The observer is however helped by the bird's contact calls that remain the principal identification criteria for passerines that represent the majority of land migrants.

Where and when?

While it is possible to observe migration movements in spring, it is in autumn that they are more diversified and intense. In spring, these movements are often short-lived (the birds are in a hurry to arrive at their nesting sites) and their numbers are lower (due to winter mortality). Furthermore, migration routes taken are located further inland, with the exception of English birds that must cross the Strait and often do so at much higher altitudes than in the autumn.

On the other hand, the migration route most used in autumn is along the coast. The birds are in less of a hurry and more likely to make stopovers for a few days before continuing their journeys at this time of year. Their numbers are higher too. The passage of different species succeeds one another from August until November. Starting at the beginning of August, sometimes even at the end of July, some species begin their journey southwards while other species are still raising their young. The Trans-Saharan migrants, for the most part insectivorous, are the first to pass through our region (Common Nightingale, Sedge Warbler, Garden Warbler, Willow Warbler...). They are followed from mid-September onwards by short-distance migrants (Blackcap, Robin, Common Chiffchaff) and then in mid-October by the seed-eating passerines (Common Chaffinch, Siskin, redpolls...) and the larger turdidae (Blackbird, Song Thrush...). In some years they are joined by marked movements of tits (Great Tit, Coal Tit, Blue Tit).

Certain parameters may improve the observation conditions of an active migration. Active migration is more pronounced and birds stopping over are more active in the early hours of the morning.A rather strong headwind, for example, forces birds to migrate at lower altitudes while a tailwind allows them to fly higher in the sky to a point where they are no longer visible to the naked eye. Cloud cover makes them easier to spot than against a backdrop of a blue sky.

At the present time, there are no sites in the Nord– Pas-de-Calais which organises coordinated monitoring activities of land migration even if ad-hoc operations have been organised over the last 20 years.

Groups of actively migrating birds. Guy Flohart

Migrating Song Thrush. Guy Flohart

The nearest site today that organises this type of monitoring is the Banc de l'Ilette in Picardy. The data collected may however be entered into the regional database of the Ornithological and Naturalist Group of Nord– Pas-de-Calais (GON). Anyone can take part and do bird counts at any time during the migration period. These regular counts help the understanding of a species by counting and the number of birds resting in a garden or ground nearby. Guy Flohart has carried out such monitoring for several years on a sector of Cap Gris-Nez and certain phenological graphics presented in this publication are the result of his work.

This data may also be entered into the regional wildlife database set up by GON in order to contribute towards our knowledge and protection of birdlife in the region: **http://www.sirf.eu**

How?

Many sites on the coastal fringe may be used to observe active migration as long as they offer an unobstructed view. However, a slightly elevated vantage point makes it possible to monitor a wider corridor and to spot birds at a greater distance.

For specific research on movements of raptors, hilly areas further inland are preferable. This group of birds, which uses rising thermal air currents to move around, approaches the coastline less often.

The observation point to use depends on the species being studied.

Group of observers on a skywatch operation. Julien Boulanger

For shorebirds, wet areas in the form of open mudflats (bodies of shallow water or flooded grasslands) or foreshores (esp. estuaries) are favourites. Waterfowl have a preference for large bodies of water in terms of area that offer peace and quiet. Hunting greatly restricts their choice of stopover areas to a number of protected natural areas or to ports and harbours in autumn. As for passerines, it depends on the ecological preferences of the species under observation. For species that live in open habitats: ploughed fields or cropland, grasslands and wasteland, while for other species: hedgerows and thickets. Small thickets are more easily explored than large areas of bushland.

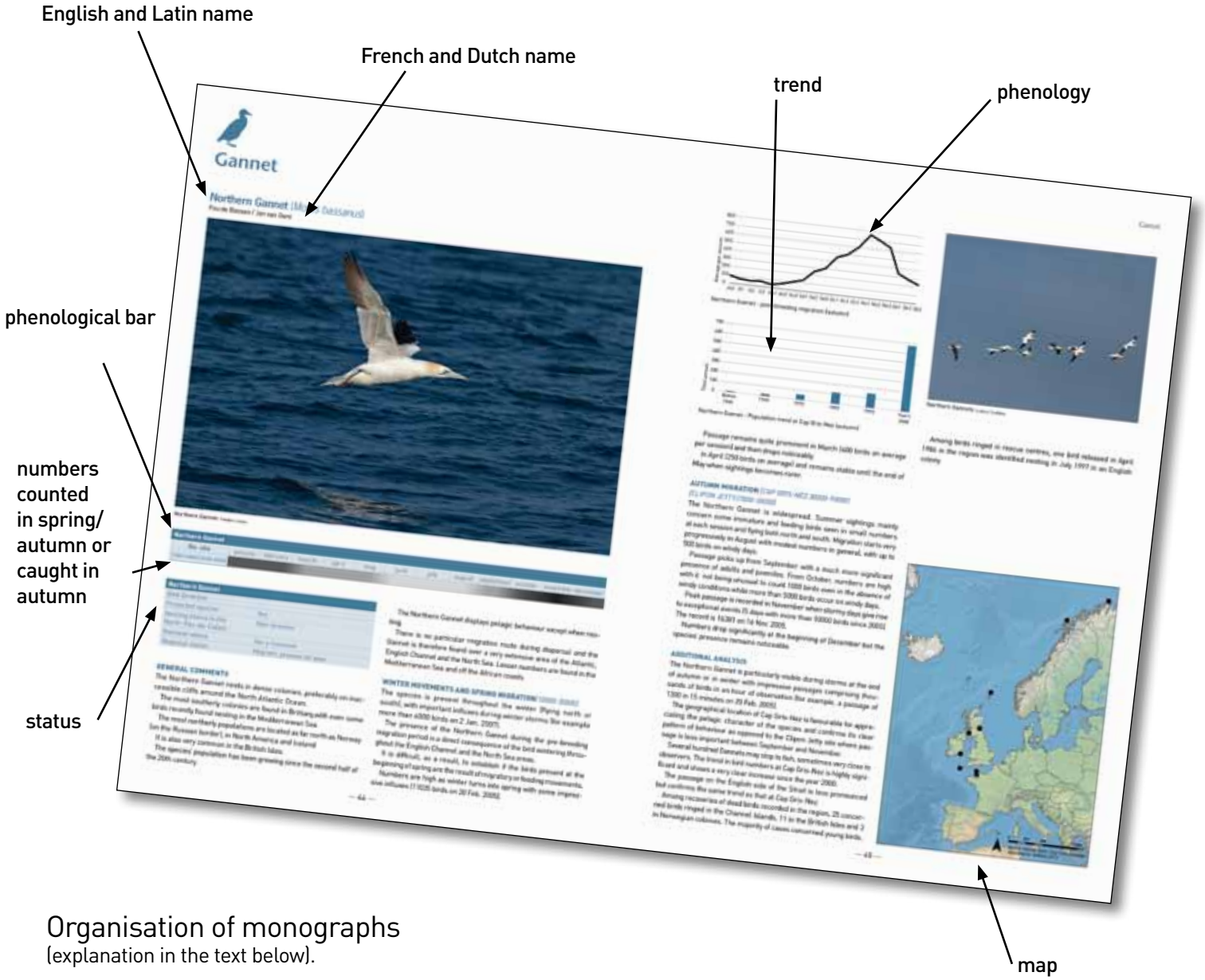
Urban parks may also produce pleasant surprises at this time of year. The essential equipment for monitoring active migration is identical to that used for seawatching (travel chair, notebook, counter...). As for optical equipment, a pair of binoculars is enough in the majority of cases, but the use of a telescope will prove itself indispensable for identifying birds a long way off.

Migrant waders resting on spring migration. Frédéric Caloin

The monographs and analytical limitations

The choice of species

The order of sub-species in this publication is based on Voous' (1977) and Beaman's (1997) classification systems as used by the majority of publications in the 20th century. The English names used are mainly those of the 'British Birds list of Western Palaearctic Birds' (2014). The taxonomy takes into account modifications proposed by the Commission for French Birdlife (CAF) in 2008-2009. The choice of species included was made in order to limit the size of the publication (around 80 species). For land species, the choice was made to include those species for which we have regular ringing or control/recovery data or species for which we have discovered new information. Therefore, some groups do not figure in this publication such as Ardeidae, raptors or certain species of passerine which cannot be dissociated from the topic of migration such as the Northern Wheatear or the Meadow Pipit. The majority of marine species that migrate regularly through the Strait of Dover are included. The monographs are preceded by a short presentation on the family or species group.



Organisation of monographs
(explanation in the text below).

Different Statues

Bird Directive: Directive 2009/147/CE of the european community on the conservation of wild birds is an extension of the Paris Convention of 18 Oct. 1950 for the protection of wild birds during breeding and migration.
Annex I: list of species in need of the creation of SPAs (Special Protection Areas).
Annex II: list of species that may be hunted.
Annex III: list of species that may be used commercially.

National Protection: Section 3 of the Ministerial Order of 29 Oct. 2009 lists the birds protected on French territories and the procedures and means of protection. The section includes the list of species that may not be captured or killed. In parallel, the Ministerial Order of 26 Jun. 1987 lists species of game that may be hunted. This precision is important as species that may be hunted produce more recoverys than protected species.

Nesting status in Nord– Pas-de-Calais: Rare species status based on the "Atlas des oiseaux nicheurs du Nord - Pas-de-Calais 1985-1995" (Tombal, 1996).

National status migrant: Status as per the "Nouvelle Inventaire des Oiseaux de France" (Dubois & al., 2008).

Regional Status: Migrant to be evaluated according to the following criteria:
Very common: seen every year and (almost) at every session during favourable periods (example: Northern Gannet, Blackcap)
Common: seen every year but not at every session, slightly dependant on weather conditions (Manx Shearwater, Pied Flycatcher). May be appended with the words "in small numbers".
Uncommon: seen irregularly, often strongly dependent on meteorological conditions or invasions (Little Auk, Coal Tit).
Occasional: not seen every year or in very low numbers (Scopoli's Shearwater, Barred Warbler)

Phenological Bar

The phenological bar illustrates the migration pattern of the species over the entire region. For land birds, the average number of birds ringed each year in the Nord– Pas-de-Calais region is given. For seabirds, the average number of birds counted at seawatch regional sites (from Cap Gris-Nez or failing that, from the Clipon Jetty) is used. Post-breeding migration is better monitored than pre-breeding migration. The phenological data presented for this period can therefore be considered as more accurate.

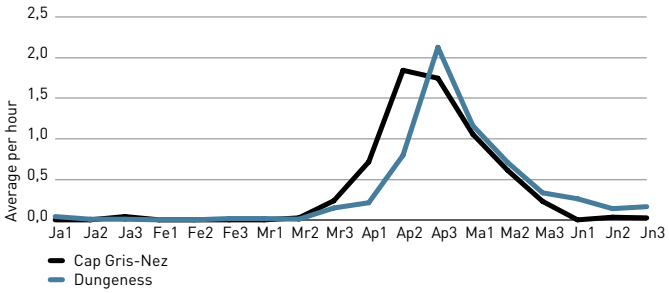
Legend:

Resident or local movements
Identified nesting
Low passage
High passage (good chance of seeing less abundant species)
Typical period for highest passage
Peak passage (best 10-day prd. for the species)

Phenology

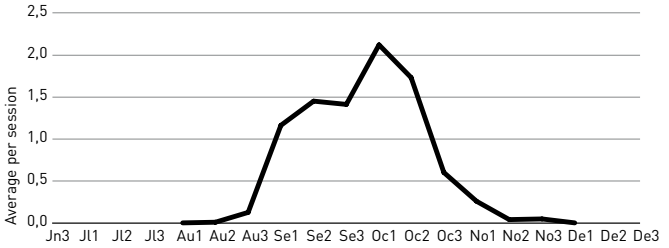
For seabird species, two types of graphics are used.

The spring migration graph compares bird counts from January-June at the Cap Gris-Nez site on the French coast, with the Dungeness site, located on the Kent coast of England. In order to analyse the data, the numbers have been rounded up to an hour of observation (on the English side, the session are often of shorter length). The numbers therefore correspond to the average number of birds observed per hour of monitoring. The graphics give a clear idea of the migration paths used in the Strait of Dover by certain species in spring. Some species are not seen in spring or in very small numbers (for example, the Long-tailed Skua or the Sooty Shearwater); therefore no graphics are shown for these species.



Long-tailed Skua pre-breeding migration (spring).

Post-breeding migration graphics give the bird counts on the Nord–Pas-de-Calais coastline from July-December. This data, based on figures for 2004-2012, have been rounded off to an average per session. The figure therefore gives the average number of birds that you might hope to see per session in the 10-day period in question. In order to obtain long time series and optimal coverage, monitoring data from the Cap Gris-Nez has been incorporated with data from the Clipon Jetty site. For each day and each species, if both sites were active, the maximum figure has been retained to avoid double counting. The graphics therefore reflect more so the number of migrating birds along the French side of the Strait rather than actually observed passage numbers at Cap Gris-Nez. This allows us to fill in some periods where Cap Gris-Nez was under watched compared to the Clipon site.



Long-tailed Skua post-breeding migration (autumn).

There are two types of land birds:

Unless otherwise stated, the red line indicates the ongoing number of birds ringed per 10-day period, from July to November at coastal ringing sites in The Caps and Marais d'Opale Regional Natural Park (Slack and Mont Saint-Frieux Dunes) with the addition of Wissant Marshes data for marshland birds.

As length of netting used to catch birds varies from one site or even session to another, this data has been standardised in order to calculate a catching percentage per 1000 linear metres of netting. The line is the result of data accumulated from 2008-2012 at three stations with simultaneously active periods.

The predominant habitats at these stations are of two types: shrubland (dune shrubland of various density) and wetland (reed beds, low marshes). It is therefore normal to find higher numbers of bird species that prefer these types of habitat.

Dune habitat of the Mont Saint-Freux. Frédéric Caloin

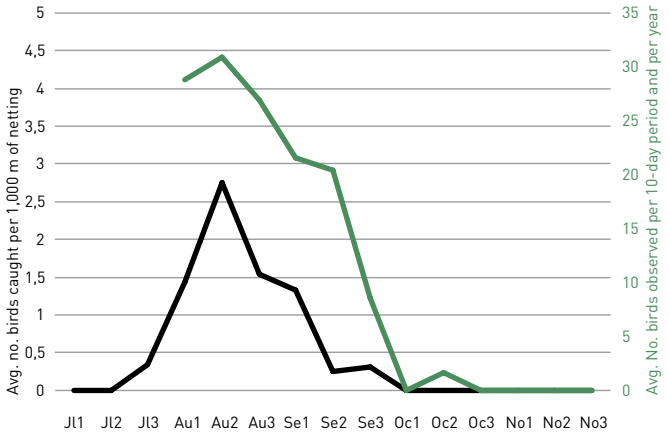
Dune habitat of the Slack. Frédéric Caloin

The green line indicates the number of birds observed on stopovers in the Cap Gris-Nez sector where the bird counters follow a strict trajectory every 10-day period from the beginning of August to the beginning of November. The data is standardised and the line indicates the average number of birds observed in every 10-day period.

This line is the result of data accumulated by Guy Flohart from 2003-2011. The transects used cross extremely diverse habitats: woodland, bushes, ploughed fields and cropland, grassland but not wetland (therefore no marshland species).

The two resulting lines may be used to compare the phenologies obtained using these two very different but complementary means of measurement. While some species are not very often ringed but are easily observable (flycatcher, Whinchat), other species are hard to detect without being caught (Garden Warbler, marshland birds).

For certain land bird species, we often do not possess reliable digital data because the birds are ringed for specific programmes outside of the migration period (ringed in colony, roost or at a bird table). There are therefore no graphics in these cases.



Pied Flycatcher- post-breeding migration (autumn)

Fluctuation

When the initial publication project first saw the light of day, we secretly hoped that we would be able to work on the changing patterns of certain species based on data collected by ringing and visual observations. We quickly understood from our scientific and statistical colleagues that the exercise would prove to be difficult.

We know of course that several conditions are necessary in order to achieve a reliable result:

- adoption of a standard;
- annual uniform observation patterns;
- a sufficiently long time series to differentiate annual patterns from long-term trends.

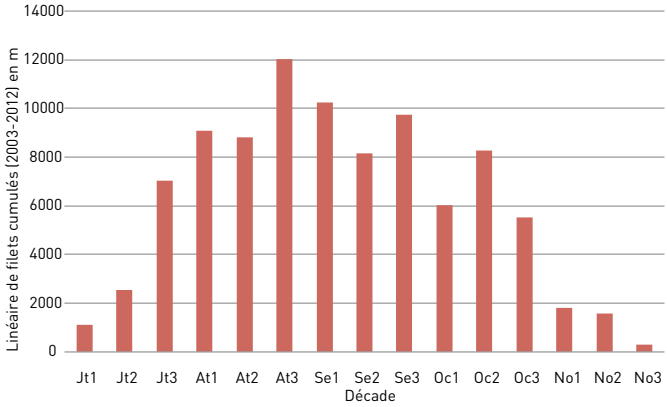
These conditions are difficult to satisfy and conciliate with the practices of volunteer field workers. Moreover, each practice entails its own additional constraints.

For visual observations:

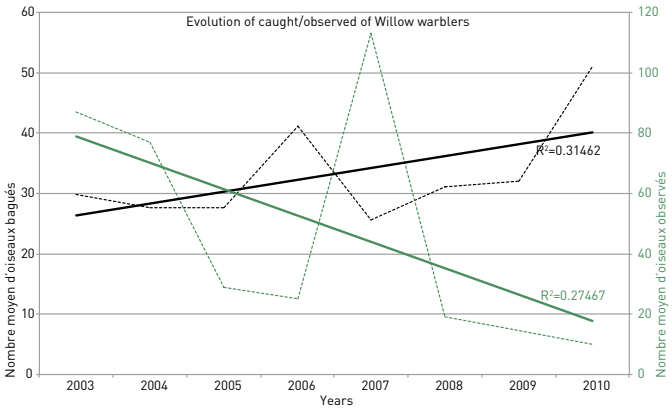
- today's equipment is a great improvement over that used ten years ago and offers better observation conditions, therefore with a higher ability of identification. This is particularly the case for sea-watching where observation conditions are sometimes quite challenging (poor light, distant birds);
- the observer's identification abilities as a result of either their experience (less experienced observers tend to only identify birds at short or medium distances), or better understanding of identification criteria (for example for the Long-tailed Skua);
- the number of observers: in the case of large migrations, a solitary observer can not easily estimate the magnitude of the passage.

With regard to ringing, trapping conditions constitute the principal constraints:

- the use of different "playback" systems (playback consists of playing bird song in order to attract other birds).These bird-call systems have developed in recent years and are more effective today, probably attracting birds at greater distances than before.
- the linear netting used in metres, which varies throughout the season depending on the number of ringers and assistant ringers present at the station. Generally, the greater the linear meters, the greater the chances of catching a bird, all the more so for occasional visitors or birds easily attracted by bird-call playback systems.



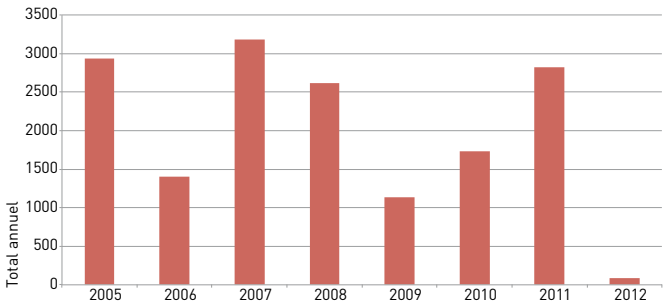
Distribution of autumn captures (July-November).



Difference between captured and observed Willow Warblers 2003-2010.

In addition, the pattern of each migration period depends heavily on meteorological criteria (wind, cloud cover, rain). For example, in the case of an easterly wind, numerous migratory flights which normally take an inland route may be seen along the coastline. Another example would be that when the weather is favourable (tailwind, high pressure systems), migration flights may fly over the region without stopping while, in the case of bad weather (strong headwind, cloud cover, rain), the birds fly over at lower altitudes or make more regular migratory stopovers.The trend in numbers observed/caught does not therefore depend entirely on the state of the population of a species but also on climatic conditions at the moment of the species' migration. The graphics below show the trend in Sooty Shearwater numbers recorded at the Cap Gris-Nez site. The results are directly influenced by weather conditions. In 2012, the conditions were highly unfavourable (absence of westerly streams in September-October) and less than 200 individuals were observed.

In order to "smooth out" these climatic discrepancies, it is necessary to carry out studies over long time series (10-20 years).



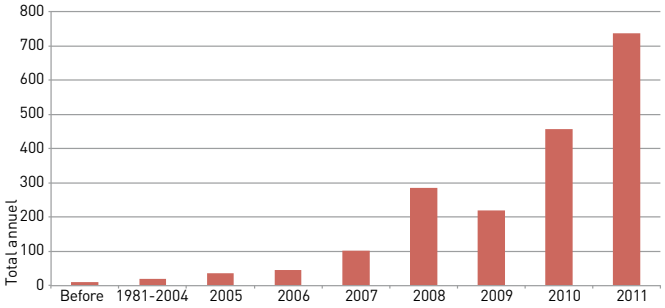
Sooty Shearwater fluctuations at cap Gris-Nez.

For seawatching, we have available a long time series of timed data (1956-2011) but it is only sufficiently complete from 2004 onwards. As for ringing, only the Slack Dunes station has timed series of data from 2004-2012. Concerning visual observations, Guy Flohart collected data from 2002-2011 (except for 2010).

With regard to land species, other constraints became apparent to us while analysing ringing and observational data. For, example, that of sample habitats monitored. Scientific ringing on the coastline of The Caps and Marais d'Opale Regional Natural Park is exclusively carried out in sensitive natural areas, habitats that are preserved from harm and which are rich in terms of plant and wildlife. On the other hand, the monitoring of visible migration is carried out in areas where agricultural practices may change over time to favour one or another species.

A clear example is the Common Redstart illustrated below: monitoring by means of ringing in sensitive natural areas paints a brighter picture than bird counts in "normal" environments which suggest the opposite.

We therefore made the choice to only underline these tendencies when they were clear (Common Scoter, Balearic Shearwater) or to illustrate species of an "intrusive" nature (tits, redpolls).



Balearic Shearwater fluctuations at cap Gris-Nez.

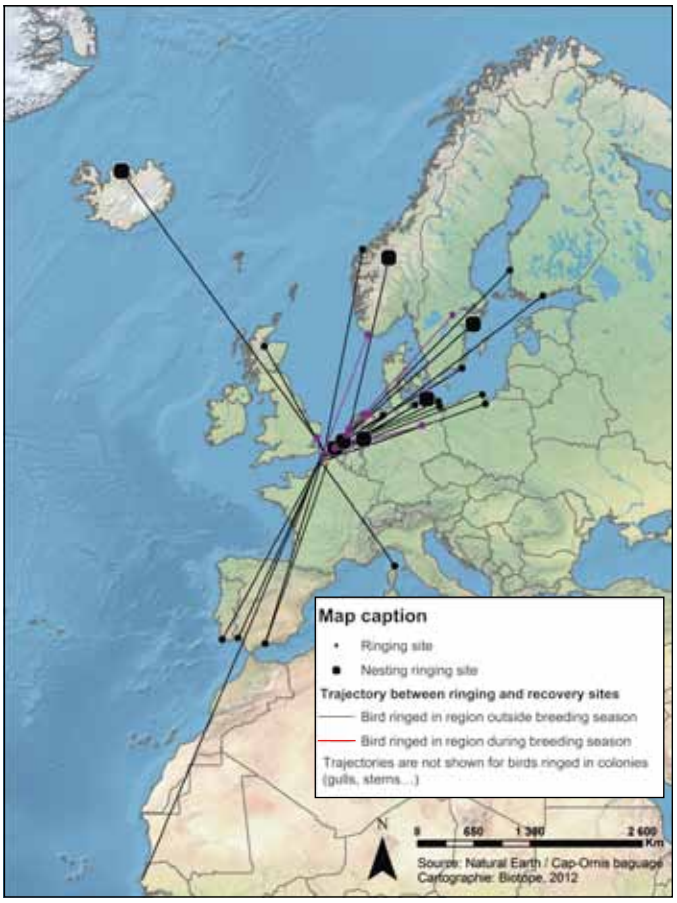
Map

Where ringing data is available, the map will indicate the controls/recoveries found in the regional database of the Nord– Pas-de-Calais CRBPO delegation. Most of the control/recovery data is post-2002 (88%), date at which the entry of ringing data in a digital format become regular. The data is given in the form of a journey between the ringing site and the control or recovery site. The red lines represent the movement of ringed birds in the Nord– Pas-de-Calais region in the nesting period (15 May-31 June), the black lines represent birds ringed outside this period. These journeys are only theoretical and do not represent the real movements of a bird (which are probably not in straight line).

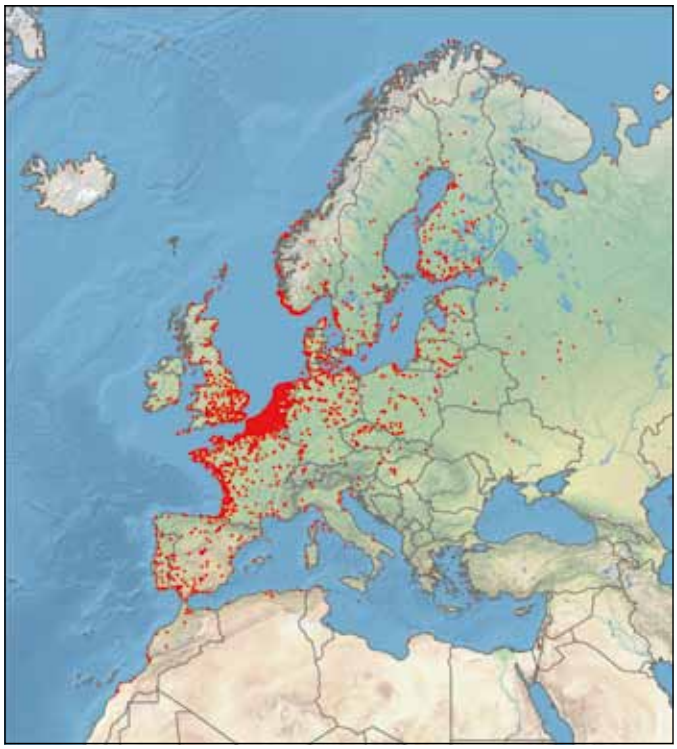
As we do not have any such data for species observed by seawatching, we have tried to represent flights crossing the region, from nesting sites to wintering quarters, based on bibliographical data available.

Photographs

Wherever possible we have endeavoured to select only those photographs taken in the region. In other words, the bird is photographed in the plumage and general conditions that are associated with the situation under discussion. As well as a photograph showing the species, we have given priority to seawatching photos depicting the environment or showing different plumage. In the case of ringing, the second photo concerns identification or the age of a bird.



Example of map showing recoveries and controls.



Map showing distribution of recoveries and controls ringed in the Nord– Pas-de-Calais.

Razorbills and Common Guillemots. Frédéric Caloin

Future outlook

Until now, the results presented in this publication are entirely thanks to the hard work of a handful of enthusiastic volunteers whose passions are the question of bird migration. However, enthusiasm can sometimes wane and often our personal lives do not allow us to spend as much time as we would like pursuing our ornithological interests.

While editing this overview, we realised that migration monitoring can only be of scientific interest if it is maintained over long periods (10-20 years) with regular and sufficient observations, trapping and ringing efforts. Also, only over periods of time can we smooth out inter-annual fluctuations due to meteorological conditions or cyclic evolutions.

Nowadays, if we wish to ensure such monitoring, we need to have a dynamic team where members can be quickly replaced if need be but always making sure that a few experienced persons are to hand to train new enthusiasts. There are several things that can be done to maintain enthusiasm:

- installing equipment that offers more comfortable conditions to observers and ringers. Team members will be more likely to continue their efforts in that case. For example, a shelter might offer safer conditions for both birds and ringers as well as offer cover to observers from a cloudburst or freezing winds. Nowadays, most ringing sites have a cabin set up by the natural areas administration but it seems to us that none of them are really suitable for migration monitoring. The equipment is more often aimed at tourism rather than designed for naturalist practicalities.
- the creation of a professional organisation capable of employing one or two experienced observers could also prove to be a good way to improve monitoring. These employees could organise monitoring by a team of volunteers and stand in if necessary at low-activity periods,evaluate monitoring results and welcome newcomers who will later join a volunteer team. The creation of such a position should seek the total backing of volunteers whose support is needed for such a project, and should not be in opposition to their legitimate concerns.

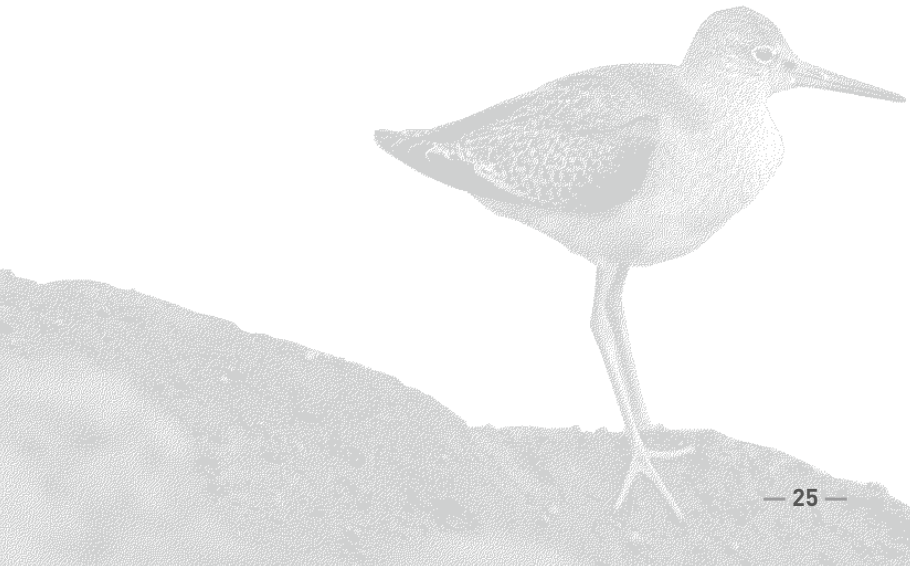
A new regional ringing station was set up recently (2010) by EDEN 62 with the support of the regional delegation of Nord– Pas-de-Calais ringers on a designated sensitive natural area: Fort-Vert Dunes (Marck). There are many examples elsewhere in Europe of multi-purpose stations (ringing and observation) as with our British neighbours at Dungeness Bird Observatory in Kent.

Why not consider this type of station at Cap Gris-Nez?

PNR Caps et Marais d'Opale.

Eurasian Wigeon. Ludovic Scalabre

Monographs



Divers

Divers are late seasonal visitors and can be seen among the last migrants who pass through the Strait of Dover in autumn. They are present throughout winter. Four species visit the area under consideration: the Red-throated Diver, the Black-throated Diver, the Great Northern Diver and the rare White-billed Diver.

Red-throated Diver (*Gavia stellata*)

Plongeon catmarin / Roodkeelduiker

Red-throated Diver flying. Frédéric Caloin

Red-throated Diver												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
2000-5000/1000-4000	ST											ST

Red-throated Diver	
Bird Directive	Annex I
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Common
Regional status	Common migrant

GENERAL COMMENTS

The Red-throated Diver nests mainly in Scandinavia on small shallow freshwater ponds and lakes. it migrates in groups via the Strait of Dover. The region is the southern limit for large wintering groups even if the species is found in small numbers in the Atlantic and Mediterranean regions. The largest numbers of divers are found off the Dutch coast where thousands of wintering birds can be found. The species can be seen on both sides of the Strait throughout the winter.

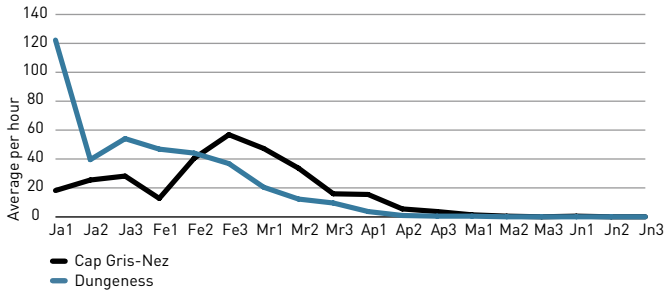
WINTER MOVEMENTS AND SPRING MIGRATION *(2000 – 5000)*

The Red-throated Diver is present in large numbers where local movements of several hundred divers may be observed from the end of December to the beginning of February. Counts made in mid-January on the coast indicate high numbers (several hundred to a thousand birds) present in the winter period at the edge of the Picardy coastal plains.

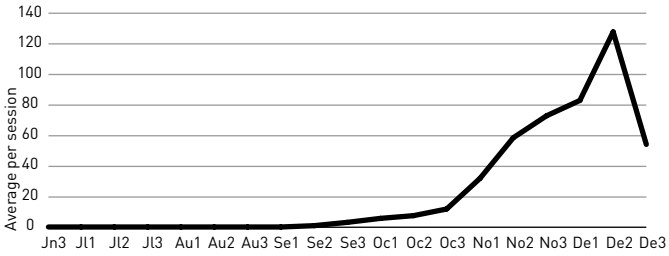
The spring migration commences from the second 10 day period of February with a marked peak in passage until the second 10 day period in March (140–210 birds per session). Numbers decrease progressively from then on until the beginning of May. There is residual passage until the end of May.

AUTUMN MIGRATION *(1000-4000)*

Before the real start of migration in mid-September, a few solitary birds may be seen from mid-July onwards.



Red-throated Diver - pre-breeding migration (spring)



Red-throated Diver - post-breeding migration (autumn)

Numbers increase slowly from the third 10-day period of September until the end of October. Important movements start to be seen from the beginning of November with a passage peak from the last 10-days of November to mid-December with an average of 130 birds per session. The record is 665 individuals on 17 Dec. 2011 at Cap Gris-Nez and 762 on 09 Dec. 2006 at the Clipon Jetty. Bird counts from the last 10 days of December until the beginning of February cannot be distinguished between migration and local movements of wintering birds, that may number several hundred.

ADDITIONAL ANALYSIS

An analysis of passage between Dungeness, Kent and the Cap Gris-Nez site shows that pre-breeding migration is more concentrated on the French coastline. The birds in England seem to be local wintering birds that progressively leave the area very early in the season with a constant decrease in passage numbers. On the other hand, peak passage is very visible on the French coast during the pre-breeding migration period.

There are no particular meteorological conditions that help anticipate an important passage for the species but strong winds do seem to curtail migration.

The Red-throated Diver, like the Black-throated Diver, can form large migratory groups exceeding 20 individuals. The two species may well form mixed groups when their migration periods overlap.

There is only one entry in the regional data for controls/recoveries of ringed birds. A Swedish bird (Varmland region) ringed as a chick in July 1993 and recovered in the region in March 2003.

Red-throated Diver flying. Ludovic Scalabre

Red-throated Diver. Guy Flohart

Black-throated Diver (*Gavia arctica*)

Plongeon arctique / Parelduiker

Black-throated Diver. Frédéric Caloin

Black-throated Diver												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
400-1100/200-800												

Black-throated Diver	
Bird Directive	Annex I
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Fairly common
Regional status	Regular migrant

GENERAL COMMENTS

The Black-throated Diver nests mainly in Scandinavia near deep bodies of water covering large areas. It only passes through the Strait of Dover to reach its winter quarters off the Normandy and Brittany coast but also, to a lesser extent, along the Atlantic and Mediterranean coastlines. Very few Black-throated as opposed to Red-throated Divers winter in the region.

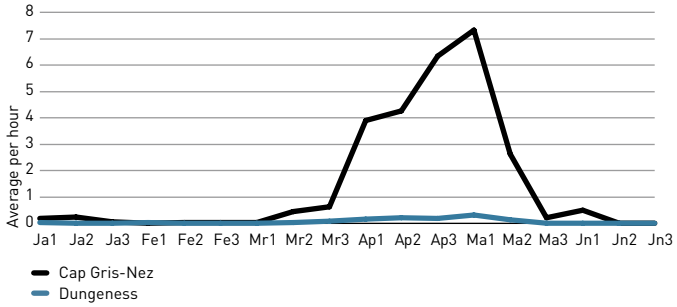
WINTER MOVEMENTS AND SPRING MIGRATION *(400-1100)*

The Black-throated Diver is present throughout Northern Europe in winter but records show it to be in limited numbers. The species is probably more pelagic than the Red-throated Diver which explains this under-recording. A few birds, probably wintering ones, are seen in January and February.

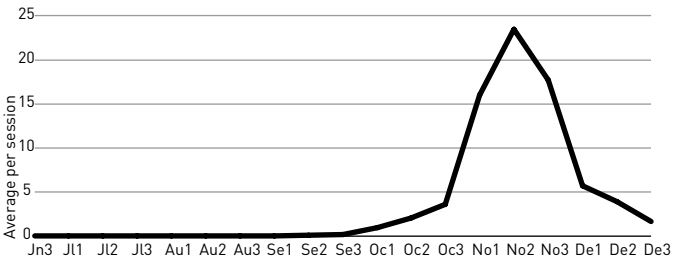
Passage begins very slowly in mid-March with a rather regular but limited presence of a few birds per session.

From the start of April, passage intensifies greatly to peak at an average of up to 55 birds per session at the beginning of May. Days with more than 100 birds are not unknown, the record being 346 on 6 May 2005.

From mid-May, numbers decrease significantly with sightings in the third 10 day period of May being quite rare.



Black-throated Diver - pre-breeding migration (spring)



Black-throated Diver - post-breeding migration (autumn)

Migrating Black-throat Divers. Guy Flohart

AUTUMN MIGRATION *(200-800)*

The first migrants appear in September with some individuals throughout the month. In October, numbers increase progressively and sightings becomes regular but still in small numbers. Passage escalates quickly in November to reach its peak in the middle of the month with an average of 50 birds per session. Passage density drops off quickly at the end of November and the species is rarely recorded from the beginning of December onwards.

The record is 319 birds on 18 Nov. 2008 at Cap Gris-Nez and 433 birds on 3 Nov. 2002 at the Clipon Jetty.

ADDITIONAL ANALYSIS

The regular monitoring carried out since 2005 has discovered an important spring passage of the species at Cap Gris-Nez, of which we were previously unaware. With numbers regularly exceeding 1000 birds in spring despite only partial monitoring of the site, it is clear that wintering birds in France are higher in number than those given in the "Nouvel inventaire des oiseaux de France" (Dubois, 2008).

Black-throated Divers migrating low over sea. Ludovic Scalabre

This is related to the character of the bird being less attracted to the coast in winter and hence more difficult to census in coastal regions. The species favours light tailwinds in spring, a crucial condition for its presence in large numbers. During this heavy passage, the species migrates at higher altitudes and often in large groups.

This migratory behaviour probably explains how this passage remained undetected in the past with some 90% of birds remaining invisible to an observer looking out to sea. Moreover, as the birds fly at high altitudes, many flocks do not hesitate to cut across the land at Cap Gris-Nez behind the backs of observers.

An analysis of passage between Dungeness, Kent and the Cap Gris-Nez site shows that the migratory habits of the Black-throated Diver prompt it to migrate via the French side of the Strait during its spring migration as the bird count numbers are fifteen times higher on the French side.

Grebes

Five species of Grebe frequent the Strait of Dover. Two of them, the Great Crested Grebe and the Red-necked Grebe, are present throughout the year at sea, except during the breeding period. Two other species the Slavonian Grebe and Black-necked Grebe are only recorded during migratory movements. Lastly, the Little Grebe, only very occasionally found at sea, is not dealt with here.

Great crested Grebe (*Podiceps cristatus*)

Grèbe huppé / Fuut

Great crested Grebe. Ludovic Scalabre

Red-necked Grebe (*Podiceps grisegena*)

Grèbe jougris / Roodhalsfuut

Red-necked Grebe. Julien Boulanger

Great crested Grebe												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
300-1400/150-600												
Red-necked Grebe												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
5-20/20-80												

Great crested Grebe	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Common breeder
National status	Common
Regional status	Common migrant

Red-necked Grebe	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Rare
Regional status	Irregular migrant

GENERAL COMMENTS

The Great Crested Grebe nests on freshwater or brackish lakes. It is found all over Europe, with the exception of the northern regions of Scandinavian countries. It nests widely in the Nord Pas-de-Calais region and France. The Red-necked Grebe, on the other hand, is found nesting over a large area particularly in Eastern Europe on lakes and watercourses with dense plantlife. It rarely breeds in France (1-3 pairs). In autumn, the birds furthest north and east leave their nesting sites to fly to Southern or Western Europe.

In the Strait and on the coast, even if they are both regular visitors, the concentrations of Great Crested Grebe migrants and wintering birds are far greater than those of the Red-necked Grebe.

WINTER MOVEMENTS AND SPRING MIGRATION

(GREAT CRESTED GREBE : 300-1400, RED-NECKED GREBE 5-20)

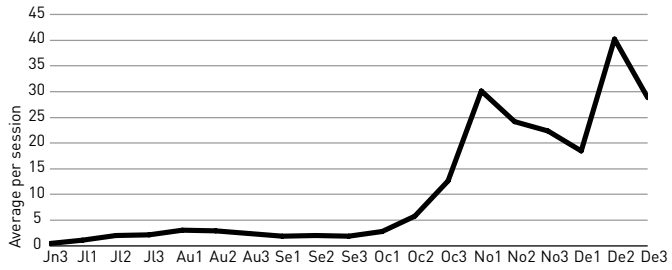
Wintering flocks of Great Crested Grebes are easily visible all along the coast as the species confines itself to a narrow coastal strip. For example, in January 2006, more than 2800 birds were counted on the coast between Hardelot and Berck.

In the Strait, movements are continual from December to March when nesting birds progressively leave the coastal regions. The Red-necked Grebe spends the winter in the Strait of Dover but in small numbers as shown by the few birds records during winter monitoring sessions.

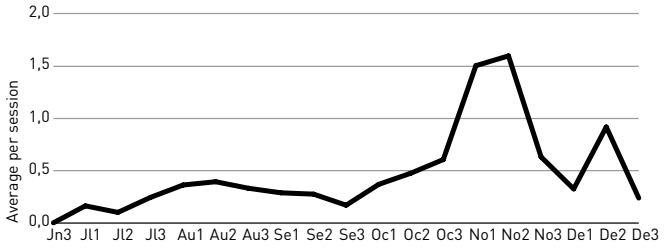
The species, is probably present a little further out to sea, which makes it more difficult to census from the coast.

For this reason, its presence is perhaps underestimated. During the spring season the Red-necked Grebe is seen in small numbers.

Migratory movements are noticeable from the beginning of March until the beginning of May. On a good day, two to four birds might be seen and these figures have only been exceeded once (spring record of eight birds on 13 Mar. 2008). The spring migration of the Great Crested Grebe is more difficult to analyse. The birds spend most of the time at sea, sometimes in large numbers that drift slowly northwards. Migration being measured more by a progressive drop in the size of these rafts floating off Cap Gris-Nez.



Great crested Grebe - post-breeding migration (autumn)



Red-necked Grebe - post-breeding migration (autumn)

AUTUMN MIGRATION

(GREAT CRESTED GREBE : 150-600, RED-NECKED GREBE : 20-80)

The Great Crested Grebe is present in small numbers in the Dover Strait from July. There are daily movements by just a few birds until the beginning of October. Passage intensifies progressively in mid-October and culminates at the beginning of November with an average of around 30 birds per session and a maximum of 100–300 birds.

This passage drops off noticeably during November. The most important movements concern wintering birds from December onwards. The first Red-necked Grebes may also appear at the beginning of July but migration only becomes noticeable at the end of the month. During August, the species is quite regular but in very small numbers: records generally show 1-3 bird.

From October, migration picks up steadily with a very marked peak in the first two 10 day periods of November. More than 10 individuals per day may be seen, most often when there is a north-westerly wind. A very impressive record was set at the Clipon Jetty 4 Nov. 2002 with 28 individuals. Numbers diminish quite quickly from the end of November but the species remains visible until the end of the year.

ADDITIONAL ANALYSIS

The Red-necked Grebe very rarely forms groups and most records at Cap Gris-Nez are of single birds or pairs. It is quite usual however for the Red-necked Grebe to mix with other species of grebes, whether on the ground or in flight. Strong north-westerly winds are likely to lead to large numbers of the species even if passage in large numbers may occur without any particular weather conditions.

The Red-necked Grebe's spring migration takes place mainly on the French side of the Strait. Dungeness has records for only a small number of birds in spring and a few more in autumn, but migration remains exceptional.

Great crested Grebes. Ludovic Scalabre

Black-necked Grebe (*Podiceps nigricollis*)

Grèbe à cou noir / Geoorde Fuut

Black-necked Grebe. Julien Boulanger

Slavonian Grebe (*Podiceps auritus*)

Grèbe esclavon / Kuifduiker

Slavonian Grebe. Stephan Peten (Belgique)

Black-necked Grebe												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
5-25/2-15												

Slavonian Grebe												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
5-20/10-20												

Black-necked Grebe	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Very rare breeder
National status	Common
Regional status	Irregular migrant

Slavonian Grebe	
Bird Directive	Annex I
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Uncommon breeder
Regional status	Irregular migrant

GENERAL COMMENTS

The Black-necked Grebe is widely found in Europe as far north as Southern Scandinavia. It nests preferably at the edge of bodies of water where colonies of Black-headed Gulls are established. The Slavonian Grebe nests in more northerly areas for the most part on lakes with dense plantlife, close to the coastal zones in Iceland, Norway and around the Baltic Sea. In Russia it is found as far east as the Urals.

The Black-necked Grebe sometimes visits inland unfrozen bodies of water in winter while the Slavonian Grebe stays exclusively in the coastal areas of ports and sheltered areas such as estuaries.

WINTER MOVEMENTS AND SPRING MIGRATION

The Black-necked Grebe winters in small numbers in the ports and estuaries of the region, often in the company of the Slavonian Grebe. The regional, coastal winter sites best known for the two species are the Port of Dunkirk and to a lesser extent, the Port of Boulogne-sur-Mer. The Black-necked Grebe is rarely seen at sea during this period. Even rarer, the Slavonian Grebe does provide some sporadic evidence of its presence in the Strait of Dover, probably when moving locally. The spring passage of the Black-necked Grebe is clearly visible but the number of individuals counted remains modest.

Passage occurs from mid-March to the end of April, with its migration peak at the beginning of April. The Black-necked Grebe is only noted occasionally during sessions each year (generally less than 5 sessions), most of the time in the company of the Slavonian Grebe. The best day ever, with a remarkable 22 birds, was recorded at an unusual date, 20 March 2005 (all the other dates mentioned concern less than 10 individuals). The Slavonian Grebe limits its passage to a one-month period in spring, from the end of March until the second 10 day period of April, with a few individuals still visible at the end of April. The record of 12 birds was established 07 Apr. 2007.

AUTUMN MIGRATION

Autumn passage of the Black-necked Grebe can be divided into two distinct periods.

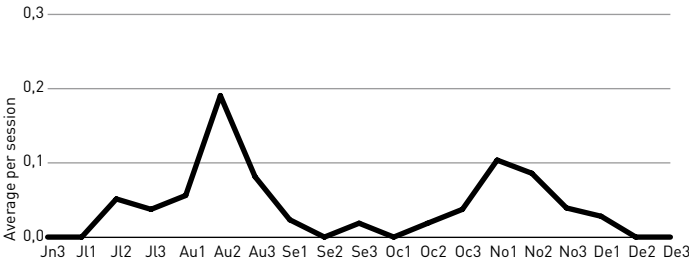
The first movements take place at the end of summer during the dispersal of local breeding pairs, essentially in August. The second migration wave in October-November probably concerns northern birds. The passage coincides with that of the Slavonian Grebe, the two species often being found together at migration time. The migration of the Slavonian Grebe is compressed into four 10-day periods, from the end of October to the end of November with a marked passage peak in the first 10-day period. of November.

It is possible to see a few individuals from the end of summer (Aug-Sept) but this is rather rare as we are only talking of a few individuals even in the best passage periods. The number of records over a season being often less than five. The record of 15 birds was on 4 Nov. 2002 (Clipon Jetty), all the other records being less than 10.

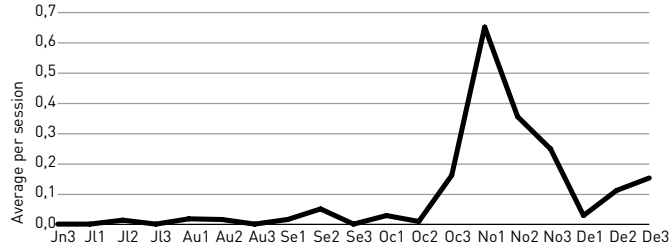
Some data recorded in December is associated with the species' winter presence.

ADDITIONAL ANALYSIS

The Black-necked Grebe is very often accompanied by the Slavonian Grebe. Both species live mostly in groups at sea, drifting with the currents. Passage on the English side of the Strait seems much more limited for both species but with a similar pattern. Many observations cover both the Slavonian Grebe /Black-necked Grebe as a group. Both species are small and difficult to tell apart from a distance, especially in autumn when their plumages are similar.



Black-necked Grebe - post-breeding migration (autumn)



Slavonian Grebe - post-breeding migration (autumn)

Slavonian Grebes and Great crested Grebe. Ludovic Scalabre

Black-necked Grebes. Ludovic Scalabre

Shearwaters

Being long-distance pelagic migrants, shearwaters are one of the groups of flagship species for seawatchers. Cap Gris-Nez is a privileged passage point from which to monitor the three species that transit regularly via the North Sea: the Sooty Shearwater, the Manx Shearwater and the Balearic Shearwater. Four other species may be seen occasionally: Scopoli's Shearwater, the Great Shearwater, the Macaronesian Shearwater and the Yelkouan Shearwater.

Manx Shearwater (*Puffinus puffinus*)

Puffin des Anglais / Noordse Pijlstormvogel

Manx Shearwater. Stephan Peten

Manx Shearwater												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
5-40/100-1200				Mouvements locaux								

Manx Shearwater	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Fairly common
Regional status	Regular migrant

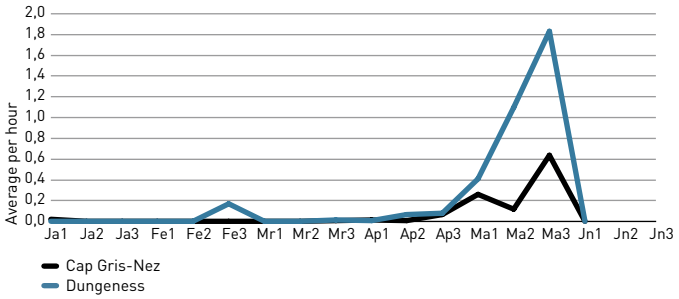
GENERAL COMMENTS

The Manx Shearwater nests over a wide area of the coasts of the Atlantic Ocean that stretches from the Canary Islands and Madeira in the south to the Icelandic coast in the north, with its stronghold being in the British Isles (Wales, Ireland, Scotland) and Faroe Islands that represents more than 90% of the world population. It can also be found in small numbers on the French coast (Brittany, Channel Islands). Its distribution has recently extended to the north-east American coast. A trans-equatorial migrant, the Manx Shearwater winters in the South Atlantic Ocean from the Brazilian and Argentinian coasts to the South African coast (in small numbers). It mainly follows the Atlantic route, the North Sea being a secondary route.

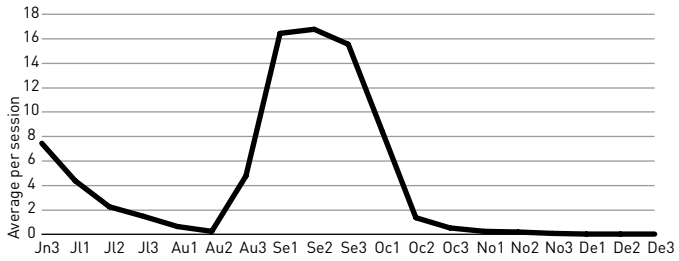
WINTER MOVEMENTS AND SPRING MIGRATION *(5-40)*

The species does not winter in the Strait of Dover. However, limited data on a few late migrants has been recorded in December and January.

The presence of the Manx Shearwater is hardly noticeable on the French side of the Strait. The best period is at the end of May when some individuals may be sighted. These sightings are probably of



Manx Shearwater - pre-breeding migration (spring)



Manx Shearwater - post-breeding migration (autumn)

Manx Shearwater. Julien Boulanger

birds that have already nested and are dispersing. Its presence is far more common and regular on the English side of the Strait with more than fifty birds noted on some days in May.

AUTUMN MIGRATION *(100-1200)*

The Manx Shearwater is a very regular sight from June to the beginning of August due to the feeding of its young (nesting begins in April-May), and the species may search for food far away from the colony to which it generally returns at night.

It is possible to see more than 50 birds on a windy day in this period.

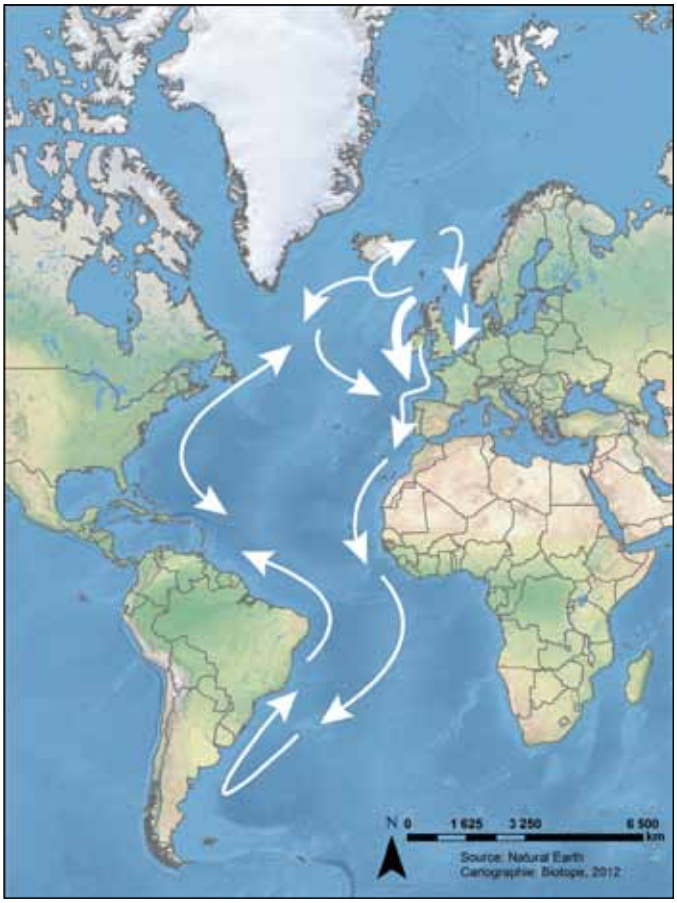
Migration starting at the end of August quickly reach its maximum in September when the species is very regular but often in small numbers (an average of 16 birds. per session). Strong north-westerly winds originating from Scotland are necessary to see a good passage of the species, sometimes with hundreds of birds over two or three days. The maximum number observed is 772 individuals on 7 Sept. 2008. The beginning of October remains a good period with the possibility of seeing the last influxes but passage drops off considerably from mid-October. Migration finishes in mid-November although the occasional bird may still be recorded.

ADDITIONAL ANALYSIS

Like the Sooty Shearwater, post-breeding numbers of the Manx Shearwater are closely tied to the weather conditions that determine exactly when the September passage peak occurs. The main migration route of the species is over the Atlantic Ocean off the Irish coast, so its presence in the North Sea is low except when there are very strong north-westerly winds in Scotland. In all cases, even in the best of years when it is possible to see more than 1000 birds in a season, total numbers observed in the North Sea are modest compared to the very high passage recorded every year in Ireland with days of over 10000 birds.

An influx of Manx Shearwaters may comprise more than ten birds.

These groups can be mixed, including Balearic and less occasionally Sooty Shearwaters. In times of successive storms, weary birds seeking shelter appear close to the shore, flying slowly and landing regularly. A unique opportunity to observe the bird closely.



Balearic Shearwater (*Puffinus mauretanicus*)

Puffin des Baléares / Vale Pijlstormvogel

Balearic Shearwater. Frédéric Le Gallo (Hoëdic)

Balearic Shearwater												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
0-2/100-700												

Balearic Shearwater	
Bird Directive	Annex I
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Uncommon
Regional status	Regular migrant

GENERAL COMMENTS

The species breeds exclusively on a few islands in the Balearic archipelago in February-March.

The remainder of the Mediterranean is dominated by the Yelkouan Shearwater. At the end of May/beginning of June, after breeding, the Balearic Shearwater migrates towards the French coastline to summer in the Atlantic Ocean. Its distribution area has greatly extended northwards in the last few years. Its ever greater presence in the Strait of Dover is a direct result of the species spending the summer in the English Channel.

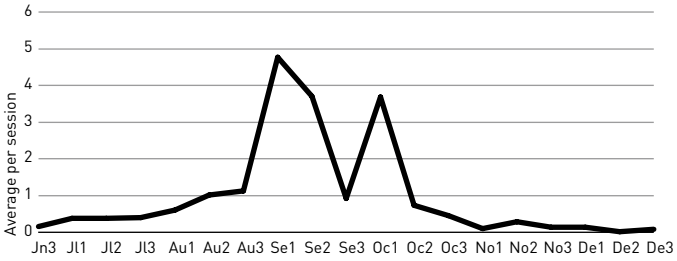
WINTER MOVEMENTS AND SPRING MIGRATION *(0-2)*

Some birds have been recorded (December-January) but the Balearic Shearwater does not winter in the Strait of Dover. The presence of the species is exceptional in April-May. The first summer visitors being observed at the end of June.

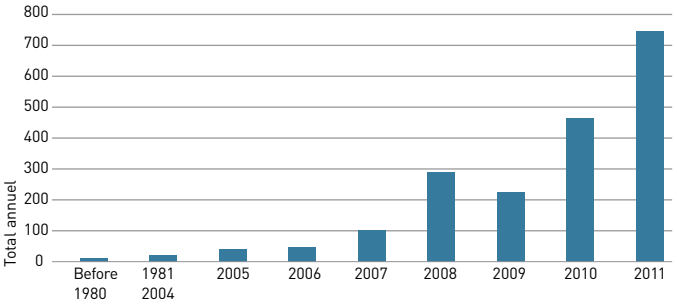
AUTUMN MIGRATION *(10-700)*

Some solitary Balearic Shearwaters are regularly observed from the beginning of July. Both sightings and bird numbers increase progressively in August. From the middle of the month, the species becomes very regular and it is already possible to see 10-20 birds on a good day. The maximum numbers are noted from the beginning of September to the beginning of October with, since 2007, the possibility to observe up to a hundred birds the day after strong south-westerly winds.

The record was set 05 Sept. 2009 with 100 birds at Cap Gris-Nez (48 at Clipon Jetty the same day). Notwithstanding favourable meteorological conditions, the species is visible in small but quite regular numbers during this period.



Balearic Shearwater - post-breeding migration (autumn)



Balearic Shearwater - trend of annual numbers at Cap Gris-Nez

Numbers drop rapidly from mid-October to a residual passage after mid-November.

NB: the trough in the visible passage for the third 10 day period of September in the graph is entirely due to the absence of favourable winds during this period as the species has been present in very large numbers since 2008.

ADDITIONAL ANALYSIS

Movements of Balearic Shearwaters in the Strait of Dover are directly linked to summering in the English Channel. There is no evidence of birds migrating into the North Sea. Days of heavy passage always come in the wake of fierce storms from the south-west (the day before), which blow the birds in the English Channel eastwards.

The birds rejoin their original summer quarters by flying along the French coastline. The progression northwards of the summer distribution area of the Balearic Shearwater is particularly visible in the Strait of Dover since 2007-2008 when their numbers increased dramatically. Although total annual numbers progressed slowly to reach at best some twenty individuals at the beginning of 2000, the species has become regular since 2008 with 12 days exceeding 50 birds and an annual record of 738 in 2011.

Balearic Shearwater. Ludovic Scalabre

Balearic Shearwater. Willy Raitière/Biotope

By comparison, the record day for the species was only 18 in 2006 and 46 birds in total that same year! Cap Gris-Nez, being at the northernmost limit of the species' distribution area (Manche), is ideally located to observe, together with the Brittany and Normandy summer sites, the rapid changes in its normal distribution. The Clipon site, located further north, records far fewer birds. Data from the English side of the Strait confirms the same pattern but the number of birds observed is far fewer. Influxes of small groups of Balearic Shearwater sometimes then associate with the Manx Shearwater, which gives a useful insight into the distinctive criteria of the species.

Sooty Shearwater (*Puffinus griseus*)

Puffin fuligineux / Grauwe Pijlstormvogel

Sooty Shearwater. Frédéric Le Gallo (Hoëdic)

Sooty Shearwater												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
0/200-2800												

Sooty Shearwater	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Uncommon
Regional status	Regular migrant

GENERAL COMMENTS

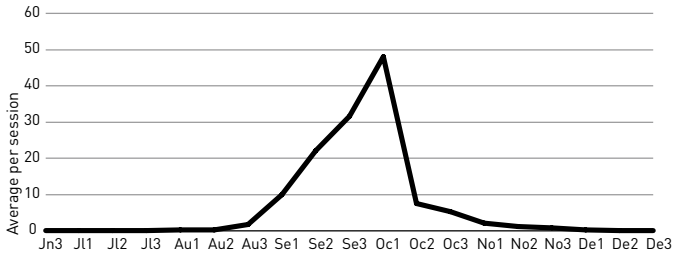
The Sooty Shearwater, like the Great Shearwater, nests in the Southern Hemisphere. Both of these atypical long-distance migrants voyage over the oceans in a counter clockwise direction, contrary to all other European species. Three population strongholds are located in the South Atlantic, from the extreme south of Argentina to the Falkland Islands and Tristan da Cunha (mid-South Atlantic). Migrants visible in our latitudes fly north along the North American East Coast in spring, summer in Arctic waters before flying back down along the European coastline. The principal migration route is off the Irish coast. Passage by means of a secondary route via the North Sea may be taken depending on weather conditions to the north-west of Ireland. The Pacific population (Australia, New-Zealand) adopts the same migratory strategy towards the Northern Hemisphere.

WINTER MOVEMENTS AND SPRING MIGRATION *(0)*

The Sooty Shearwater does not winter in the North Sea. A few birds have been seen in December during winter storms and there is even one record of a sighting in January. Both were probably cases of late migrants. The species does not reside in the Western Palearctic in spring. Otherwise it is totally absent during this period.

AUTUMN MIGRATION *(200-2800)*

The concentrated migration passage of the Sooty Shearwater takes place over a short period. A few solitary individuals may appear between mid-July and mid-August but few regular migration movements are recorded before the end of August with 10-20 birds in the right conditions.



Sooty Shearwater - post-breeding migration (autumn)

Passage becomes heavier from the first 10-day period of September. From the middle of the month, the species is observed at each session with a favourable wind, with sometimes influxes of more than 300 birds. Passage peak is very marked but only for some fifteen days at the end of September-beginning of October.

All records of more than 500 birds were noted between the 25 September and the 5 October, in fact with one or two exceptional passages over a few days, 1649 birds on 1 and 2 Oct. 2008, 1749 on 1 and 2 Oct. 1977, 1822 on 28 and 29 Sept. 2005 and the best day ever with 1335 birds on 1 Oct. 2008.

Sooty Shearwater. Willy Raitière/Biotope

Sooty Shearwater. Frédéric Caloin

The intensity of migration all but disappears starting from the second 10 day period of October. The best days then rarely exceed 100 birds even if passage remains regular throughout the month.

The species is then seen regularly with the possibility of 20 or so birds until the middle of November.

ADDITIONAL ANALYSIS

Influxes and consequently the number of birds seen in a season depend on particular meteorological conditions (change of Atlantic wind direction towards the North Sea around Scotland) which must coincide with the very short peak passage period for the species. Annual totals may therefore vary from 200 birds if the right conditions are not present to nearly 3000 birds if they are.

The Sooty Shearwater is often seen alone except during important influxes when it may move occur in small groups. Its presence outside periods of influx needs exceptional wind conditions as the species is highly pelagic and normally lives at sea.

Even during massive influxes, passages occur essentially far out to sea.

It is therefore, owing to its special geographical location, that Cap Gris-Nez records three times as many sightings as the Clipon site just 47 km away.

Petrels

Petrels are the smallest of European seabirds. This highly pelagic group only approaches the coast during the breeding period or in stormy weather. They move around just above the surface of the sea between the waves, which makes them difficult to observe, especially in rough seas. Two species visit the Strait of Dover during the migration period: Leach´s Storm Petrel and the European Storm Petrel.

Leach's Storm Petrel (*Oceanodroma leucorhoa*)

Océanite culblanc / Vaal Stormvogeltje

Leach's Storm Petrel. Julien Boulanger

European Storm Petrel (*Hydrobates pelagicus*)

Océanite tempête / Stormvogeltje

European Storm Petrel. Frédéric Le Gallo (Hoëdic)

Leach's Storm Petrel												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
0/0-50												

European Storm Petrel												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
0-70/0-2												

Leach's Storm Petrel	
Bird Directive	Annex I
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Uncommon
Regional status	Regular migrants in small numbers

European Storm Petrel	
Bird Directive	Annex I
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Uncommon
Regional status	Occasionnal migrant

GENERAL COMMENTS

Leach´s Storm Petrel nests on the rocky islands of the North Atlantic and North Pacific Oceans. Birds seen in Europe come from colonies in Norway, Iceland, Scotland and the Faroe Islands. European birds and those from South-East Canada winter in the South Atlantic, from Brazil to South Africa. The European Storm Petrel only nests in the North-East Atlantic. The coastlines of Norway, Iceland, the Faroe Islands, Scotland and Ireland are home to 90% of the world population. Smaller colonies are established on the French and Spanish Atlantic coasts (Brittany, Basque Country). The species winters for the most part off the south-west African coast (South-East Atlantic). A Mediterranean population, presumed to be resident, is found in Spain, France (Corsica), Italy, Malta and Greece. Both species are highly pelagic except in the breeding period and only otherwise approaching the coast during severe storms.

WINTER MOVEMENTS AND PRE-BREEDING MIGRATION

(LEACH´S STORM-PETREL : 0) (EUROPEAN STORM-PETREL : 0-70)

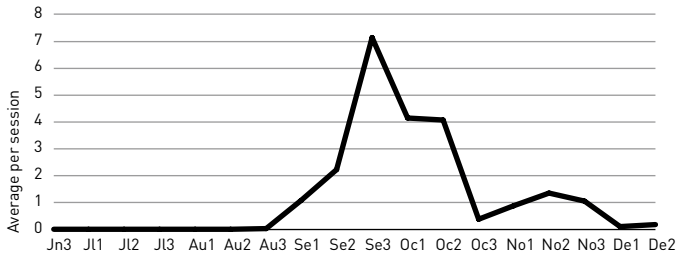
Leach´s Storm-petrel and the European Storm-petrel do not winter off our regional coast. Late migrants however are sometimes recorded when there are strong winds at the beginning of winter, in particular at the Clipon Jetty (regularly in December, more occasionally in January). The European Storm-petrel is not normally present in spring in the region. Nevertheless, a unique and record influx was recorded at the end of May 2006 during a particularly violent south-westerly storm,

which forced hundreds of birds in the Atlantic towards the English coast and, to a lesser extent, towards the French Channel coast and especially around Cap Gris-Nez. On the 23 May 2006, a record day, 54 birds were counted and sightings continued until the end of the month. Leach´s Storm-petrel has never been sighted in spring.

AUTUMN MIGRATION *(LEACH´S STORM-PETREL: 5-50) (EUROPEAN STORM-PETREL : 0-2)*

The migration of Leach´s Storm-petrel is less often observed from Cap Gris-Nez.

The phenological data comes mostly from an analysis of its passage recorded at the Clipon Jetty which is better placed to observe the species. The first birds may exceptionally appear at the end of August but the first data is generally with the first north-westerly winds in September, indispensable conditions for the species to make a general appearance.



Leach's Storm Petrel - post-breeding migration (autumn)

Until mid-September, the numbers for the species remain low but may reach fifty individuals around the middle of the month. The best period to see Leach´s Storm Petrel is between the end of September and the beginning of October.

As soon as conditions are right, the species is observed and some remarkable influxes of more than 100 birds have been witnessed (155 on 23 Sept. 2003, 328 on 23 Sept. 2004 (site record), 142 on 2 Oct. 2005 and 236 on 12 Oct.1997). Numbers decrease rapidly in October but the species remains more or less regular in November if there are fierce storms. Some birds may be recorded in December and even January.

The European Storm-petrel is an occasional visitor to the Strait of Dover. Only a few individuals have been observed even in the best years from Cap Gris-Nez or the Clipon Jetty which produces a few more records. Sightings occur from the beginning of September to the end of December but the best period seems to be October.

However, the bird count numbers are too low to establish a pattern. The record is just five birds noted at the Clipon Jetty.

ADDITIONAL ANALYSIS

The presence of Leach´s Storm-Petrel is directly related to wind conditions during the dispersal period of the species.

Therefore, variability is high from one year to the next, depending on wind conditions between the end of September and beginning of October. The difference in the amount of data between the Clipon Jetty and Cap Gris-Nez is very large (30-500 and 5-50 sightings respectively per year). This is probably due to the strictly pelagic behaviour of the species and the geographical configuration of the two sites that are only 45 km apart.

Petrels that arrive off the coast of the CliponJetty, pushed by north-westerly winds, do not anticipate the presence of the jetty, barely visible to a bird flying just above the waves.

They therefore find themselves at the base of the jetty that they must then skirt around before flying out to sea again. The configuration of the Cap Gris-Nez site is very different with its high cliffs visible from miles away (esp. those of Cap Blanc-Nez). They probably do not look very inviting to petrels nearing the coast and therefore they veer off. These species, which are very small, keep away from the coast and move around in the troughs of waves.

They are therefore very difficult for observers to spot. The exceptional influxes that sometimes affect the Bay of Biscay coastline (and even reach inland lakes) during very fierce storms at the beginning of winter never reach as far as the Dover Strait.

Leach's Storm Petrel

European Storm Petrel

Fulmar

Northern Fulmar (*Fulmarus glacialis*)

Fulmar boréal / Noordse Stromvogel

Northern Fulmar. Frédéric Caloin

Northern Fulmar												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
NC/200-2000												

Northern Fulmar	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Local breeder
National status	Fairly common
Regional status	Present all year

GENERAL COMMENTS

The Fulmar breeds in large numbers around the British Isles, in Iceland and Norway.

There is a darker morph form of the species that is found in the most northerly of zones, essentially in the Barents Sea. Since the 1970s the species has expanded southwards and can now be found along the French coastline on cliffs from the Pas-de-Calais to the Morbihan.

Some sixty couples are present in the region on the Cap Blanc-Nez and Pointe de la Crèche (Wimereux) cliffs.

The colonies are abandoned rather late in the season (September). The main wintering grounds are located in the North Sea and the North Atlantic but the species is also present as far south as the Bay of Biscay and Spain.

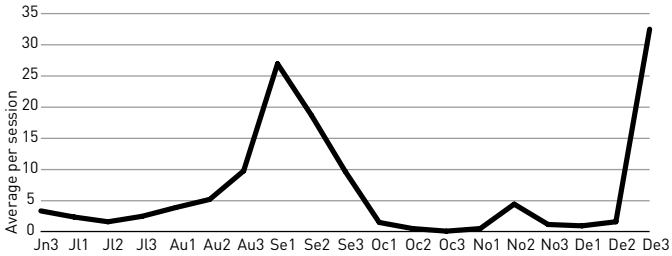
WINTER MOVEMENTS AND SPRING MIGRATION

The Fulmar winters in numbers in the North Sea. In stormy weather in December and January, several hundred birds may be seen together with the darker northern birds (the percentage of the darker birds may be up to 10%).

On 30 Dec. 2011, the best day in the records, 95 darker birds were observed. The rather early return of nesting individuals (sometimes in the middle of winter) makes it difficult to measure migration movements in spring; it being made. even more difficult as adults are accompanied by numerous juveniles (sexual maturity is reached from 7-9 years of age) present along the cliffs.

Dark morph Northern Fulmar. Daniel Haubreux

Northern Fulmar. Ludovic Scalabre



Northern Fulmar - post-breeding migration (autumn)

AUTUMN MIGRATION *(200-2000)*

A local nester, the Fulmar is present throughout the summer. The first migration movements are noticeable from the beginning of August and increase quite rapidly to reach a migration peak towards mid-September.

In this period, important influxes are observed during strong north-westerly storms (between 300-1000 birds on the best days).

The Clipon Jetty holds the record with 1166 on 10 Sept. 2011.

There are therefore twice as many birds at the Clipon site compared to Cap Gris-Nez further south.

The movements die down very quickly: at the end of September, the species is rarely seen before the arrival of winter storms.

As wintering zones are mainly to the north, sightings are mostly of individuals blown into the Strait by strong winds.

ADDITIONAL ANALYSIS

The Fulmar lives mostly singly or in pairs. Even at times of influx, there is no grouping but rather a dispersed and continual passage. The post-breeding passage only concerns light morph individuals (southern nesting birds); only two sightings of the northern variant have been recorded in this period. The number of birds seen has greatly increase since the 1970s as the species has expanded southwards

All five birds recovered in the region have originated in Great Britain, the oldest bird being aged 22.

Gannet

Northern Gannet (*Morus bassanus*)

Fou de Bassan / Jan van Gent

Northern Gannet. Frédéric Caloin

Northern Gannet												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
10000-30000/30000-90000												

Northern Gannet	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Ver y common
Regional status	Migrant, present all year

GENERAL COMMENTS

The Northern Gannet nests in dense colonies, preferably on inaccessible cliffs around the North Atlantic Ocean.

The most southerly colonies are found in Brittany,with even some birds recently found nesting in the Mediterranean Sea.

The most northerly populations are located as far north as Norway (on the Russian border), in North America and Iceland.

It is also very common in the British Isles.

The species' population has been growing since the second half of the 20th century.

The Northern Gannet displays pelagic behaviour except when nesting.

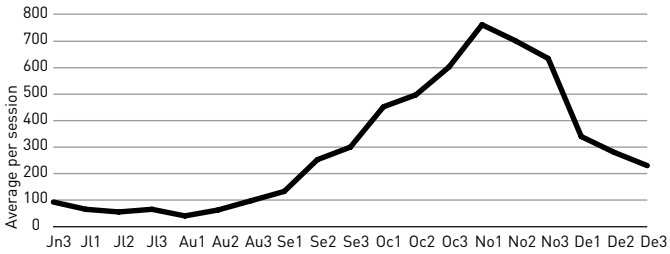
There is no particular migration route during dispersal and the Gannet is therefore found over a very extensive area of the Atlantic, English Channel and the North Sea. Lesser numbers are found in the Mediterranean Sea and off the African coasts.

WINTER MOVEMENTS AND SPRING MIGRATION *(10000-30000)*

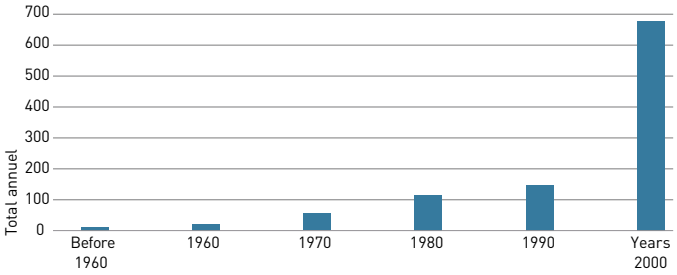
The species is present throughout the winter (flying north or south), with important influxes during winter storms (for example more than 6000 birds on 2 Jan. 2007).

The presence of the Northern Gannet during the pre-breeding migration period is a direct consequence of the bird wintering throughout the English Channel and the North Sea areas.

It is difficult, as a result, to establish if the birds present at the beginning of spring are the result of migratory or feeding movements.



Northern Gannet - post-breeding migration (autumn)



Northern Gannet - population trend at Cap Gris-Nez (autumn)

Numbers are high as winter turns into spring with some impressive influxes (11035 birds on 20 Feb. 2005).

Passage remains quite prominent in March (400 birds on average per session) and then drops noticeably.

in April (250 birds on average) and remains stable until the end of May when sightings becomes rarer.

AUTUMN MIGRATION *(CAP GRIS-NEZ:30000-90000) (CLIPON JETTY:(7000-30000)*

The Northern Gannet is widespread. Summer sightings mainly concern some immature and feeding birds seen in small numbers at each session and flying both north and south. Migration starts very progressively in August with modest numbers in general, with up to 500 birds on windy days.

Passage picks up from September with a much more significant presence of adults and juveniles. From October, numbers are high with it not being unusual to count 1000 birds even in the absence of windy conditions while more than 5000 birds occur on windy days.

Peak passage is recorded in November when stormy days give rise to exceptional events (5 days with more than 10000 birds since 2005). The record is 16381 on 16 Nov. 2005.

Numbers drop significantly at the beginning of December but the species' presence remains noticeable.

ADDITIONAL ANALYSIS

The Northern Gannet is particularly visible during storms at the end of autumn or in winter with impressive passages comprising thousands of birds in an hour of observation (for example, a passage of 1300 in 15 minutes on 20 Feb. 2005).

The geographical location of Cap Gris-Nez is favourable for appreciating the pelagic character of the species and confirms its clear pattern of behaviour as opposed to the Clipon Jetty site where passage is less important between September and November.

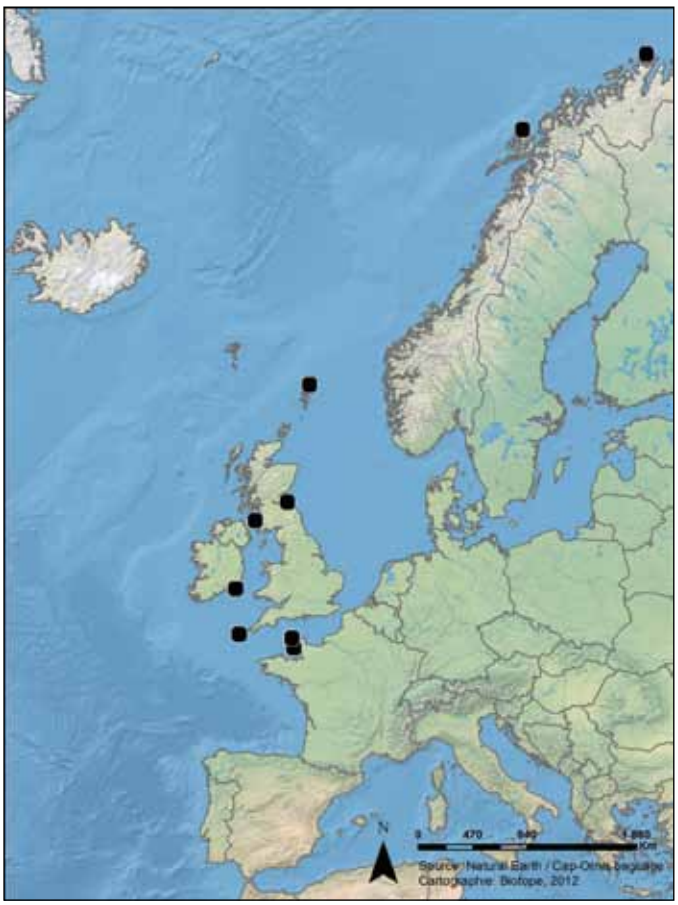
Several hundred Gannets may stop to fish, sometimes very close to observers. The trend in bird numbers at Cap Gris-Nez is highly significant and shows a very clear increase since the year 2000.

The passage on the English side of the Strait is less pronounced but confirms the same trend as that at Cap Gris-Nez.

Northern Gannets. Ludovic Scalabre

Among recoveries of dead birds recorded in the region, 25 concerned birds ringed in the Channel Islands, 11 in the British Isles and 3 in Norwegian colonies. The majority of cases concerned young birds.

Among birds ringed in rescue centres, one bird released in April 1986 in the region was identified nesting in July 1997 in an English colony.



Cormorants

Great Cormorant (*Phalacrocorax carbo*)

Grand Cormoran / Aalscholver

Great Cormorant. Ludovic Scalabre

Shag (*Phalacrocorax aristotelis*)

Cormoran huppé / Kuifaalscholver

Shag. Ludovic Scalabre

Great Cormorant												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
NC												

Shag												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
NC												

Great Cormorant	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Rare breeder
National status	Common
Regional status	Regular migrant

Shag	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Uncommon
Regional status	Regular migrant

GENERAL COMMENTS

The Great Cormorant is found nesting from the Arctic to Subtropical Africa, mainly on the coast but also in the wetland regions of the continent. Only the most northerly populations migrate in wintertime. They move to ice-free zones on the coast or more southerly climes. Even if the species is often seen flying over at Cap Gris-Nez, individuals are often not counted as migrants despite the fact that it does not nest on the cliffs overlooking the Strait.

The Atlantic Shag population nest exclusively on the western and northern coastline of Europe, from France to Norway. The closest nesting grounds are in the Seine-Maritime department. The Mediterranean sub-species populations, also known as the Mediterranean Shag, do not mix with the Atlantic populations. Contrary to the Great Cormorant, the Shag does not visit inland bodies of water, even in wintertime. It prefers rocky foreshores and is regularly seen around the tide race of harbour seawalls. In winter, the populations disperse along the coastline, generally at a short distance from the colonies (normally less than 100 kms.).

WINTER MOVEMENTS AND SPRING MIGRATION

In wintertime (December to the beginning of February), the number of Great Cormorants seen at Cap Gris-Nez is greater than at any other time of year. The birds are often seen in the morning in flocks (of several hundred or even over a thousand). They are probably moving from coastal roosts (Port of Boulogne-sur-Mer, Marquise quarries) to fishing grounds around the coast. From March, numbers drop due to the gradual abandonment of winter roosts. Pre-breeding migration movements are however impossible to distinguish from local ones. As for the Shag, the species is present all winter and spring below the cliffs of Cap Gris-Nez, but only two or three birds.

Most observations concern birds stopping to rest or fish rather than actual migrants. In spring, there are fewer sightings. They start again in May, but above all in June and the beginning of July. However, it should be emphasised that in this period (June-July), the low level of site monitoring may be the reason for the drop in sightings. The spring record for the Shag is 6 birds on 12 Mar. 2006.

AUTUMN MIGRATION

The two species regularly stop on migration in the region but an analysis of their movements is difficult, particularly as the Great Cormorant is involved in continual local movements making it impossible.

The first sightings of the Shag are made at the end of July (taking into account the difficulties mentioned above) with an increase in August. The species then remains present all autumn and winter. The autumn record is 7 birds on 26 Oct. 2010.

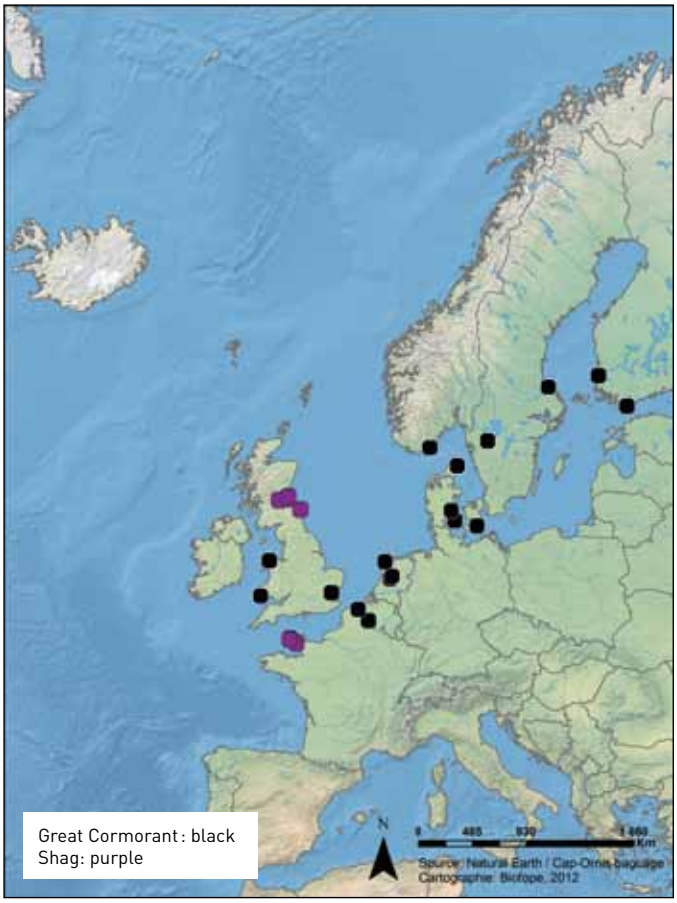
Shags. Ludovic Scalabre

ADDITIONAL ANALYSIS

Regional data on recoveries of ringed birds reveals lots of information on the provenance of wintering birds.

For the Great Cormorant, there are 26 records between September and March, all the result of birds originally ringed as young in breeding colonies.They came from the English coast (7), the French North Sea coasts (12) and from around the Baltic Sea (7).

It should be noted that there is only four recoveries from truly continental colonies.The oldest bird was aged 15.Regarding the European Shag, their origins are even more limited.Of the 12 records, nine birds were ringed in Scotland and the remaining three in the Channel Islands.The oldest bird was aged 11.



Geese

Brent Goose (*Branta bernicla*)

Bernache cravant / Rotgans

Brent Geese. Ludovic Scalabre

Brent Goose												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
4000-15000/5000-20000												

Brent Goose	
Bird Directive	Annex II
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Very common
Regional status	Regular migrant

GENERAL COMMENTS

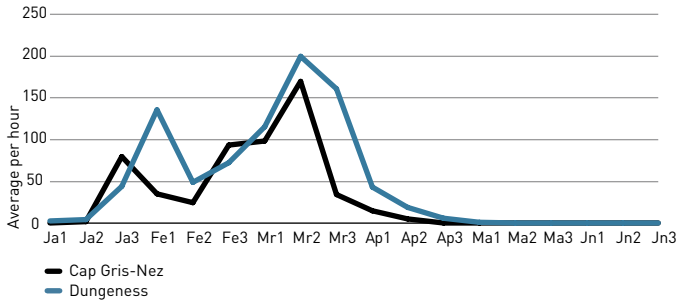
The Brent Goose is divided into three sub-species that cover the entire Arctic region: the Pacific Brent Goose (ssp. nigricans) from Eastern Siberia to North-West Canada, the Pale-breasted Brent Goose (ssp hrota) that inhabits the Canadian Arctic, Greenland, Spitzberg and Franz Josef Land, and the Dark-breasted Brent Goose (bernicla) in Western Siberia.

The vast majority of wintering birds in France concern the dark breasted form whose migration route passes through the Strait of Dover.

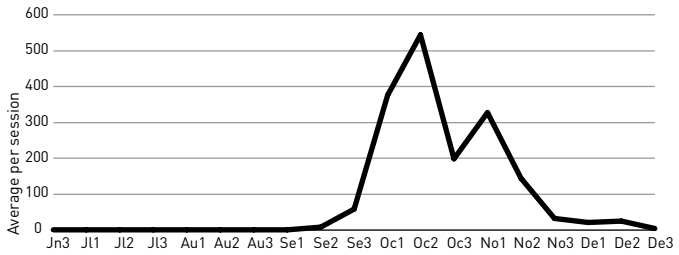
The hrota sub-species is present in small numbers each year but its usual wintering areas are in Ireland and England and its migration route does not pass through the Strait. A few individuals of the nigricans sub-species are observed in France each year. Threatened with extinction in the 1930s as the result of a disease that hit its principal food source in its wintering zones, its numbers increased considerably in the second half of the 20th century.

WINTER MOVEMENTS AND SPRING MIGRATION *(4000-15000)*

The Brent Goose is a regular sight in winter due to local movements between different wintering sites but these movements normally concern only small groups. The presence of the species on pastureland around Cap Gris-Nez is of quite regular occurrence. Passage of the Brent Goose in spring is highly variable and its movements difficult to predict. The species migrates on either the French or English side of the Strait depending on wind conditions in the English Channel. Small movements are recorded from the end of January but the first significant movements normally start in February with



Brent Goose - pre-breeding migration (spring)



Brent Goose - post-breeding migration (autumn)

skeins of up to several hundred geese. Some earlier movements have been recorded in recent years in January or early February, without any obvious climatic conditions.

The first two 10-day periods of March are witness to the passage of the majority of birds. The best days may then exceed a thousand birds with, for example, 2514 on 19 Mar. 2011; 2716 on 9 Mar. 2009; 3430 on 9 Mar. 2011 and a record 8836 birds on 12 Mar. 2005. From the end of March, the species remains very regular but in far smaller numbers, declining rapidly at the beginning of April to become residual by the end of the month.

AUTUMN MIGRATION *(5000-20000)*

The first Brent Geese are seen in mid-September. The increase in numbers is very rapid and its presence is regular by the end of the month in small numbers, even when windy, and generally less than one hundred birds per day.

The peak passage is throughout October with a highly regular presence in large numbers as soon as winds are favourable.

Often, the first north-westerly storm of the season gives rise to a considerable passage of the species.

Several days with more than 10000 birds have been recorded (10520 on 7 Oct. 2012; 14958 on 12 Oct. 2009 and 16874 on 8 Oct. 2011 which is the record).

Later similar winds bring still important but fewer numbers.

Passage remains strong until the beginning of November and then falls progressively but it is still possible to see a few hundred Brent Geese until the end of the month. In December, passage remains quite regular but with numbers reduced to around a few dozen birds.

ADDITIONAL ANALYSIS

The presence of the two sub-species hrota and nigricans are relatively rare events and, in the case of the Pale-breasted Brent Goose, only concern a few birds.

The Pacific Brent Goose, on the other hand, is much rarer with only four sightings in the last eight years.

Influxes of the species are indeed a spectacular sight with skeins of over one thousand birds sometimes. This can all happen in a single, if not a half a day. This intense passage over short time periods explains, in part, the discrepancies of total annual figures as 75% of the seasonal passage can take place in just a few hours.

The similarity of passage between the Clipon Jetty and Cap Gris-Nez is quite remarkable even if numbers are often higher at Cap Gris-Nez.

These differences, when they exist, are explained by the skeins of geese flying inland over the Dunkirk region. More classic winter movements then follow towards Western and Southern Europe as well as the coastal regions of North Africa.

Brent Geese. Ludovic Scalabre

Common Shelduck (*Tadorna tadorna*)

Tadorne de Belon / Bergeend

Shelducks. Guy Flohart

Common Shelduck												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
NC/400-1400												

Common Shelduck	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Fairly common breeder
National status	Common
Regional status	Present all year and migrant

GENERAL COMMENTS

The Common Shelduck is very widespread from Western Europe to East Asia.

In Europe, it nests mostly in coastal regions in the west of France, in the British Isles and in Scandinavia as well as around the Black and Mediterranean Seas. The migration movements of this species are different from other duck species.

Most adult birds from Western Europe fly north from mid-June to the beginning of August to moult together on the sandbanks of the Wadden Sea (German shoreline).

WINTER MOVEMENTS AND SPRING MIGRATION *(NOT COUNTED)*

The Common Shelduck winters in the region, mainly in estuaries in the southern part of the Pas-de-Calais.

At Cap Gris-Nez, local movements are regular throughout the winter with a more pronounced passage when there is a prolonged cold spell (e.g. 124 birds on 2 Jan. 2012, 167 on 2 Jan. 2010).

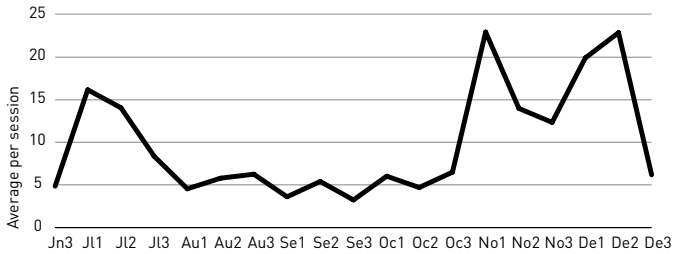
Pre-breeding migration movements northwards are difficult to interpret at Cap Gris-Nez as they are confused with the local movement of birds.

Observed bird numbers remain stable throughout the spring.

AUTUMN MIGRATION *(400-1400)*

Movements of the Common Shelduck for moulting purposes are noticeable in the Strait of Dover with a northerly passage from the end of June to the beginning of August.

These movements remain relatively modest (200-400 observed) in comparison to the total number of birds that fly north towards the Wadden Sea.



Shelduck - post-breeding migration (autumn)

Shelducks. Ludovic Scalabre

Return movements are extended: the species, generally in groups of a few tens of birds, is very regular from August to the end of October. A very clear passage peak is noted in November but December is also a very good month for the species.

The best days are consistent with north-westerly winds during this period with a record 365 birds on 22 Nov. 2008.

ADDITIONAL ANALYSIS

Except for the months of November and December when the species mixes freely with groups of Brent Geese, the Common Shelduck generally lives in individual groups. Outside this end-of-year influx period, weather conditions have no effect on passage intensity, which is difficult to forecast for this species.

Contrary to other ducks for which hunting results in large numbers of recoveries, the species is protected and only nine records are in the databases. The majority of ringed birds found dead in the region came from the Bay of Somme or Belgium. One bird ringed in Germany in August, probably during the moulting period, was recovered in November in the region.

The oldest bird was at least 18 years and was ringed as an adult at the Marquenterre Park (Somme, France) in Feb. 1983, being found dead in Jun. 2000 in Ambleteuse.

Dabbling Ducks

This group covers a category of ducks that feed on the surface of the water. Contrary to diving ducks, no species in the group are sea ducks. The various species visit the Strait of Dover essentially in the migration periods and in the case of winter movements due to prolonged cold spells. The species migrate preferably at night and only a small part of their movements are detectable in the daytime.

Northern Shoveler (*Anas clypeata*)

Canard souchet / Slobeend

Northern Shovelers and Gadwall. Ludovic Scalabre

Northern Shoveler												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
250-1000/150-700												

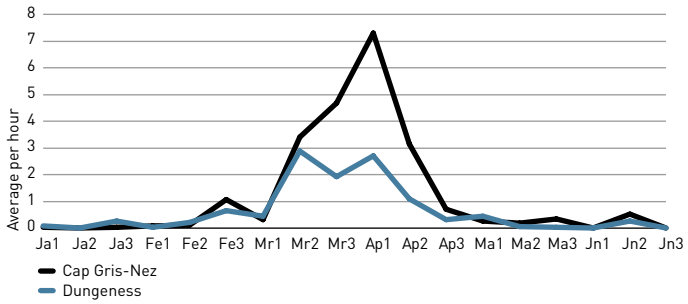
Northern Shoveler	
Bird Directive	Annex II et III
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Common breeder
National status	Uncommon
Regional status	Irregular migrant

GENERAL COMMENTS

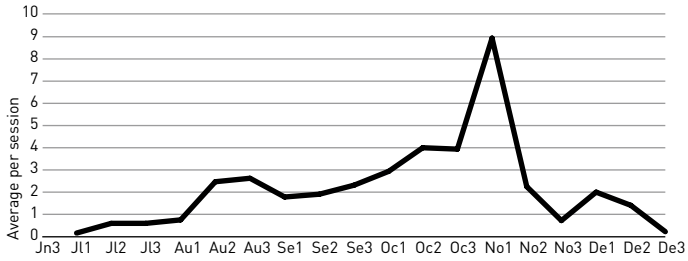
The Northern Shoveler is widespread in all temperate regions of the Northern Hemisphere. The species nests from Western Europe to Eastern Asia (Kamtchatka) but avoids the most northerly latitudes and is not very common around the Mediterranean. European birds winter all over Western Europe, around the Mediterranean basin (including North Africa) as well as in numbers in Sub-Saharan Africa.

WINTER MOVEMENTS AND SPRING MIGRATION *(250-1000)*

The species is rare in the Strait of Dover in wintertime. Only a few birds have been recorded. The spring passage of the Northern Shoveler is more distinct than the autumn migration. The first individuals appear at the end of February but passage only becomes really important from mid-March. The species then appears regularly with daily numbers sometimes exceeding fifty. Peak passage starts at the end of March and finishes in mid-April. The highest recorded days are 321 birds on 1 Apr. 2007, 207 on 11 Apr. 2010 and 397 on 9 Apr. 2011 (Cap Gris-Nez record). Passage then decreases quickly



Northern Shoveler - pre-breeding migration (spring)



Northern Shoveler - post-breeding migration (autumn)

from the twentieth of the month. There are few records after the first ten days of May.

AUTUMN MIGRATION *(150-700)*

The Northern Shoveler is present throughout the post-breeding period but without a very marked peak passage.

From July, solitary individuals are seen. From mid-August, passage increases.

It remains more or less constant until mid-October with a very regular but limited presence of a few dozen birds at maximum.

There are only two records for more than 50 birds per day in this period. The best period for passage is between the last ten days of October and early November. The species is then regular and more than 50 birds are observable on many days.

The record is 327 birds on 7 Nov. 1981. Maximum daily numbers however have fallen since 1995 with no more than 150 birds being recorded. Passage decreases very quickly after the first ten days of November to become residual until the end of the year.

ADDITIONAL ANALYSIS

Passage is unpredictable with regard to weather conditions in autumn.

In spring, moderate north-easterly winds are favourable for passage of the species as well as for other waterfowl.

The Northern Shoveler often appears in large mixed species of the Anatidae family, an especially appreciated sight for observers.

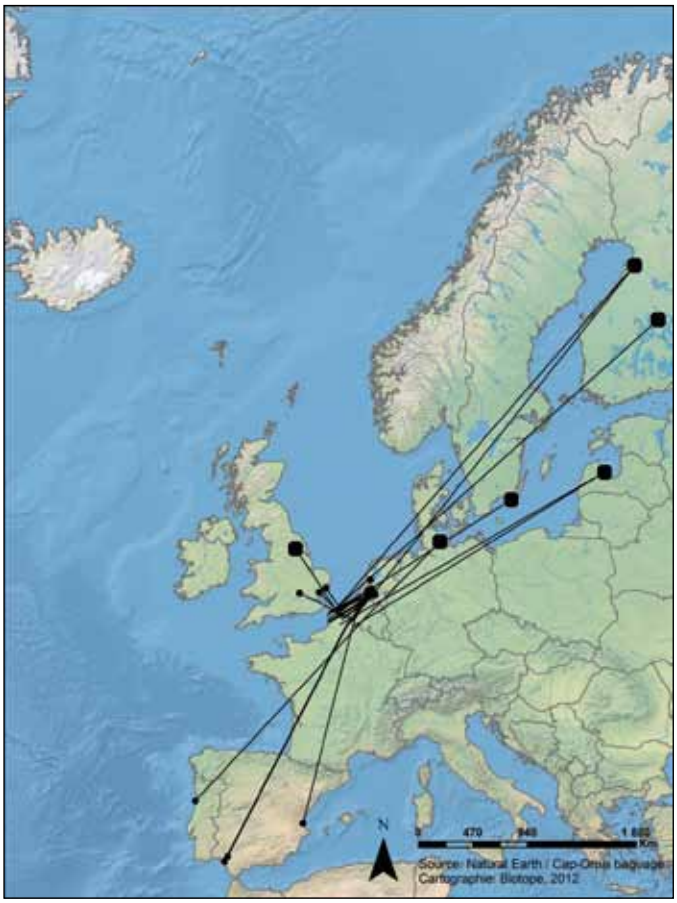
After the end of March, the Northern Shoveler is more often seen in individual groups as the dates of its peak passage are later than for other Anatidae.

Passage on the English side of the Strait (Dungeness) is less marked but respects exactly the same patterns.

Out of 36 recovery entries recorded in the region, none concerned birds ringed in France while 19 were for Dutch birds.

The other birds came from Great Britain (4), Finland (3), Spain (3), Latvia (2), Belgium (1), Germany (1), Denmark (1) Portugal (1) and Sweden (1). The oldest bird was 7 years. A bird ringed 29 September 1969 in the Netherlands was recovered the next day in the region, after having travelled 222 kms.

Northern Shovelers. Ludovic Scalabre



Northern Pintail (*Anas acuta*)

Canard pilet / Pijlstaart

Northern Pintails. Ludovic Scalabre

Northern Pintail												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
150-500/200-1500												

Northern Pintail	
Bird Directive	Annex II et III
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Occasionnal breeder
National status	Uncommon
Regional status	Regular migrant

GENERAL COMMENTS

The Northern Pintail is present on all three continents of the Northern Hemisphere. It nests in northern latitudes, mainly in Northern Scandinavia and Russia. The species occasionally nests in more temperate countries (including France). A long-distance migrant, it can be found in Western European temperate regions in winter, around the Mediterranean basin (Europe and Africa) and as far as Sub-Saharan Africa where it also winters in numbers.

It is found mostly in estuaries, brackish marshes and coastal lagoons in winter.

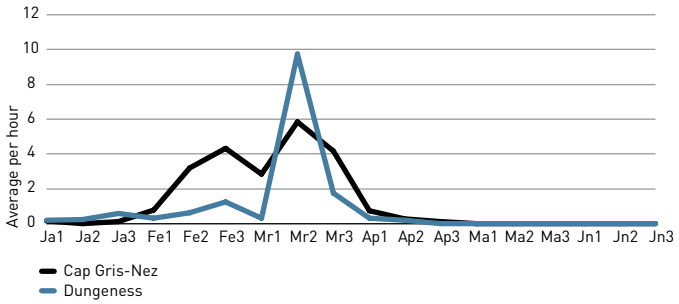
The Somme Estuary represents a site of international importance for the species (2500 birds in 2002).

WINTER MOVEMENTS AND SPRING MIGRATION *(150-500)*

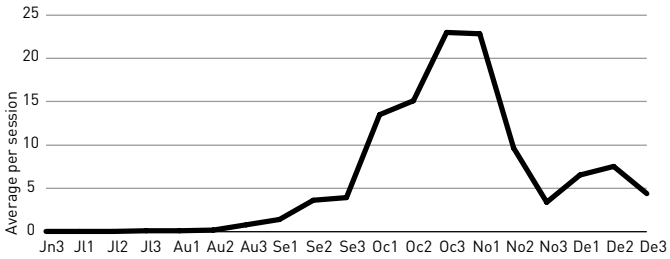
The Northern Pintail is regularly seen in small numbers during the winter period when moving between local wintering sites, but cold weather does not result in a noticeable increase in numbers. The spring passage of the species is very marked.

It is one of the first migrants of the season whose presence is already quite significant in mid-February. Sightings are already very regular and counts vary from a few individuals to around one hundred birds per day. March is the best passage period with a migration peak in the middle of the month which is characterised more by the regularity of observations than by any one peak. The record is 224 birds on 20 Mar. 2005.

Passage declines very quickly at the beginning of April. The species is hardly ever seen by the middle of the month.



Northern Pintail - pre-breeding migration (spring)



Northern Pintail - post-breeding migration (autumn)

AUTUMN MIGRATION *(200-1500)*

The autumn migration of the Northern Pintail starts generally at the end of August in small groups of a few dozen birds at the most. Passage remains quite modest throughout September with a more regular presence at the end of the month.

The start of October marks a very marked increase in passage with more sightings, sometimes exceeding a hundred individuals on a good day. The peak passage peak occurs in the last ten day period of October and the beginning of November. An exceptional day may see more than 500 birds.

The record is 1238 birds on 31 Oct. 2002 at the Clipon Jetty and circa 1500 birds the following day at Cap Gris-Nez. After mid-November, passage remains regular and sometimes quite marked with some days in excess of 100 birds. It continues until the beginning of winter.

Northern Pintails. Vincent Delcourt/Biotope

ADDITIONAL ANALYSIS

The Northern Pintail lives in large groups offering a superb spectacle to observers. It mixes frequently with all the other members of the Anatidae family. A long-distance migrant, it is quite normal to see a few orange coloured individuals which have been tinged with laterite (a red rock found in tropical countries), at the end of February or beginning of March. This colouration confirms that they have arrived from wintering zones in Sub-Saharan Africa.

In spring, passage is less marked on the English side of the Strait, even though the species is regularly observed.

A remarkable event did take place however on 13 Mar. 2006 at Dungeness with a count of 860 birds.

Out of 28 ring recoveries in the region, the majority of birds came from Marquenterre Park (Somme) 9 birds, 8 from the Netherlands, 4 from Great Britain, 2 from Sweden, 2 from Spain (birds ringed in January and September), one from Denmark and one from Belgium.

All of the birds had been ringed during the migration period and recovered in the region between September and March, mainly due to hunting. The oldest bird was 11 years.

Eurasian Wigeon (*Anas penelope*)

Canard siffleur / Smient

Eurasian Wigeons and Common Teals. Ludovic Scalabre

Eurasian Wigeon												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
200-1000/500-2500												

Eurasian Wigeon	
Bird Directive	Annex II et III
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Occasionnal breeder
National status	Fairlycommon
Regional status	Regular migrant

GENERAL COMMENTS

The Eurasian Wigeon is very widespread. It can be found nesting from Northern Europe (Baltic countries, Scandinavia) to Far Eastern Asia.

European birds winter in all the coastal areas of Western Europe, around the Mediterranean basin including the African coast as well as around the Black and Caspian Seas. The Netherlands is also home to an important number of wintering birds.

WINTER MOVEMENTS AND SPRING MIGRATION *(200-1000)*

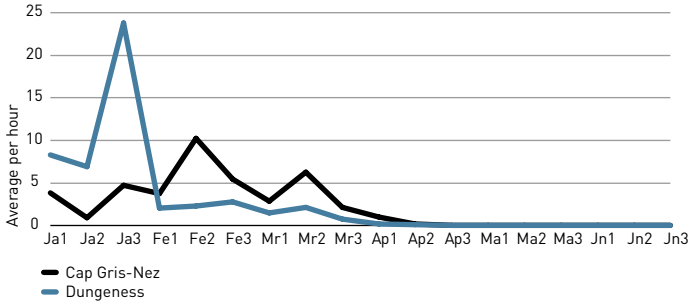
The Eurasian Wigeon is normally observable in small numbers in the Strait of Dover in the winter. Movements recorded being of local wintering birds. When there is a particularly cold spell, the very close proximity of important wintering grounds (esp. in the Netherlands and Belgium) can cause massive movements that may even eclipse those recorded for post-breeding migration.

The record is 2889 birds on 26 Dec. 2010 at Cap Gris-Nez.

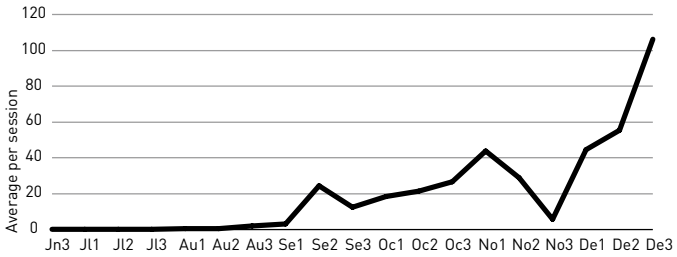
At the beginning of the spring migration season, it is difficult to distinguish local movements of wintering birds from long-distance migrants passing through the Dover Strait.

Nevertheless, pre-breeding movements clearly emerge between mid-February and the end of March, with a peak passage over the three 10-day periods from the end of February to mid-March.

At this period, the species is very regular with several tens of birds per session. Numbers observed for the spring migration are however modest in relation to those in autumn. Maximum numbers are 161 birds on 16 Mar. 2006 and 344 birds on 20 Feb. 2011.



Eurasian Wigeon - pre-breeding migration (spring)



Eurasian Wigeon - post-breeding migration (autumn)

Winter group of Eurasian Wigeon. Julien Boulanger

AUTUMN MIGRATION *(500-2500)*

The first migratory movements of the Eurasian Wigeon are visible from the end of August, even a few individuals may appear from July onwards. In mid-September, the species becomes very regular but in small numbers.

Only a few days exceed 100 individuals. Passage increases very progressively to reach its height at the beginning of November, even if there is no very marked peak. The best days may bring between 500-600 birds. The record is 1613 birds on 31 Oct. 2002 at the Clipon Jetty.

Numbers fall rapidly at the end of November. Except for movements of wintering birds fleeing the cold, only a few individuals are observed from December onwards.

ADDITIONAL ANALYSIS

A comparison of English data (Dungeness) and French data is interesting. At Dungeness, the pattern is identical but numbers are smaller in spring, except at the end of winter when the species is abundant on the English side.

The reason may be that shorelines of English estuaries offer more peaceful and safe areas, without hunting pressures, to large numbers of Eurasian Wigeon, as is also the case in the Netherlands.

Like the majority of Anatidae, the Wigeon may live in individual or mixed species groups. With the exception of long cold spells, influxes of the species are hard to predict. Strong north-west to north-easterly winds seem more favourable but wet conditions may equally give rise to high numbers whatever the wind direction.

Out of 107 ring recoveries in the region (mainly due to hunting), 74 birds had been ringed in the Netherlands.

The other birds came from Great Britain (23), Portugal (4), Sweden (2), Finland (2), Denmark (1) and France (1). The oldest bird recovered in the region was at least 10 years.

Common Teal (*Anas crecca*)

Sarcelle d'hiver / Wintertaling

Common Teals. Ludovic Scalabre

Common Teal												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
150-800/300-1000												

Common Teal	
Bird Directive	Annex II et III
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Rare breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

The Common Teal nests throughout the Palearctic region (Europe and Asia), from the temperate zones to the extreme north. European birds winter mostly in the temperate regions of Western Europe and in the Mediterranean basin.

A small number travel as far south as North and West Africa.

WINTER MOVEMENTS AND SPRING MIGRATION *(150-800)*

The species is rarely seen at sea in winter, preferring inland bodies of water. A few individuals or small groups are sometimes spotted flying locally but rarely at sea. The first migration movements of the Common Teal are noted in mid-February.

They remain quite constant until the beginning of March with a regular presence albeit in small numbers.

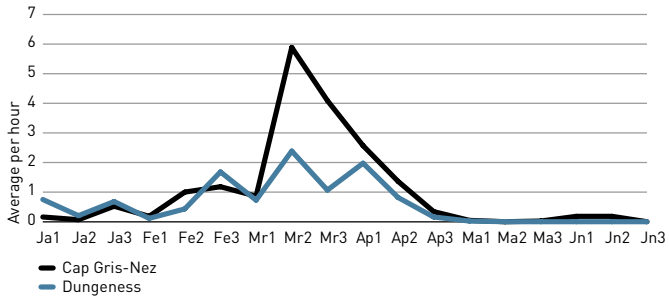
Numbers increase quickly to reach their peak between mid-March and the end of March. Their presence is then more or less daily and maximum numbers may exceed 100 birds (the record being 280 on 23 Mar. 2011). The first two 10-day periods of April remain a good period with a very regular presence but numbers quickly fall from the middle of the month. Passage at the end of April and the beginning of May only concerns a few individuals.

AUTUMN MIGRATION *(300-1000)*

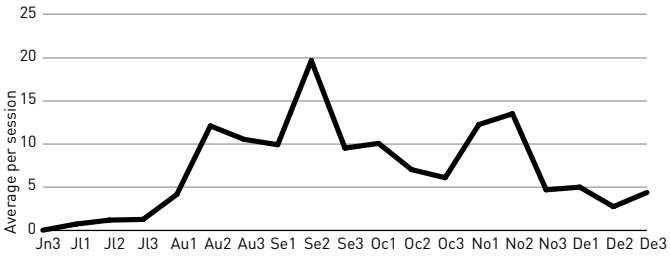
The migration pattern of the Common Teal is not very distinct in autumn. The first birds appear from July in small numbers.

From mid-August, the species is very regular and then throughout the autumn migration period with generally a few dozen individuals per session. Best days fluctuate between 150-200 birds.

After October which is not a very favourable month, passage picks up again in November.



Common Teal - pre-breeding migration (spring)



Common Teal - post-breeding migration (autumn)

Common Teals.
Julien Boulanger (Latvia)

Numbers decrease progressively in December when the species remains regular but in small numbers. The highest numbers have been at the Clipon Jetty: 1552 birds on 8 Dec. 2002 and 579 on 11 Sept. 2005.

ADDITIONAL ANALYSIS

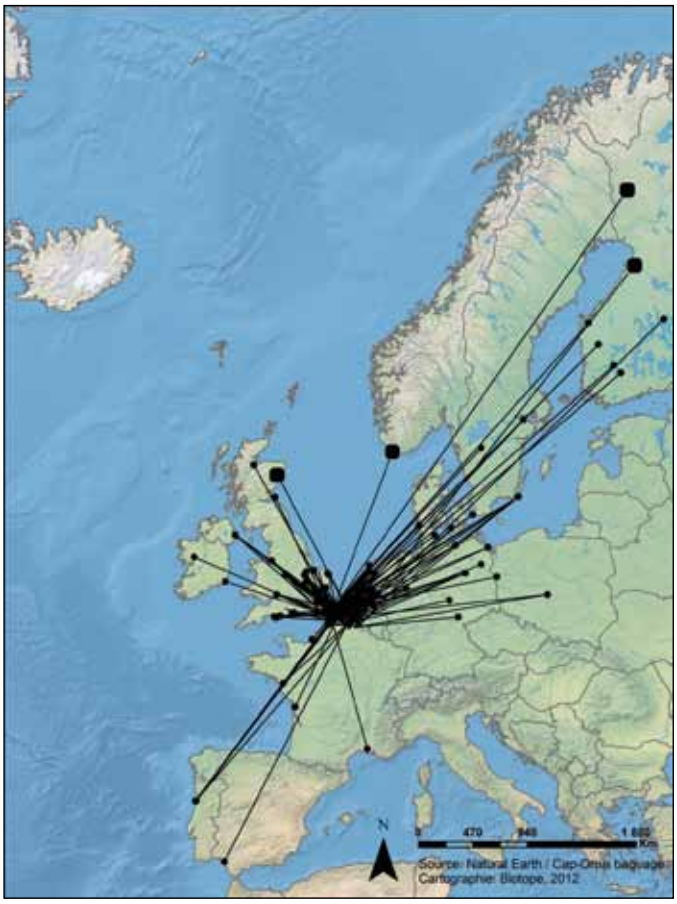
The best conditions leading to high autumn passage are south-west to north-westerly winds, with heavy cloud cover encouraging movements at low altitudes.

In spring, a wind from the north-east is favourable, as is the case for most members of the Anatidae family.

Total numbers recorded at the Clipon Jetty are often higher than those at Cap Gris-Nez.

It is likely that the species does not hesitate to take an overland shortcut. At the end of February-beginning of March, the regular presence of mixed groups of Common Teal and Northern Pintail with a strong orange tinge (laterite) confirms the arrival of birds from the West African coast.

Comparisons with English data confirm the spring pattern but with an indistinct passage peak and a reduced numbers on the English side of the Strait. The Eurasian Teal is the member of the Anatidae family for which there is the most recovery information (309), mainly due to hunting. Most of the birds were ringed in the Netherlands (137) and Great Britain (86). Other data comes from as far away as Scandinavia and Portugal. The oldest bird was aged 16. A bird ringed 04 Oct. 1984 in the Netherlands was recovered the next day in the region, after a journey of 362 kms.



Gadwall (*Anas strepera*)

Canard chipeau / Krakeend

Gadwalls. Ludovic Scalabre

Mallard (*Anas platyrhynchos*)

Canard colvert / Wilde Eend

Mallards. Ludovic Scalabre

Gadwall												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
20-100/20-70												
Mallard												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
10-50/20-200												

Gadwall	
Bird Directive	Annex II
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Rare breeder
National status	Uncommon
Regional status	Regular migrants in small numbers

Mallard	
Bird Directive	Annex II et III
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Very common breeder
National status	Common
Regional status	Irregular migrant

GENERAL COMMENTS

The Gadwall is a Palearctic species. It winters in areas usually free of ice both inland and on the coast. A few birds move as far south as North Africa and the Nile Valley in Egypt.

The Mallard has much the same distribution but only as far north as the southern edge of the tundra. Birds in the Palearctic are sedentary in the temperate zones. The others migrate to Western Europe and the northern shores of the Mediterranean Sea while a few cross to North Africa.

Both species are essentially birds of inland water areas and are hence relatively rare on the sea other than during periods of extreme cold when inland waters freeze. Migratory movements are mainly nocturnal so there are few records of diurnal movements on the coast.

WINTER AND SPRING MIGRATION

(GADWALL 20-100: MALLARD 10-50)

There are very few records for the Gadwall in December (cold weather included) while two exceptional days for the Mallard have been noted at Clipon Jetty with 410 on 1 December 2010 followed by 556 the next day.

In spring movements of the Gadwall are slightly more marked than in autumn. The period of passage extends from the end of February to the beginning of May with a clear peak at the end of March to early April when it is possible to see between 10 and 20 birds during a good session. The record is 25 birds on 20 April 2011 at Cap Gris-Nez.

For the Mallard migration is hardly discernable with only a few tens of birds seen in March at Cap Gris-Nez.

AUTUMN MIGRATION *(GADWALL 20-70 ; MALLARD 20-200)*

In autumn it is possible to find individual Gadwall from July onwards but the real movements commence in mid-August but only a few birds are noted. This is followed by a complete break until the start of October when the movements become more regular but even then only a handful of birds are involved. There is a peak in the passage in the first two decades of November with between 10 and 20 birds on the best days while the record is of 41 on 12 November 2011.

The migration of the Mallard is not very frequent over the sea and concern very few birds. After the breeding season the species is seen in very small numbers. Passage becomes more marked from mid-September to mid-December but even the best days only record 20 to 30 birds. Since the beginning of 2000 there are only four mentions of

Gadwall. Frédéric Caloin

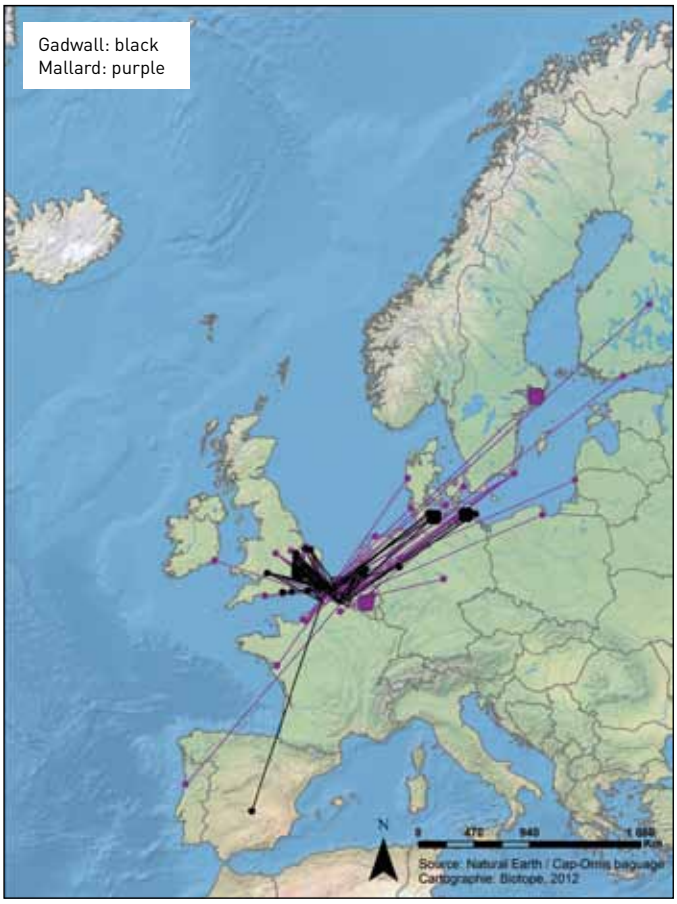
birds in excess of 50 per day, two of those being the exceptional days of 1 and 2 December 2010 mentioned above.

ADDITIONAL ANALYSIS

The two species being favoured by the hunters has resulted in a large number of recoveries and shows that there is a regular exchange east-west with Great Britain. There are no recoveries indicating birds of an eastern origin.

In effect, the Gadwall shows 56 recoveries of which 60% come from Great Britain followed by the Netherlands and Germany with a recovery in Spain in winter being the furthest south.

For the Mallard, more than 50% comes from Great Britain while other recoveries come from Western Europe and Scandinavia (notably Sweden). The recovery furthest south is that of a bird in Portugal in winter.



Diving Ducks

This group of ducks feed by diving and they can be divided into sea-ducks such as scoters and eiders and the more fresh water species such as Tufted Duck, Common Pochard and Greater Scaup. Most marine ducks like the scoters and eiders migrate by day and winter along the coasts, in estuaries and ports.

Common Pochard
(Aythya ferina)
Fuligule milouin / Tafeleend

Tufted Duck
(Aythya fuligula)
Fuligule morillon / Kuifeend

Greater Scaup
(Aythya marila)
Fuligule milouinan / Topper

Common Pochard												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
0-5/5-15												
Tufted Duck												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
3-20/10-50												
Greater Scaup												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
0-10/5-50												

Common Pochard	
Bird Directive	Annex II et III
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Uncommon breeder
National status	Common
Regional status	Irregular migrant

Tufted Duck	
Bird Directive	Annex II et III
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Uncommon breeder
National status	Common
Regional status	Irregular migrant

Greater Scaup	
Bird Directive	Annex II et III
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Uncommon
Regional status	Irregular migrant

GENERAL COMMENTS

The Common Pochard is a breeding bird of the temperate regions of Europe (Iceland included) and as far east as Central Asia with wintering areas extending southward to the Mediterranean Sea as far south as North Africa

The Tufted Duck nests over an even larger area from Europe to the east of Asia. It is sedentary in Western Europe these birds being joined in winter by northern and continental populations with a few birds reaching North and West Africa.

The Greater Scaup is a northern species found more at sea than the other two species.and is essentially a Holarctic breeding species. In winter mainly European birds are to be found in large concentrations along the mainland North Sea coasts with other wintering areas around the British Isles, Western Norway, the Baltic and Caspian Seas. A few winter in the Mediterranean Sea.

Tufted Ducks. Julien Boulanger

WINTER AND SPRING MIGRATION

The arrival of very cold periods in winter with inland waters freezing over causes these species to migrate, notably the Common Pochard and Tufted Duck.

There are very few records of any of these species on spring migration.

Tufted Ducks. Guy Flohart

AUTUMN MIGRATION

Until the year 2000 the Common Pochard was fairly common at sea with over 100 birds recorded each year. Since then it has rarely been noted with some 15 birds per annum mainly in October. The same phenomenon has been noted, even if less pronounced, for the Tufted Duck some 30 being concentrated at the end of October to mid-November. The Greater Scaup likewise with about 30 mainly in the first half of November.

This scarcity can be explained by birds which migrated through the Dover Strait now wintering in more northern countries.

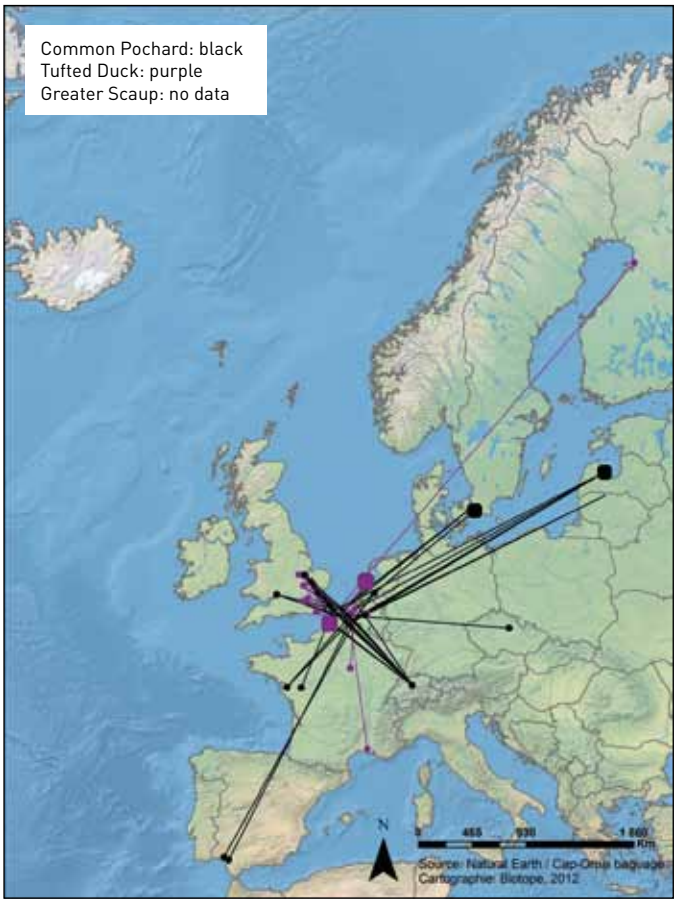
ADDITIONAL COMMENTS

There are no recoveries of the Greater Scaup in the regional data base, the species being relatively rare and occurring at sea is seldom hunted.

The other two species have provided more recoveries. There are 50 for the Common Pochard of which 36% are Swiss birds and 28% from Great Britain while the remainder are from Scanindavia south to Spain. The oldest bird being at least 11 years.

For the Tufted Duck the recoveries have been 50% in Great Britain, 24% in the Benelux countries and 12% in Switzerland. The oldest bird being at least 9 years.

Greater Scaups. Ludovic Scalabre



Common Scoter (*Melanitta nigra*)

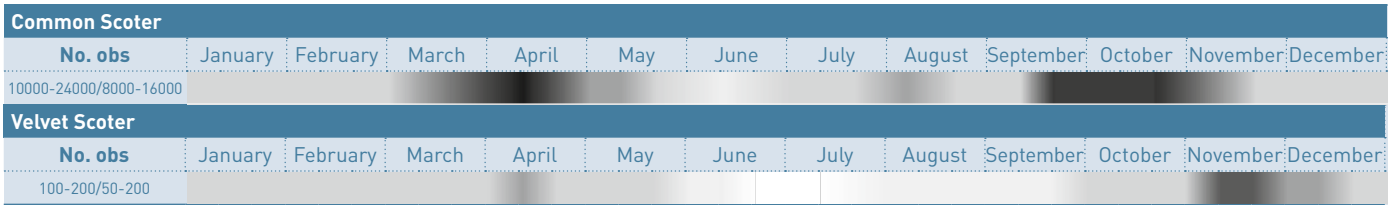
Macreuse noire / Zwarte Zee-Eend

Common Scoters. Frédéric Caloin

Velvet Scoter (*Melanitta fusca*)

Macreuse brune / Grote zee-Eend

Common Scoters and Velvet Scoters. Ludovic Scalabre



Common Scoter	
Bird Directive	Annex II et III
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Fairly common
Regional status	Present all year

Velvet Scoter	
Bird Directive	Annex II
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Uncommon
Regional status	Irregular

GENERAL COMMENTS

The Common Scoter breeds in the northern part of the European continent from the west to Central Siberia, also Iceland. The principal wintering areas are the Norwegian Sea to the North-West Atlantic. Also, the species migrates south on the eastern Atlantic seaboard to the waters off West Africa (Mauritania). It is present throughout the year in the Strait of Dover.

The Velvet Scoter nests in the north of Europe as far east as the west of Asia. The wintering areas are the north-west coasts of Europe, from Norway to the English Channel. Occasional birds travel as far as Spain.

WINTER AND SPRING MIGRATION

(COMMON SCOTER 10000-24000) (VELVET SCOTER 100-200)

The Common Scoter is present throughout the year but rarely in large numbers. The Velvet Scoter is equally regular but rarely in any numbers. Winter movements concern local birds and it is not possible to determine any positive direction as birds frequently move north or south.

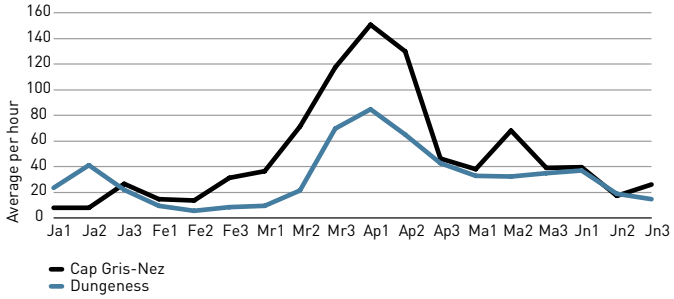
Spring migration is stronger than that of autumn and occurs in a short period. Birds are seen throughout the spring but from the end of February it is possible to determine a clear movement northwards.

In mid-March passage is more intense with averages of 300 birds per session of seawatching increasing to the end of the month. Numbers reach a maximum at the beginning of April with averages of 700 birds a session. On the best days more than 2000 birds have been recorded with the record being 4505 birds on 15 April 2007. 70% of the spring migration occurs within the period of four weeks from mid-March to mid-April. By the end of April the numbers have diminished but remains significant until the end of May (200-250 birds per session). In June a few birds are seen.

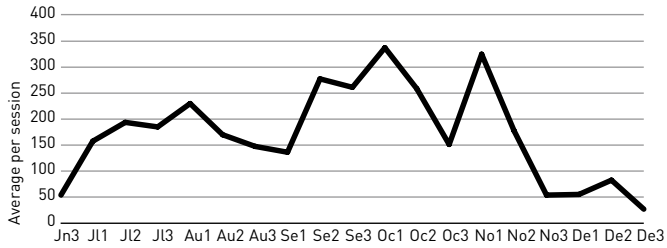
The migration in spring of the Velvet Scoter was, at one time, very marked during the first twenty days of April. Today there are fewer birds but even so it is still possible to see birds from February to the end of April.

AUTUMN MIGRATION *(COMMON SCOTER 8000-16000) (VELVET SCOTER 50-200)*

From the begiining of July the Common Scoter is seen daily on migration. Significant numbers occur with up to a 1000 birds daily. A steady migration continues until the start of August and then, from mid-August to early September numbers gradually decline. There are still days with important numbers (3029 birds on 15 August 2005). The second decade of September see the start of the best period for



Common Scoter - pre-breeding migration (spring)

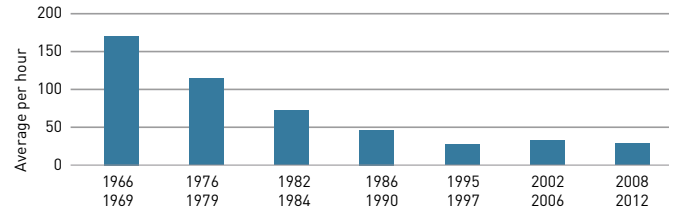


Common Scoter - post-breeding migration (autumn)

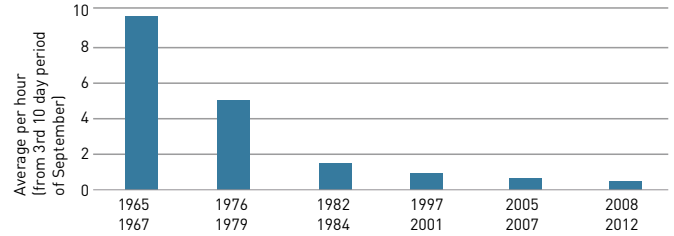
the species which continues until early November. The average number is 300 birds per session even if one counts the days when several thousand birds pass. Numbers then fall rapidly but birds are seen until the end of November.

Since 2005 the annual totals have stabilised around 3000 birds as opposed to the 8000-10000 counted at the start of the 1980s.

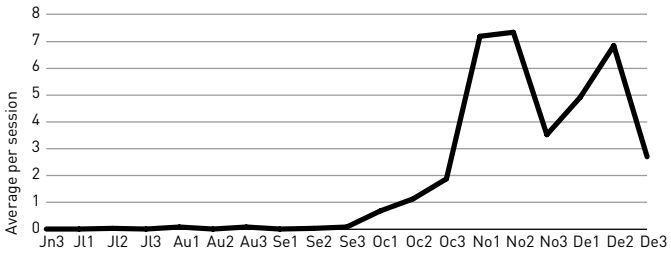
The records of the Velvet Scoter in the period August-September were at one time regular but have now become exceptional. The first migrants are hardly noticeable with a few birds recorded at the beginning of October with the liklihood of seeing the species as the month progresses. The start of November sees a considerable increase in numbers with the species becoming regular by the middle of the month. At this time it is possible to see a few tens of birds (90 on 10 November 2005 at Cap Gris-Nez and 84 on 4 November 2002 at the Clipon Jetty. The numbers then rapidly decline and then show an increase towards mid-December.



Trends in numbers of Common Scoters at Cap Gris-Nez in autumn.



Trends in numbers of Velvet Scoters at Cap Gris-Nez in autumn.



Velvet Scoter - post-breeding migration (autumn)

ADDITIONAL ANALYSIS

The number of Common Scoters occurring on migration in the Strait of Dover have fallen dramatically since the 1960s. The numbers recorded are six times less with an hourly mean recently of 26 per hour from 161 birds per hour. The situation is even more dramatic for the Velvet Scoter where the average hourly rate is twenty times less than in the 1960s!

Even if the evolution towards wintering further north can be associated with climate change, the situation is made worse by the overall decline of the species.

The regular recording of Common Scoters at Cap Gris-Nez has helped to show the evidence and effects of climate change and which is due to the constant attention of observers. The records from the Strait of Dover are used by the 'Observatoire national sur les effets du rechauffement climatique' (ONERC).

The Common Scoter tends to remain in large groups of its own species but associating with Velvet Scoters at the end of the season. It is difficult to relate weather conditions to the passage of the two species making it hard to anticipate movements.

Common Eider (*Somateria mollissima*)

Eider à duvet / Eider

Common Eiders. Ludovic Scalabre

Common Eider												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
150-500/150-600												

Common Eider	
Bird Directive	Annex II et III
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Uncommon
Regional status	Regular migrant

GENERAL COMMENTS

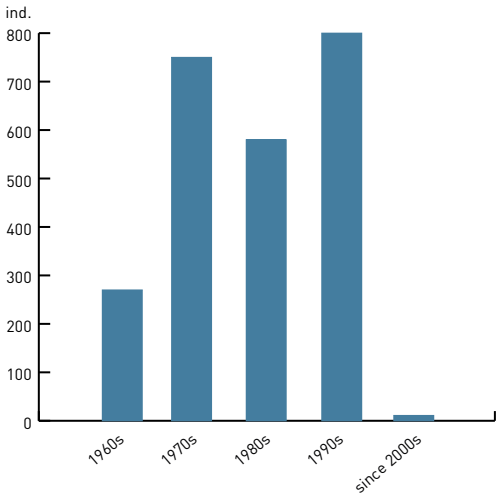
The Common Eider is a Holarctic species mainly distributed in the arctic and sub-arctic regions with the exception of Central Siberia and the extreme north of Canada. Several smaller populations exist to the south in Europe (British Isles, Netherlands, Germany, Poland and a few pairs in France). The main populations principally migrate short distances from there breeding grounds to winter in ice-free waters. However, the distribution in winter is from the Barents Sea to as far south as the Mediterranean Sea. The principal wintering area ranges from the Atlantic coasts of Western Europe and the Baltic Sea. Since 1990 there has been a clear movement of the breeding areas towards the north in the Baltic and the more southerly breeders have been in decline.

WINTER AND SPRING MOVEMENTS *(150-500)*

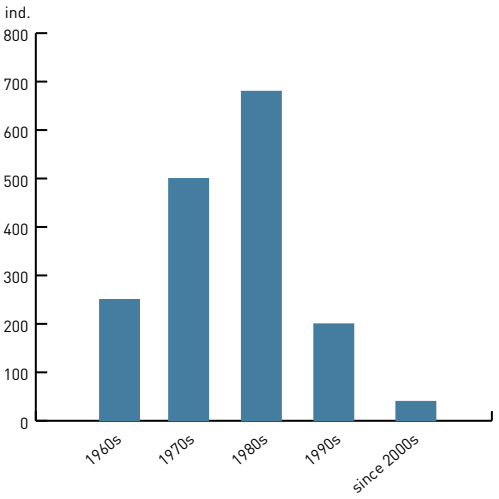
The species is a regular winter visitor to the coasts of the Nord – Pas-de-Calais region but the large numbers which occurred before 1990 have significantly declined.

There is a clear spring passage without any obvious peaks. Several birds are present throughout January and February. The spring migration commences in the first decade of March and rises gradually until mid-April. The numbers are generally in a few tens of birds per session with the highest count being 147 on 18 April 2006.

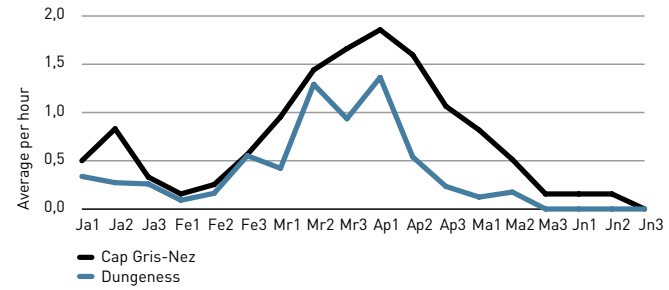
The passage continues until the end of the month after which there is a quick decline in numbers until the middle of May.



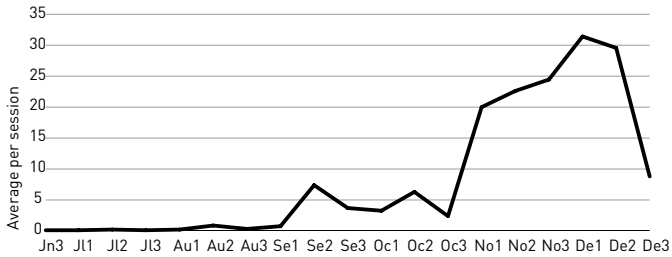
Common Eider - Maximum numbers of wintering birds



Common Eider - Maximum numbers of summering birds



Common Eider - pre-breeding migration (spring)



Common Eider - post-breeding migration (autumn)

AUTUMN MIGRATION *(150-600)*

The migration of the Common Eider is more noticeable at the Clipon Jetty than at Cap Gris-Nez but the periods of passage are the same. This difference in numbers can be explained by the Clipon Jetty being closer to the more important wintering area in the Netherlands. The first birds appear towards the middle of August and join the isolated individuals which have summered (numbers in the hundreds had formally occurred in July). From September to the end of October modest numbers up to several tens are seen, exceptionally 301 being seen from the Clipon Jetty on 14 September 2008.

Between early November and mid-December numbers increase. At this period birds are seen regularly with days exceeding 100 per day. In December a few spectacular movements have been noted with 1399 birds on 2 December 2000 at Clipon Jetty and 530 on 4 December 1997 at Cap Gris-Nez.

ADDITIONAL ANALYSIS

The decline in numbers of Common Eiders wintering and summering was noted shortly before the year 2000 to the south of the breeding areas and the numbers seen at Cap Gris-Nez emphasize this fact. In the years of the 1990s the numbers recorded were in the order of several hundreds in winter or summer. Today less than 30 birds are present at the site all the year round.

The counts at the Clipon Jetty are twice the number (300 to 1500 birds per autumn), probably because there is a regular wintering ground in Dunkirk harbour.

The fall in numbers of migrants is less apparent in the Strait of Dover and is probably due to three reasons:

- there is a wide variation in numbers from year to year;
- the second peak of autumn passage (December) occurs when there are fewer observations;
- the records from before 1996 are strongly biased by the presence of a large resident flock and the difficulty of separating local birds from migrants.

An analysis of records from Dungeness confirms the timing of movements but the numbers seen are fewer, especially in autumn, there being no other comparisons.

Common Eiders. Ludovic Scalabre

Red-breasted Merganser (*Mergus serrator*)

Harle huppé / Middelste Zaagbek

Red-breasted Mergansers. Ludovic Scalabre

Red-breasted Merganser												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
400-600/150-300												

Red-breasted Merganser	
Bird Directive	Annex II
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Uncommon
Regional status	Regular migrant

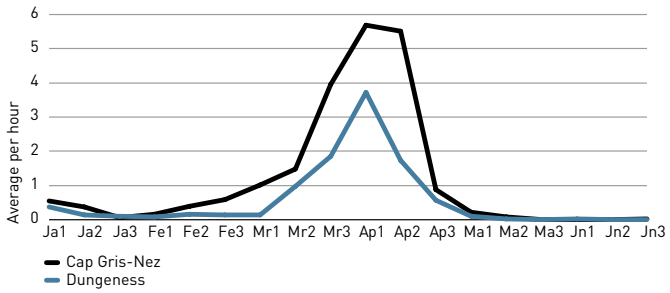
GENERAL COMMENTS

The Red-breasted Merganser is a species with a wide range in the northern hemisphere nesting mainly in the northern part of the three continents as far north as the arctic zone. Its occupies a wide range of habitats from estuaries, lakes and rivers and from wooded regions to the tundras. In Europe only the far western population is sedentary the other populations being migratory and mainly winter on the coasts of Western Europe as far south as Spain. Small numbers winter in the Mediterranean Sea as far as North Africa.

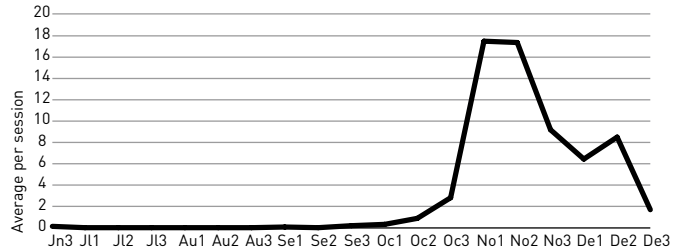
WINTER AND SPRING MIGRATION *(400-600)*

The Red-breasted Merganser winters locally in the estuaries and ports but is rarely found in the interior of the region. Small local movements are seen throughout the winter but very cold weather does not bring any noticeable increase in numbers.

The spring migration is more regular than in autumn being recorded at most sessions of seawatching from the beginning of March to the end of April. Small numbers are seen until mid-March and then increases by the end of the month with a peak in passage in the first two decades of April. During this period the daily numbers of Red-breasted Mergansers are regularly more than 50 (20 records at Cap Gris-Nez since 2005). The largest count being a remarkable 226 birds on 5 April 2008. Although the numbers drop quickly at the end of April it is not uncommon in the first days of May, but thereafter very few being noted.



Red-breasted Merganser - pre-breeding migration (spring)



Red-breasted Merganser - post-breeding migration (autumn)

AUTUMN MIGRATION *(150-300)*

The autumn migration of the Red-breasted Merganser takes place over a very short period. The first birds are generally seen in mid-October, odd birds having been seen in the summer months. Passage is regular by the end of October in small numbers and rises in early November with two-thirds of the migration occurring in the first two decades of the month. Birds are then recorded at most seawatching sessions usually a few tens, there only being five times since 1995 when more than 100 have beeen noted. The record numbers are 246 birds a the Clipon Jetty on 4 November 2002 and 205 at Cap Gris-Nez on 4 November 1990. Movement declines gradually from the end of November to mid-December when only resident birds remain.

ADDITIONAL ANALYSIS

The Red-breasted Merganser rarely associates with other species of ducks.

Numbers recorded at the Clipon Jetty are twice the number seen at Cap Gris-Nez. They do not migrate only over the sea and although following the coastline will fly inland over Cap Gris-Nez and are then not recorded.

The spring migration of the Red-breasted Merganser is significant at Dungeness on the other side of the Strait of Dover with the same time spans but in numbers about a half those recorded in France.

Red-breasted Merganser. Ludovic Scalabre

Rails

Water Rail (*Rallus aquaticus*)

Râle d'eau / Waterral

Water Rail. Daniel Haubreux

Water Rail												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
300-500				N N N N N N N N N N N N N N								

Water Rail	
Bird Directive	Annex II
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Fairly common breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

A shy species, more often heard than seen, the Water Rail breeds in all types of humid zones in Europe (with the exception of the northern two-thirds of the Scandinavian countries).

Populations in Southern and Western Europe are basically sedentary. Elsewhere, they are migratory or semi-migratory.

Migrating birds head south-west where they live in a greater variety of habitats in autumn. The Water Rail only migrates at night.

Outside the breeding period, it is therefore normally seen in flight, at first daylight. In spite of the impression of being a poor flyer, the species is able to travel long distances. Continental populations rejoin the coast to take advantage of the milder oceanic climate in winter.

The species is, in fact, relatively vulnerable to cold weather at this season. It is not unusual therefore to see it looking for food along watercourses or unfrozen ditches. The species is omnivorous. It feeds essentially on invertebrates in summertime and on seeds and small vegetable matter in wintertime.

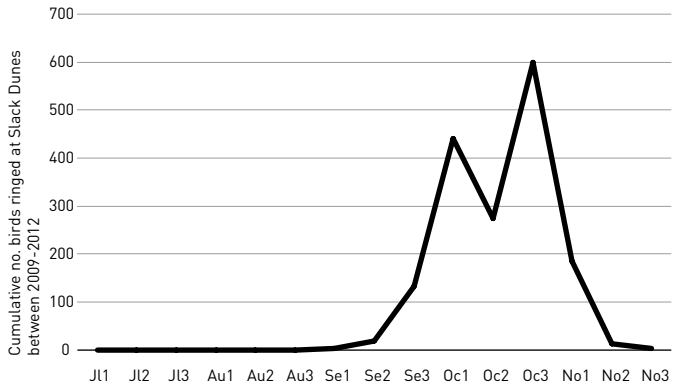
WINTERING AND SPRING MIGRATION

The species is present in the region throughout winter.

Birds that winter in the Nord – Pas-de-Calais region seem to come from Belgium, the Netherlands and Central and Eastern Germany.

It is possible that their influxes coincide with cold weather (increase of visual observations) but this is not confirmed by ringing.

Birds looking for food tend to come out of cover and are therefore more easily observed. Available data in springtime does not lend itself to establishing the pattern of the spring passage.



Water Rail - Trends in autumn captures

Ringing sessions carried out in this period have always proved to be unsuccessful. However, it seems that there is movement from the beginning of March to the beginning of April, even in February if the winter is mild. The only information for this period was for a bird ringed in autumn at Slack Dunes and found dead on the other side of the English Channel.

Nesting birds in the region are in residence at their nesting site from the end of March. No controls have been carried out on ringed birds at nesting time in the Nord – Pas-de-Calais region, the number of catches for the species being very low during this period (less than 5 birds ringed in 15 years).

AUTUMN MIGRATION

Before 2009, only seven individuals were ringed on average each year in the Nord – Pas-de-Calais region. This data was the result of incidental catches at daybreak, during ringing sessions of migrant stopover birds or during nocturnal ringing sessions for the Skylark.

To address this, a specific nocturnal catching programme has been running since autumn 2009. Since then, the average number of Water Rails ringed annually in the region has risen to around 500 individuals, which is enough to establish a precise pattern for the autumn passage. Migration really starts from the third 10 day period of September. The number of birds caught then increases rapidly to reach an initial peak around the first 10 days of October.

The number of catches then falls before rising again to reach a second peak between the third-10 day period of October and the first 10 days of November. The record number of birds caught was at the Slack Dunes on the night of 21-22 October 2012. Migration ends in the course of the second 10-day period of November when wintering begins.

ADDITIONAL ANALYSIS

Ringing effort on the Water Rail since 2009 is beginning to bear fruit. We can now draw a migratory pattern for the species and outline the immediate future of transitory birds in the Nord – Pas-de-Calais region in autumn. Birds passing through the region come mainly from Belgium, the Netherlands and Germany.

An individual ringed in 2011 at the Slack Dunes was controlled at the same site on almost exactly the same day one year later. This interesting piece of information suggests that individuals use the same migration routes from one year to the next.

Some of the birds ringed seem to continue on their way to the west of England. Three birds ringed at the Slack Dunes crossed the English Channel to winter in Great Britain, two of which were identified in Cornwall. They were among the first Water Rails ringed in France and controlled in England. All this data indicates that West


Water Rail – Measuring beak, wings and tarsus to determine sex. François Cavalier

European birds follow a north-east/south-west route keeping to the milder coastal climate.

It is likely that the work undertaken by the Nord – Pas-de-Calais Ringers Delegation on this species will help to better define the migratory pattern of the species in the coming years. Only three controls have discovered birds further away than 800 kms:

- a bird ringed in August 1989 in North-East Germany was recovered in December of the same year in Condé-sur-Escaut (59);
- a bird ringed in August 1989 in North-East Germany was recovered at the end of September of the same year in Annezin (62);
- a bird ringed in August 2003 in North-East Germany was recovered in November 2003 at Le Touquet-Paris-Plage (62).

The fastest movement recorded is held by a bird ringed in the Province of Antwerp (Belgium) and controlled the next morning at the Slack Dunes. It had covered 242 kms. in one night.

Wading birds

Eurasian Woodcock (*Scolopax rusticola*)

Bécasse des bois / Houtsnip

Eurasian Woodcock. Julien Boulanger

Eurasian Woodcock												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
10-20 (excl. ONCFS)												

Eurasian Woodcock	
Bird Directive	Annex II et III
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Fairly common breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

Of all the European wading birds, the Eurasian Woodcock is the only one with a strong affinity for woodland. The species is in fact very attracted to fresh and humid habitats with a not too dense, non-uniform, tree stratum together with ground vegetation.

Even better for the Woodcock is an area with clearings. The species only has one or two local nesting sites in Nord – Pas-de-Calais (mostly in the Boulonnais and Avesnois) and most sightings during the year concern individual migrants or wintering birds.

The region represents, together with Picardy, Normandy and Brittany coastlines, one of the major national migration routes for the species. Most regional information on ringed birds comes from specific marking programmes conducted by the National Office of Hunting and Wildlife (ONCFS), as general ringers only achieve 10-20 catches per year using conventional methods.

WINTERING AND SPRING MIGRATION

The region plays a major role as a wintering site for this species with highly fluctuating numbers from one year to another. Movements may be set off in winter but it depends on the intensity of cold winter spells in Northern and Eastern Europe whether or not movements commence.

This rather shy species can be seen feeding in the daytime and stopping over at inhabitual sites (for example in an urban area), sometimes in small groups. Annual migrant numbers may therefore fluctuate greatly depending on the weather.

The latter decides the migratory behaviour of the Woodcock, departure being encouraged by a drop in temperatures and tail-

Woodcoks are often more visible in periods of very cold weather. Philippe Dumont

winds. The first movements towards nesting grounds are noted from the end of February and culminate during the first 10-day period of March, after which numbers decrease until mid-April. Spring migration causes ringed birds to leave the region for more northerly zones.

This explains spring recoveries in Russia, in the Baltic countries and Denmark (6, 3 and 2 birds respectively). Individuals are also controlled more occasionally in Poland and Sweden. On a national scale, we can note autumn recoveries in Nord – Pas-de-Calais of birds ringed in Brittany, Seine-Maritime and Manche departments during previous autumn seasons.

Some of these birds may have flown north into the region during the intermediate spring season, but there is nothing that confirms this at the present time.

AUTUMN MIGRATION

The Woodcock's autumn migration starts at the end of September in Northern Europe and some fifteen days later in Central Europe. Migration in the region, comprising mainly of Scandinavian, Central European or Russian birds, start to be seen locally from mid-October, reaching a passage peak one month later. Passage remains marked until the beginning of December.

The origin of recovered and controlled birds in Nord – Pas-de-Calais confirms the migratory pattern given in the published records with 8 birds from Russia, 5 from Scandinavia, 3 from Baltic countries and Poland and 2 from the Benelux countries. Birds ringed in the region during the autumn migration appear to continue their journey towards more southerly latitudes as evidenced by recoveries made in France (Vendée, Landes, Dordogne, Corsica), and even in Spain (71 and 4 winter records respectively). Looking at the national situation in detail, there is a concentration of recoveries on the English Channel-Atlantic coastlines (19 in Brittany, 14 in Normandy and 13 in Picardy of which 12 in the Somme region).

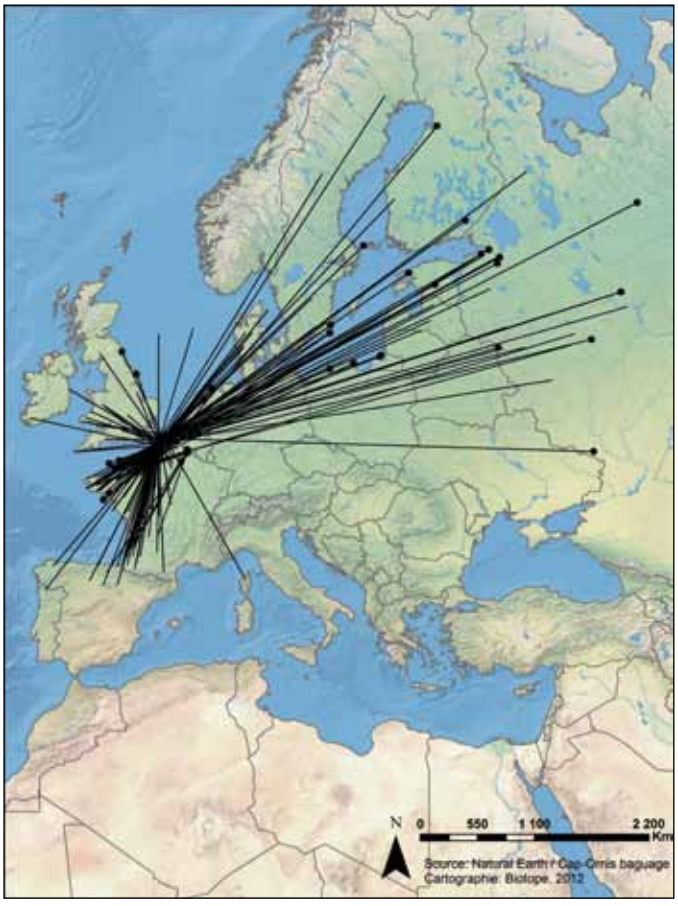
ADDITIONAL ANALYSIS

Among the remarkable facts on record, we can note 25 birds that had travelled over 2000 kms, all of which were birds ringed in Russia or Finland. The fastest movement is held by a bird ringed in Oct. 1990 in the region and recovered six days later in Spain (1223 kms. which gives an average of 203 kms. per night).

The longevity record is held by a bird ringed in the region in its first year and recovered 10 years later in Ireland (three birds aged 9 are on record).

More than 99.9% of recoveries are the result of hunting. The birds have a strong tendency to return to the same wintering site. In fact, among the birds ringed and recovered in the region, 90% were found at less than 20 kms. from the place were they were ringed: 63% of these birds were recovered during the first winter after they were ringed, 13% during the second winter, 6% during or after the third winter.

There are many illustrations of such site fidelity. For example, a Eurasian Woodcock ringed in Dec. 1987 and recovered in Nov. 1994 at less than 6 kms. from its place of ringing.



Great Ringed Plover
(Charadrius hiaticula)
Grand Gravelot / Bontbekplevier

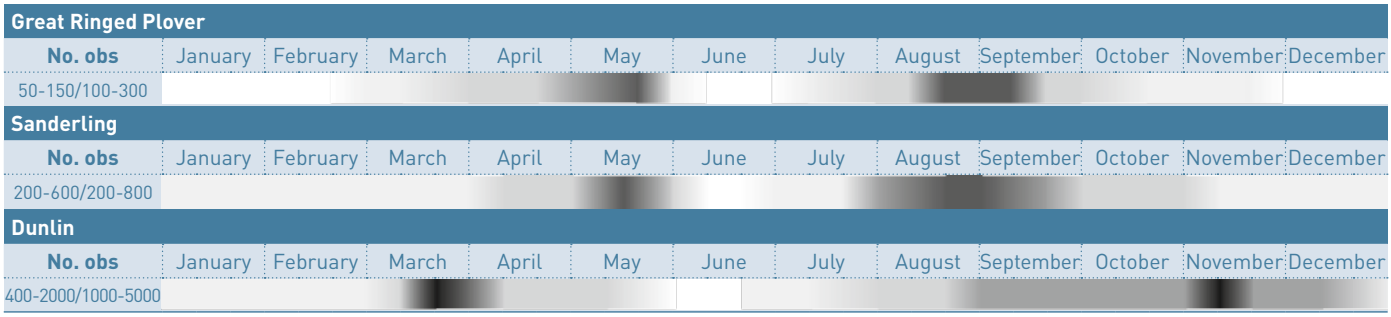
Great Ringed Plovers. Frédéric Caloin

Sanderling
(Calidris alba)
Bécasseau sanderling / Drieteenstrandloper

Sanderlings. Guy Flohart

Dunlin
(Calidris alpina)
Bécasseau variable / Bonte Strandloper

Dunlins. Julien Boulanger



Great Ringed Plover	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Uncommon breeder
National status	Common
Regional status	Regular migrant

Sanderling	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Common
Regional status	Regular migrant

Dunlin	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

The Ringed Plover has an extended breeding range occupying all the Arctic and Subarctic zones with the exception of the American continent.

In Europe its distribution includes the Baltic Sea and far into the interior. It is a long distance migrant whose winter range includes the African continent. The westernmost populations, *i.e.,* British Isles, France and Holland are mainly sedentary. The distribution of the Dunlin is similar with the populations of Western Europe being sedentary. It also occurs in the Nearctic.

European birds including those of Greenland mainly winter in the west of Europe, West Africa and around the Mediterranean basin. The Sanderling breeds on the northern coasts of the Holarctic region with the Palearctic birds wintering from West Europe to South Africa.

WINTER AND SPRING MIGRATION

RINGED PLOVER 50-150: SANDERLING 200-600: DUNLIN 400-2000

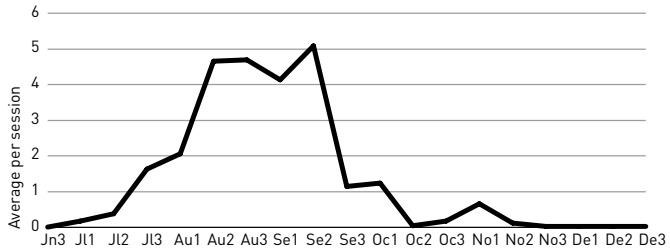
Mixed groups of Sanderlings and Dunlins are numerous in winter on the coasts of the Nord – Pas-de-Calais with some groups being several hundreds, even into the thousands, strong. Fewer Ringed Plovers are found scattered over the area. Movements seen at this period mainly concern wintering birds.

Spring passage of all three species is very marked with numbers often superior to those in the autumn. Migration occurring over a short period. The Dunlin is the first of the three species to migrate through the Dover Strait with a few birds from early March reaching a peak in the second and third decades of the month when it is possible to see several hundreds, even thousands, pass in a day with a record of 2913 birds on 19 March 2011. The beginning of April sees a continuation of good numbers but from after that until mid-May the numbers are lower. The migrations of the Ringed Plover and the Sanderling are later and are regular from early April. May is the best period with a very marked passage in the middle of the month but a rapid decline in the last decade. Numbers for both species are much lower than for the Dunlin, usually in the tens. The largests counts being 209 Sanderling on 13 May 2010 and 51 Ringed Plover on 12 May 2008.

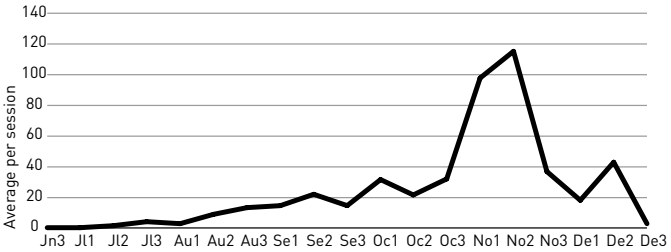
AUTUMN MIGRATION

RINGED PLOVER 100-300 ; SANDERLING 200-800: DUNLIN 1000-5000

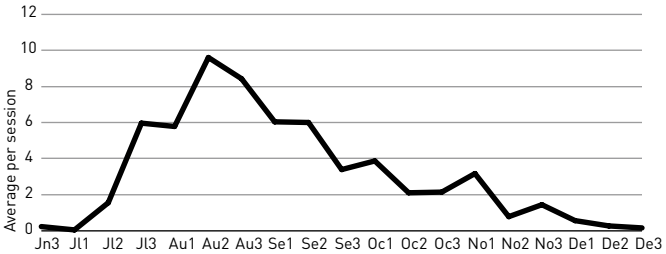
The pattern for both Ringed Plover and Sanderling during the summer is similar. The first birds appear in the middle of July and numbers increase. The peak for the Sanderling is from mid-August to early September and mid-September for the Ringed Plover. Numbers are again modest with several dozen seen in the best periods. The maximum daily count for the Sanderling being 161 on 28 August 2011 and



Great Ringed Plover - post-breeding migration (autumn)



Dunlin - post-breeding migration (autumn)



Sanderling - post-breeding migration (autumn)

213 Ringed Plovers on 21 September 1983. The movements of the Dunlin are much more extended with the first birds (few) at the end of July en route to Africa followed by birds wintering in Western Europe From mid-August birds are always recorded with rising numbers until the end of October (several hundreds in the best sessions). The end of October throughout November the numbers remain high but only a few peaks are detectable. Maxima, 1528 birds on 26 October 2005 at Cap Gris-Nez and two exceptional days at the Clipon Jetty on 13 November 2002 when no less than 4956 birds were counted and 1930 birds on 18 November 2000.

ADDITIONAL ANALYSIS

An analysis of the records from the opposite Kent coast does not give any further information as the migration records are considerably less. However, the records confirm the pattern of migration seen in the Nord – Pas-de-Calais. In total there are 24 recoveries of ringed birds in the regional data base with the majority from Western Europe (21) but also Scandinavia (2) and Russia (1).

There are two notable recoveries.

- a Sanderling trapped in the Nord – Pas-de-Calais in January 2009 and controlled in August of the same year in the south of Poland (1350 kms.).
- a Dunlin trapped on 6 August 1987 in the Kola Peninsula, N.W. Russia and recovered 25 days later on the coast of the Nord – Pas-de-Calais having travelled 2760 kms. (an average of 110 kms. a day).

Eurasian Oystercatcher (*Haematopus ostralegus*)

Huîtrier-pie / Scholekster

Eurasian Oystercatchers. Ludovic Scalabre

Eurasian Curlew (*Numenius arquata*)

Courlis cendré / Wulp

Eurasian Curlews. Marc Roca

Eurasian Oystercatcher												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
400-1000/1000-2000												
Eurasian Curlew												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
100-250/100-400												

Eurasian Oystercatcher	
Bird Directive	Annex II
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Rare breeder
National status	Common
Regional status	Present all year

Eurasian Curlew	
Bird Directive	Annex II
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Very rare
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

The Oystercatcher and Eurasian Curlew is well distributed across Europe and Asia. Whilst the Oystercatcher prefers to nest on the coast the Eurasian Curlew prefers the moors and the grasslands which equally applies at the periods of migration. The Oystercatcher only migrates along the coasts while the Curlew prefers the fields and marshes inland. The two species winters on the coasts of Western Europe, around the Mediterranean basin and even further south.

WINTER AND SPRING MOVEMENTS

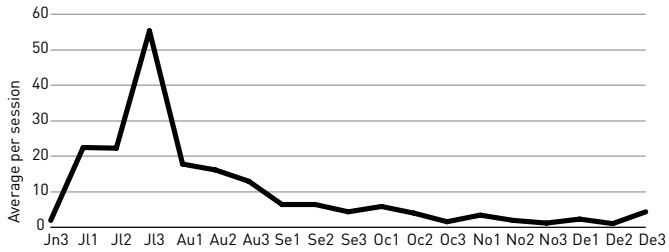
(OYSTERCATCHER 400-1000/EURASIAN CURLEW 100-250)

The two species are present in winter and slight movements can be seen during the winter. In periods of very cold weather it is possible to see birds moving. These movements are more marked for the Curlew with a record of 656 birds on 20 December 1995. At this time the numbers in the region can be between several hundred and several thousand.

Movements after such a period of hard weather can be difficult to interpret as birds mix with other birds which either have stayed put or arrived from the north. Nevertheless it is possible to see movements from mid-February with a peak of passage for the Curlew at the end of February. The Oystercatcher movements are more extended between the end of February and mid-March. The records show that they rarely exceed 100 birds for the Curlew (182 on 20 February 2011) and several hundreds for the Oystercatcher (329 on 21 February 2011, 441 on 9 March 2005). From the end of March to the end of May the numbers of Oystercatchers are less with generally a few tens of birds daily.

AUTUMN MIGRATION

Oystercatchers show perceptible small movements from the end of June and from the beginning of July larger movements are seen with occasional large numbers (539 birds on 8 July 2005 at Cap Gris-Nez). By the middle of the month migration is observed daily with a definite peak in the third decade of the month. This is when the highest numbers are recorded annually and in calm weather on certain days several hundred birds can pass, the record being 907 on 24 July 2005. Passage continues daily throughout August often with several tens of birds per day and occasionally even higher numbers such as 240 birds on 24 August 2008 at Cap Gris-Nez and 150 on 2 August 2003 at the Clipon Jetty. The beginning of September sees numbers fall gradually until the start of winter in December when it can still be described as common.



Eurasian Oystercatcher - post-breeding migration (autumn)

Eurasian Oystercatcher. Ludovic Scalabre

Eurasian Curlews. Ludovic Scalabre

The Eurasian Curlew is commonly observed from the end of June until the end of the autumn migration period in November. There are many records of birds in small numbers without being able to define any peak periods. However, birds returning to winter in the region, notably in the Canche Estuary, are apparent from early July. Movements probably occur but go undetected due to movements occurring over land or at night.

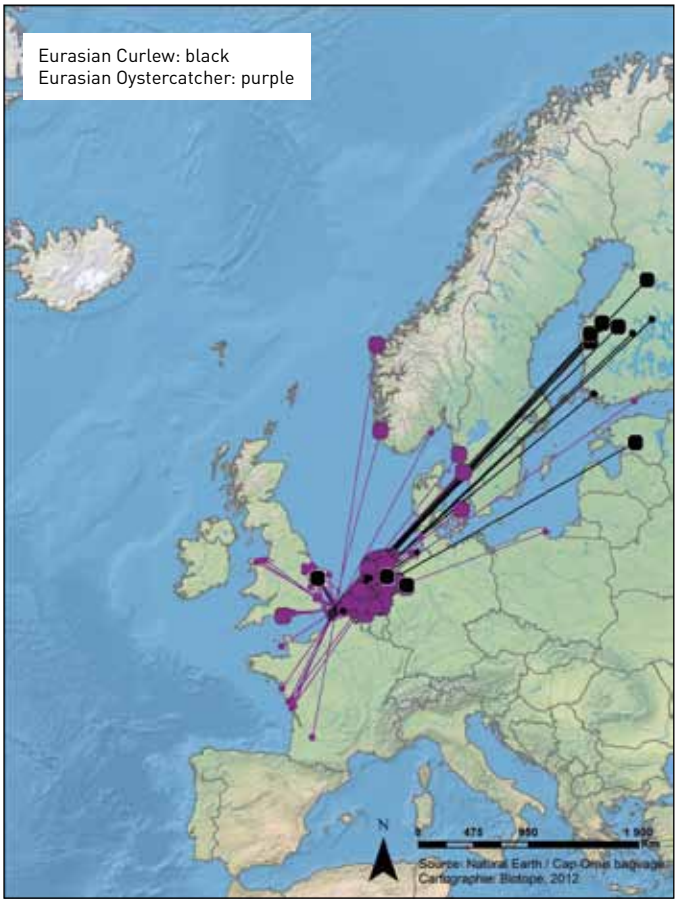
ADDITIONAL ANALYSIS

Oystercatchers do not generally migrate with other species and influxes are difficult to anticipate but they seem to occur when winds are light to moderate. An examination of the records for Dungeness does not yield any additional information other than the passage there is constant but in lesser numbers.

Because hunting is permitted for the two species there are a considerable number of recoveries in the regional ringing data base.

For the Curlew there are 21 recoveries, of which no less than 9 are from Finland. The remainder being from the North Sea coast and Estonia.

There are no less than 270 recoveries of Oystercatchers with 28% of these being from the winter of 1995-96 which, due to an extremely cold period brought more than 20000 birds to the region. Most of the recoveries are for the Netherlands (160), Belgium (52) and Great Britain (32). Otherwise there only eight from further afield namely, Norway, Sweden, Finland and Poland. The oldest bird recovered had lived at least 25 years.



Bar-tailed Godwit (*Limosa lapponica*)

Barge rousse / Rosse Grutto

Bar-tailed Godwits. Daniel Haubreux

Whimbrel (*Numenius phaeopus*)

Courlis corlieu / Regenwulp

Whimbrel. Ludovic Scalabre

Bar-tailed Godwit												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
1500-4000/1000-6000												
Whimbrel												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
300-900/400-1500												

Bar-tailed Godwit	
Bird Directive	Annex I et II
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Fairly common
Regional status	Regular migrant

Whimbrel	
Bird Directive	Annex II
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

The Bar-Tailed Godwit nests throughout the Arctic region, from Scandinavia to Eastern Russia. It is also found in Alaska. It is classified as a long-distance migrant. The wintering zones of individuals passing through the Strait of Dover are principally located in Western Africa, with a large number of birds wintering in Western Europe and around the Mediterranean basin. The Whimbrel is less associated with the Arctic region. It nests in Iceland, Scandinavia, the Baltic countries and Russia. Birds from the Palearctic region normally winter in West Africa and only very rarely in France.

WINTER MOVEMENTS AND SPRING MIGRATION

(BAR-TAILED GODWIT: 1500-4000) (WHIMBREL: 300-900)

The Bar-tailed Godwit may be observed locally during winter but always in limited numbers. The Whimbrel remains rare at this period. The spring pattern for the two species is very similar with a few sightings at the end of March and the first regular movements in small numbers at the beginning of April. Passage quickly increases in the second 10-day period and both species are then observed on a daily basis if weather conditions are right.

Numbers are in the order of 50-100 birds for good sessions.

A very sharp peak in passage is seen from the end of April to the beginning of May for the Whimbrel and until mid-May for the Bar-tailed Godwit with particularly impressive influxes and continual passage in favourable conditions.

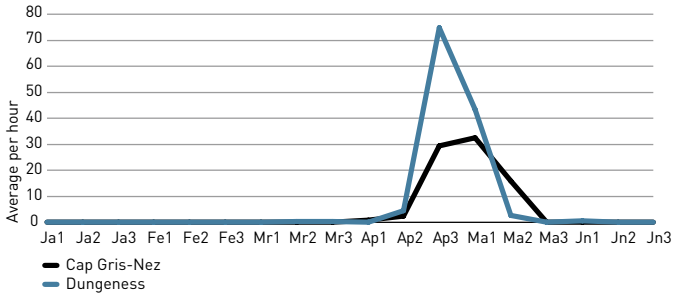
During this period, it is not uncommon to observe over 500 Bar-tailed Godwits in a single session. On the best day ever, 2189 birds were counted on 1 May 2007. Whimbrel numbers are less but still important with days regularly exceeding 100 birds during peak passage. Maxima are 328 birds on 29 Apr. 2005 and 306 on 30 Apr. 2007. Passage comes to an abrupt halt from the third 10-day period of May for both species.

AUTUMN MIGRATION

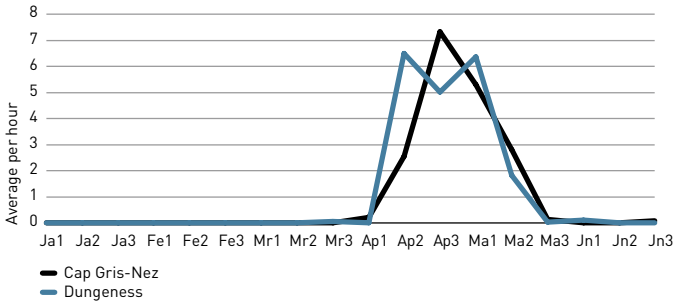
(BAR-TAILED GODWIT: 1000-6000) (WHIMBREL: 400-1500)

The two species display a similar migratory pattern in autumn. The Whimbrel is present throughout July with a progressive increase in numbers in the course of the month.

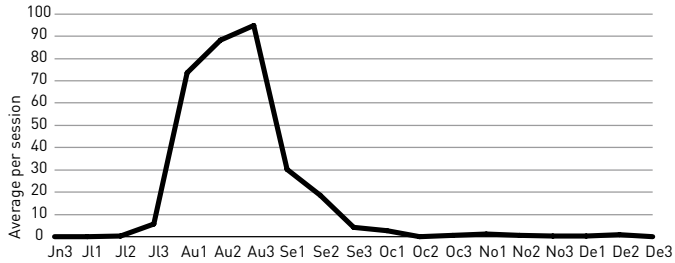
Passage peaks at the end of July and corresponds to the period when the first Bar-tailed Godwits appear.



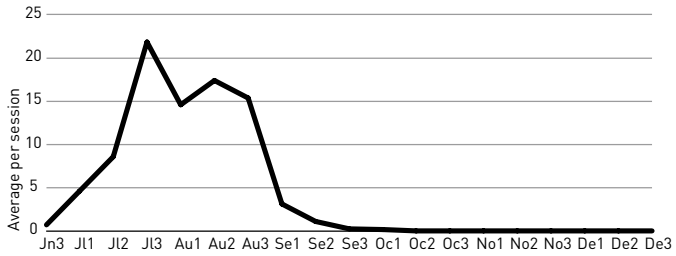
Bar-tailed Godwit - pre-breeding migration (spring)



Whimbrel - pre-breeding migration (spring)



Bar-tailed Godwit - post-breeding migration (autumn)



Whimbrel - post-breeding migration (autumn)

In September, the Bar-tailed Godwit is present but less regularly than the Whimbrel. From mid-July, the Whimbrel is extremely regular at Cap Gris-Nez, with numbers up to 50 birds per day.

At the end of the month, the peak passage starts and days of more than 100 birds are common. The record of 444 individuals was set on 30 Jul. 2007 at Cap Gris-Nez.

August totals remain high for the species with a continuous presence and often with over 100 birds if the right weather conditions prevail. (239 birds on 11 Aug. 2004 at the Clipon Jetty, 327 on 25 Aug. 2010 at Cap Gris-Nez. Numbers then drop off very quickly from the beginning of September even though the species remains regular in small numbers until the middle of the month. Passage is already residual by the end of September. For the Bar-tailed Godwit, the first regular migration movements occur at the end of July. In the first half of August, passage intensifies with numbers regularly over 1000 birds if weather conditions are favourable. Peak passage is reached in the second half of August with regular and intense daily influxes, the record being 3940 birds on 14 Aug. 2004 at Clipon Jetty.

From the start of September, numbers decrease but the species remains very regular (several hundred birds in the best sessions). Passage comes to a halt at the beginning of October.

ADDITIONAL ANALYSIS

Meteorological conditions are a decisive factor for the observation of both species and this is even more the case for the Bar-tailed Godwit, known to migrate at high altitudes (above 2000 m.) in particular if the wind is light. Therefore, the appearance in numbers of both species requires quite strong headwinds and heavy cloud cover (even light rain) for both migration seasons. The Bar-tailed Godwit is often seen in very large groups of several hundred birds, which is not the case for the Whimbrel that normally occurs in small groups. The Whimbrel's presence is similar on both sides of the Dover Strait (numbers and timing). On the other hand, even if the Bar-tailed Godwit uses the same migration window on the English coast it has far higher numbers in spring. The peak passage hourly rate averaging twice that seen on the French side. Some exceptional days and an impressive record of 7317 birds on 28 Apr. 2011 at Dungeness bear witness to this. For the Bar-tailed Godwit, there have only been four ring recoveries in the region, all from Western Europe (France, Germany and the Netherlands).

For the Whimbrel, there are nine records from Scandinavia to France including one for a bird aged 14 years.

Grey Plover (*Pluvialis squatarola*)

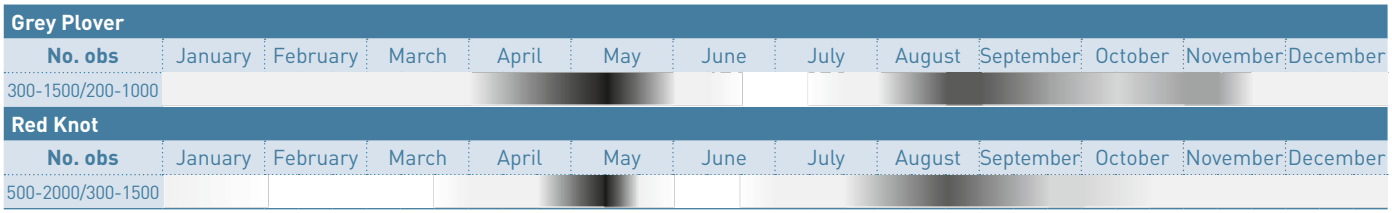
Pluvier argenté / Zilverplevier

Grey Plovers and Red Knots. Frédéric Caloin

Red Knot (*Calidris canutus*)

Bécasseau maubèche / Kanoetstrandloper

Red Knot. Ludovic Scalabre



Grey Plover	
Bird Directive	Annex II
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Common
Regional status	Regular migrant

Red Knot	
Bird Directive	Annex II
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

The Grey Plover nests exclusively in the Arctic region, from Western Russia to Alaska, and across the Nearctic region to the extreme of Eastern Canada. Birds migrating via Europe winter mostly in Western Africa but both Western Europe and the Mediterranean basin receive large numbers of wintering birds.

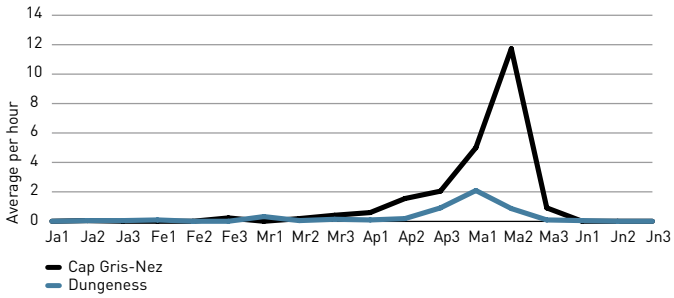
The Red Knot is only found in the High Arctic, from Central Siberia to the extreme Eastern Russia, Alaska, North-East Canada and Greenland. Two distinct populations pass through the Strait of Dover: Siberian birds from the Taimyr Peninsula on their way to winter in West Africa and those from Greenland and North-East Canada which tend to winter in Western Europe.

WINTER MOVEMENTS AND SPRING MIGRATION *(GREY PLOVER: 300-1500) (RED KNOT: 500-2000)*

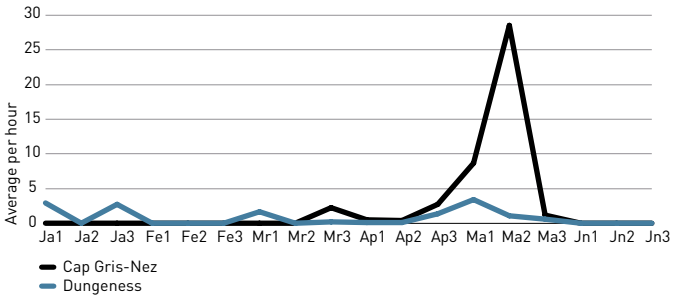
Both species are regularly seen in the region in winter but in small numbers. Spring migration for the two species does not show the same pattern, even if passage peak is reached at the same time in mid-May. Passage of the Grey Plover becomes regular from the beginning of April with numbers limited to a few individuals but which increases progressively during the month. On a good day at the end of April 50-100 birds may be seen. Passage intensifies at the beginning of May and the species is widely present when winds are favourable, even if numbers are not much higher than at the end of April. Mid-May sees the passage peak, with daily influxes sometimes exceeding 500 birds (the record is 1580 birds on 11 May 1996).

Numbers dwindle from the third 10-day period of the month when only a few individuals may still be seen. The Red Knot's passage is concentrated into a much shorter period. A few groups are observed throughout April, but regular passage only really starts at the beginning of May. The species' presence is therefore regular and between 100–300 birds per day may be observed in the case of favourable meteorological conditions.

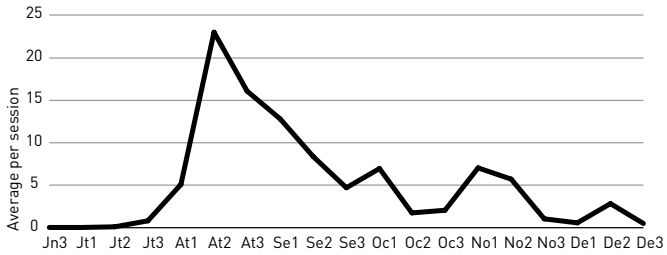
Passage peak is very marked in mid-May, with large influxes over a short period as for the Grey Plover. Records on good days show passages of 1170 birds on 12 May 2008 and 943 on 14 May 2008 at Cap Gris-Nez. Numbers then fall very quickly and passage has finished by the end of May.



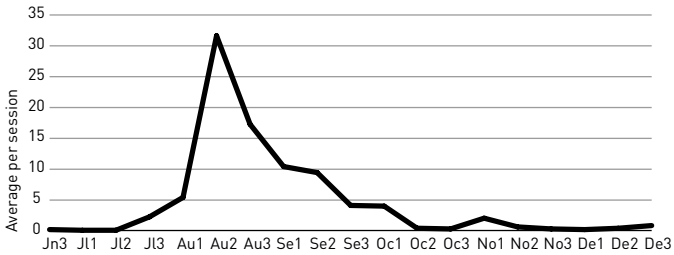
Grey Plover - pre-breeding migration (spring)



Red Knot - pre-breeding migration (spring)



Grey Plover - post-breeding migration (autumn)



Red Knot - post-breeding migration (autumn)

AUTUMN MIGRATION *(GREY PLOVER: 200-1000) (RED KNOT: 300-1500)*

The migration pattern of both species is very similar during the autumn migration. The first hesitant movements are detected at the end of July. At the beginning of August, passage increases progressively with daily numbers of up to 100 birds for both species. Passage peaks very quickly during the second half of August.

Numbers may then reach 300 birds for both species. Record influxes have all been recorded during this period with 702 birds on 20 Aug. 2006 at Cap Gris-Nez for the Grey Plover and 1438 birds on 16 Aug. 2001 at the Clipon Jetty for the Red Knot.

Passage then decreases but remains evident for both species until mid-September. By the beginning of October, the Red Knot's passage has ended even if there are a few birds until the end of the season. Regarding the Grey Plover, passage increases again in November due to young birds which have migrated later.

ADDITIONAL ANALYSIS

The spring phenological pattern is identical on the English side of the Strait but in much smaller numbers, particularly for the Red Knot whose numbers are three times lower. As is the case for most shorebirds, observation of both species in spring and autumn is heavily dependent on wind conditions.

A strong headwind or heavy cloud cover is ideal for the observation of high numbers of birds. In total, 34 recoveries have been recorded for ringed Red Knots in the regional database.

The birds were ringed from Russia (Central Siberia) to Guinea-Bissau (West Africa). There is only one record of a bird outside the Atlantic migration route: a bird ringed in Sept. 2003 in Hungary and recovered in the region in October of the same year. The species shows the ability to cover long distances. For instance, a bird ringed in Germany was recovered the next day in the region, having covered 720 kms. There are only four records for the Grey Plover in the region, all provided by birds ringed in Europe (Germany, France and the Netherlands) during the migration period.

Common Redshank (*Tringa totanus*)

Chevalier gambette / Tureluur

Common Redshanks. Frédéric Caloin

Common Greenshank (*Tringa nebularia*)

Chevalier aboyeur / Groenpootruiter

Common Greenshank. Julien Boulanger

Common Redshank												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
10-60/200-1400												

Common Greenshank												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
0-5/10-150												

Common Redshank	
Bird Directive	Annex II
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Rare breeder
National status	Uncommon
Regional status	Irregular migrant

Common Greenshank	
Bird Directive	Annex II
Protected species	Hunting allowed
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Uncommon
Regional status	Irregular migrant

GENERAL COMMENTS

The Common Redshank breeds in all of Western Europe (Iceland included) and eastwards as far as Asia. The wintering areas are extensive and cover Europe to Africa excluding the far south. It is a more coastal species than the Greenshank but is recorded less from seawatching sites. The Greenshank is a more northern species breeding in the north of Europe (Scotland, Scandinavia) and eastwards to the Pacific coast of Asia. The northern limit being the Arctic zone. Palearctic birds winter mainly in Africa but a few birds overwinter in Western Europe (British Isles, France and Spain).

WINTER AND SPRING MIGRATION

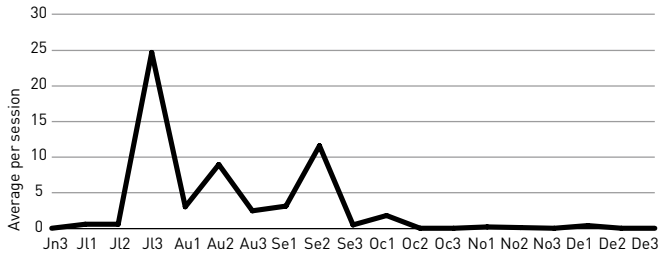
(COMMON REDSHANK 10-60) (GREENSHANK 0-5)

Very few Common Redshanks winter in the region and little movement has been noted in very cold winter periods. The Greenshank is even more rare and has not been seen at seawatching sites in the winter. Very few birds of either species are noted in the spring at Cap Gris-Nez with odd birds for the Greenshank and a few tens for the Common Redshank. The passage period is from mid-April to mid-May.

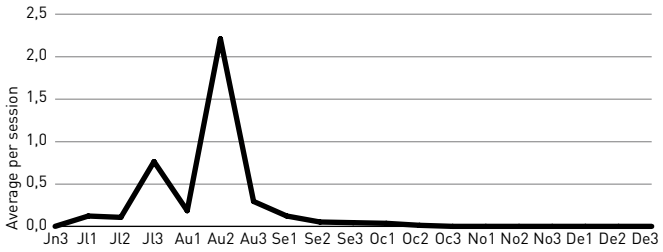
AUTUMN MIGRATION

(COMMON REDSHANK 200-1400) (GREENSHANK 10-150)

The Common Redshank is likely to be seen during the whole autumn season and is one of the first migrant waders. The major movements, often unpredictable but not seen at any other period, start in the third decade of July. Generally numbers are small but there are two exceptional records namely, 1251 birds at the Clipon Jetty on 29 July 2003 and 1256 at Cap Gris-Nez on 27 July 2005. The numbers between early August and mid-September are regular but few, at best a few tens, even if there are a few records in excess of 100 (nine in excess of 100 from the two sites since 2000). Migration then falls rapidly until early October with small numbers present until the end of the season.The Greenshank is much less common but seen annually with the passage commencing at the end of July with irregular records of limited numbers. It is most regular in August with a peak in the middle of the month, the record being 138 birds on 17 August 2008 at Cap Gris-Nez. Limited passage occurs from early September with the last records being at the beginning of October.



Common Redshank - post-breeding migration (autumn)



Common Greenshank - post-breeding migration (autumn)

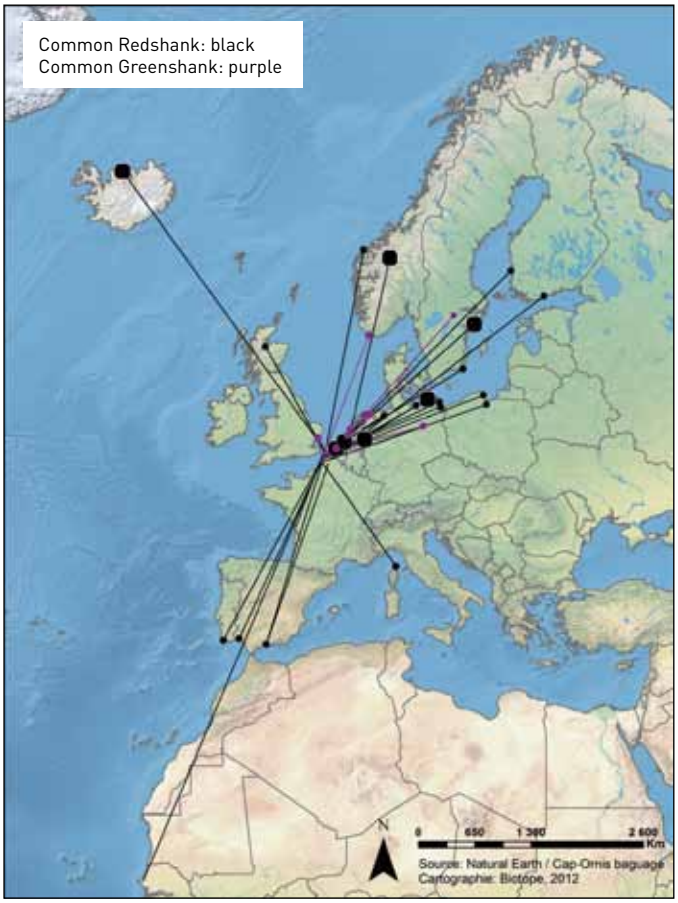
Common Redshank. Guy Flohart

Common Greenshanks. Guy Flohart

ADDITIONAL ANALYSIS

Observations of the two 'shanks' at the two seawatching sites is very unpredictable with the main migrations occuring inland and probably at night. Even if certain weather conditions (low clouds, light head winds and light rain) favours their appearance there is no guarantee of large numbers being seen as is the case for most of the wading birds. Both species can occur separately or in mixed groups of other waders. As a result of hunting for both species there have been some interesting recoveries. For the Redshank there are 32 recoveries spread from Scandinavia to Senegal in Africa. There are two from Poland and one from Iceland.

In total there are 11 recoveries for the Greenshank of which 5 are from the Netherlands and the remainder from Western Europe (Belgium, England, and Germany) with two other birds ringed in Norway and Sweden.



Grey Phalarope (*Phalaropus fulicarius*)

Phalarope à bec large / Rosse Franjepoot

Grey Phalarope. Willy Raitière/Biotope

Grey Phalarope												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
0-1/5-20												

Grey Phalarope	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Uncommon
Regional status	Regular migrants in small numbers

GENERAL COMMENTS

The Grey Phalarope inhabits an immense area of Arctic regions in the breeding period. It can be found from Western Russia to Alaska as well as throughout the Nearctic region. It is also present in West Greenland. The closest colonies are in Iceland and Spitzbergen. The species is strictly pelagic except in the nesting period.

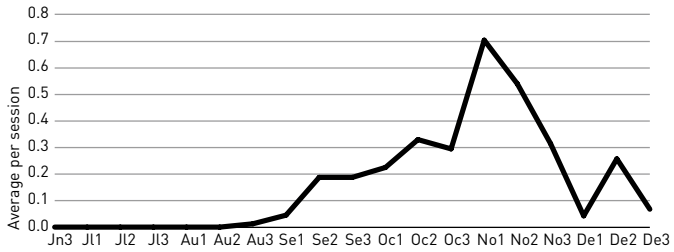
Its wintering zones have not been totally identified, excepting the West and South African coastline where winter concentrations have been observed.

Winter data along the Atlantic coastline suggests partial wintering, probably in the Bay of Biscay. The principle migration route passes over the Atlantic Ocean off the Irish coast. Passage of the species through the North Sea is difficult to detect and represents a secondary route, the use of which depends heavily on weather conditions.

WINTER MOVEMENTS AND SPRING MIGRATION

The species shows a regular presence in December and then very occasionally during the remainder of winter (2 winter records at the CliponJetty: 8 Jan. 2012 and 13 Feb. 2005). The species has just two records for spring in the Strait since 2005: one at Dungeness, Kent in March and one at Cap Gris-Nez in April.

It seems therefore that the Grey Phalarope does not migrate via the English Channel and North Sea other than by accident to reach its Arctic breeding grounds.



Grey Phalarope - post-breeding migration (autumn)

Grey Phalarope. Julien Boulanger

Grey Phalarope. Marc Roca

AUTUMN MIGRATION

(CAP GRIS-NEZ: 5-20) (CLIPON JETTY: 10-50)

The passage of the Grey Phalarope is difficult to detect and is directly dependent on favourable winds during the migration period. There are some records from the end of August to the beginning of September but movements of the species only really begin mid-September.

It is then possible to see some individuals when there is a north-westerly wind. Passage increases progressively in October. The first two 10 day periods of November see the peak passage for the species, the only period when there are isolated records even in the absence of strong winds.

Record days occur at this time, such as 18 birds on 6 Nov. 2007 at the Clipon Jetty while the record is only 6 on 16 Nov. 2005 at Cap Gris-Nez. Passage falls very quickly at the end of November with odd birds in December. Only strong north-westerly winds may result in further sightings of the species.

ADDITIONAL ANALYSIS

There is great variation between the data from the Clipon Jetty and that from Cap Gris-Nez where the species is more difficult to observe due to the site configuration, as is the case for petrels. The number of sightings at the Clipon Jetty is three times higher on average than at Cap Gris-Nez.

It does not normally form mixed groups with other species of birds when on the move owing to its rather atypical flight for a shorebird.

This species, highly pelagic, has a very jerky flight in fact and lands regularly on the sea.

Skuas

Skuas are an emblematic family for seawatchers in the Strait of Dover. Very uncommon except in coastal regions, identification of young birds (except for the Great Skua) is a real challenge for even the most experienced observer. Four species in total are present in the area under consideration, the Pomarine Skua, the Arctic Skua, the Long-tailed Skua and the Great Skua. With the exception of the Long-tailed Skua, all the other species in this group pirate food from other species (Northern Gannet, gulls and terns).

Arctic Skua (*Stercorarius parasiticus*)

Labbe parasite / Kleine Jager

Juvenile Arctic Skua. Frédéric Caloin

Arctic Skua												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
100-300/800-2000												

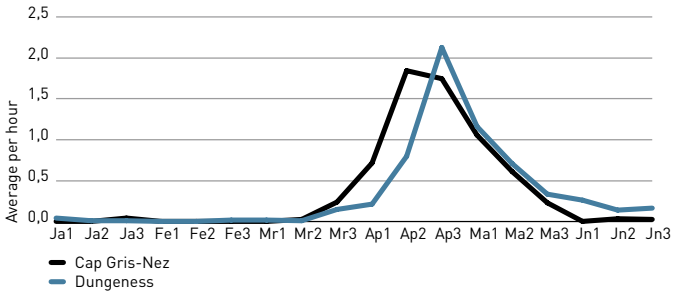
Arctic Skua	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

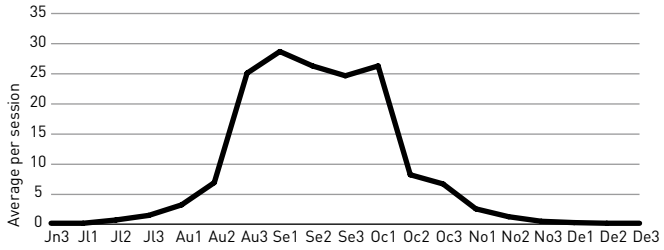
The distribution of the Arctic Skua is worldwide with the major part of the population in the Nearctic region. Its distribution area reaches south to Scotland and Sweden, and this relative proximity together with its less pelagic nature compared to the other species means that it is very regular in the Strait of Dover. Its preferred environment for nesting is coastal tundra. Because it is found everywhere, the species may migrate via the Atlantic or the Pacific Oceans in autumn to spend the winter as far south as the coasts of Chile, Argentina, South-East Africa and Australia.

WINTER MOVEMENTS AND SPRING MIGRATION *(100-300)*

The species is very occasionally seen in winter, there being some isolated records for January and February. Spring migration is very visible but on a smaller scale than in autumn, all the more so as it only concerns adult birds, immature birds not generally returning to Europe. The arrival of the Arctic Skua in the third 10-day period of March, coinciding with that of the Common Tern, sees a few individuals observed each day. Passage increases at the beginning of April when the species is almost a daily sight with a very regular passage



Arctic Skua - pre-breeding migration (spring)



Arctic Skua - post-breeding migration (autumn)

Arctic Skua (palephase). Plumage can vary from pale to dark. Julien Boulanger

but without influxes. Passage culminates at the end of April with an average of ten individuals per session but never exceeding fifty birds.

Passage continues into May but in small numbers and these diminish quickly by the middle of the month. It is still possible to observe the species at the end of May and even into early June.

AUTUMN MIGRATION *(800-2000)*

The first birds are seen from the beginning of July but are few in number. The movements becoming regular at the beginning of August with a progressive increase until the end of the month at which time juvenile birds begin to appear.

The period of maximum passage for the species is very extended, without a clear peak, from the last days of August to the beginning of October, with 25 birds on average per session and 'rushes' of over one hundred birds if weather conditions are favourable.

These 'rushes' may be repeated several times in the same season as seen in 2010 when, at Cap Gris-Nez there were 445 birds on 30 Aug. (site record), followed by 123 on 16 Sept and 169 on the 25th.

There is a strong decrease in passage after mid-October that becomes residual in November, with a few birds still seen in December.

ADDITIONAL ANALYSIS

It is worth noting that movements observed at Dungeness and Cap Gris-Nez in springtime are very similar as opposed to the Pomarine Skua that favours the English route. As for all pelagic species in autumn, north-westerly wind conditions in the North Sea are ideal to produce an influx that is generally visible between the Dutch coast and Cap Gris-Nez in similar numbers. The Arctic Skua is more of a coastal than pelagic species in the strictest sense.

The Arctic Skua often travels in pairs or small groups. Larger groups of several dozen birds may form at the times of major movements. It is not unusual to see migrants stop to steal from terns or gulls at their fishing grounds.

Mixed groups of adults and young are common from September onwards. It is also quite common to see groups mixed with the Pomarine or Long-tailed Skua, which can be very educational as it highlights the different identification pointers of each species.

Pomarine Skua (*Stercorarius pomarinus*)

Labbe pomarin / Middelste Jager

Pomarine Skuas and Arctic Skua. Ludovic Scalabre

Pomarine Skua												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
5-20/100-1000												

Pomarine Skua	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Uncommon
Regional status	Regular migrant

GENERAL COMMENTS

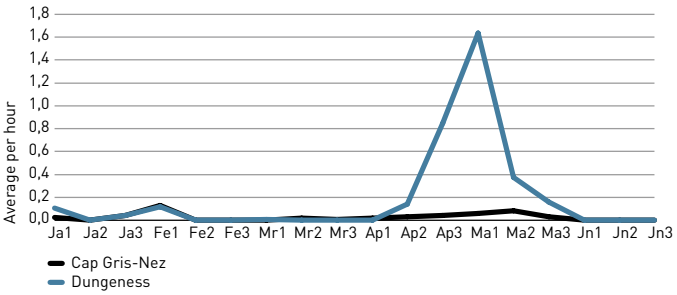
The Pomarine Skua nests throughout the Arctic region from Russia's western borders to the Alaskan coastline. Its breeding distribution is mainly in regions that are inaccessible making it impossible to conduct a census of the world population. The Pomarine Skua is highly pelagic during migration and the species generally migrates far out to sea off the Norwegian, Irish and Scottish coasts. Only a few migration areas welcome the species in large numbers including noticeably the extreme north of Norway which is at the centre of the spring passage of western birds. The Strait of Dover constitutes a secondary migration route. Its distribution is worldwide, with birds passing over the Atlantic and Pacific Oceans to winter at sea, in the intertropical zone. Pacific birds may fly south beyond the Cape Horn and the Australian coast.

WINTER MOVEMENTS AND SPRING MIGRATION *(5-20)*

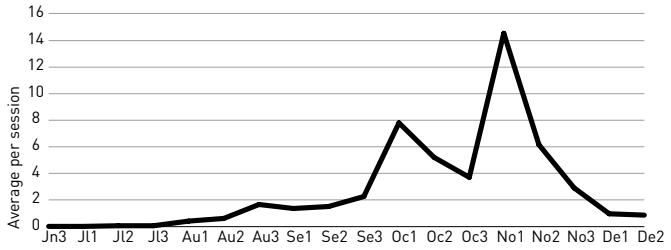
Only juvenile Pomerines are present in winter in small numbers in the North Sea and the Strait of Dover. In years where there is no influx of juveniles, the species seems totally absent from the Strait. In spring, the Pomarine Skua is not at all common on the French side of the Strait where migration movement is barely noticeable with only a few individuals if weather conditions are particularly favourable. In such a case, the species is seen from mid-April to mid-May.

AUTUMN MIGRATION *(100-150 TYPICAL YEAR) (400-1000 AT TIMES OF INFLUX OF JUVENILES)*

Migration of the species is divided into two distinct waves. The first one is composed exclusively of adult birds that start to arrive in mid-



Pomarine Skua - pre-breeding migration (spring)



Pomarine Skua - post-breeding migration (autumn)

Juvenile Pomarine Skua. Daniel Haubreux

July and the second one of young birds at the end of the season. Migration really gets under way at the beginning of August when the species becomes very regular but with only one or two birds per session.

Passage intensifies progressively from September to reach an average of 8 birds per session (50-150 indv. on a good day) at the beginning of October. Young birds start to appear with the adults in this period.

Passage declines from mid-October with the last adults. It picks up again in November with juvenile birds completely taking over of the new wave which peaks in the first half of the month. In a good breeding year for the species (coinciding with an abundance of lemmings), it is possible to observe impressive influxes of several hundred juveniles per session.

The best days on record are 362 birds on 9 Nov. 2007 for Cap Gris-Nez and 455 on 7 Nov. 1999 for the Clipon Jetty. Passage decreases very rapidly at the end of November and sightings in December are rare and more often than not of wintering birds.

ADDITIONAL ANALYSIS

The comparison of spring data between the Dungeness and Cap Gris-Nez site is fascinating. The species is almost completely absent on the French side but commonly and sometimes even abundantly present on the English coast with annual totals of 50-300 individuals.

However, this phenomenon only applies to the Pomarine Skua and, to a lesser extent, the Long-tailed Skua.

In autumn, north-westerly conditions in the North Sea are required for a good passage even if it is quite common to see a few adults pass by in quieter weather conditions. The species generally migrates in pairs or small groups, but mixed groups with the Arctic Skua are possible. The species migrates generally at very high altitudes when the weather is calm.

A strong northerly wind on the French side of the Strait is indispensable if you hope to see the species in the springtime but even this only brings a few birds.

Long-tailed Skua (*Stercorarius longicaudus*)

Labbe à longue queue / Kleinste Jager

Juvenile Long-tailed Skua. Ludovic Scalabre

Long-tailed Skua												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
–/30-150												

Long-tailed Skua	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Rare
Regional status	Regular migrant in small numbers

GENERAL COMMENTS

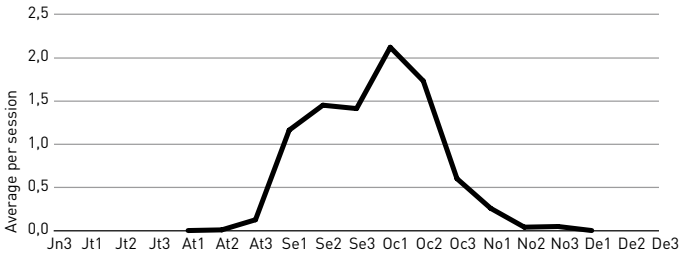
The Long-tailed Skua nests throughout the Holarctic region (Europe, Russia and North America). In Europe, its distribution area reaches as far south as Southern Sweden. Contrary to the other species, its nesting grounds are not restricted to coastal regions as the Long-tailed Skua also occurs on th high plains of mountainous region. Adult Long-tailed Skuas are highly pelagic and their migratory routes southward to the southern tip of Africa, South America and to the Antarctic Ocean follow the Atlantic and Pacific Oceans without necessarily flying along coastal regions. Juveniles take a more over-land route, which makes it the most likely species to be seen inland. Adults are rarely seen in the North Sea.

WINTER MOVEMENTS AND SPRING MIGRATION *(0)*

The Long-tailed Skua is not present in winter, and it is also very rare to see it in the Strait of Dover in spring. There are only four sightings between 2005 and 2011, all made between the end of April and May and all on the English side. Numerous observations made in Scotland (Hebrides Islands) show that the species travels along the west coasts of the British Isles.

AUTUMN MIGRATION *(30-150)*

The first individuals sometimes appear as early as mid-August but migration does not really start before the end of the month. Passage can be very marked at the end of August (for example, 27 birds on 24 Aug. 1998) but the most favourable period for the species is between early September and into the first 10-day period of October. The peak is recorded at the end of September-beginning of October



Long-tailed Skua - post-breeding migration (autumn)

Juvenile Long-tailed Skua. Ludovic Scalabre

Pale phase Long-tailed Skua. Ludovic Scalabre

but the exact timing is dependant on favourable weather conditions. Therefore, the average per session may remain extremely low even at the end of September (2.12 birds on average) and zero (0) for the species in unfavourable conditions. Good days bring between 10-20 and occasionally 30-50 birds during exceptional influxes due to high breeding success coupled with ideal weather conditions. The last substantial influx was recorded in 2004 at the Clipon Jetty (Cap Gris-Nez not monitored) with a record 50 sightings on 24 September after 44 the day before. Passage decreases noticeably in mid-October but further birds may still be recorded until mid-November.

ADDITIONAL ANALYSIS

The presence of the Long-tailed Skua is strictly related to favourable meteorological conditions in the North Sea with strong north-westerly winds able to generate an influx of migrants or a more dispersed passage over 2 or 3 days depending on conditions. Migrant bird counts over a season are therefore highly variable with years where the species is hardly present and others where it makes several appearances in large numbers. Sightings of adult birds in the region are very rare with a maximum of 2 or 3 records per season. There are some records of juveniles being sighted far inland.

The Long-tailed Skua can form mixed groups with Arctic and Pomarine Skuas. The upward trend in numbers recorded since the 1990s is the result of better knowledge of the species.

In the past, it was considered a very difficult species to identify in sea-watching conditions and therefore few records were accepted.

Today, identification criteria have improved making for easier identification, but it is still can be difficult.

Great Skua (*Stercorarius skua*)

Grand Labbe / Grote Jager

Great Skua with the English coast as background. Guy Flohart

Great Skua												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
80-300/1000-2800												

Great Skua	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Common
Regional status	Regular migrant and present throughout year

GENERAL COMMENTS

The major part of the Great Skua breeding population is quite localised in the North Atlantic with two historical strongholds in Iceland and the Faroe Islands, which together account for 90% of the population.

It also breeds in the Orkney and Shetland Islands of Scotland and more recently, following an expansion north-eastwards, in Norway, Spitzbergen and in Russia on the Kolka Peninsula.

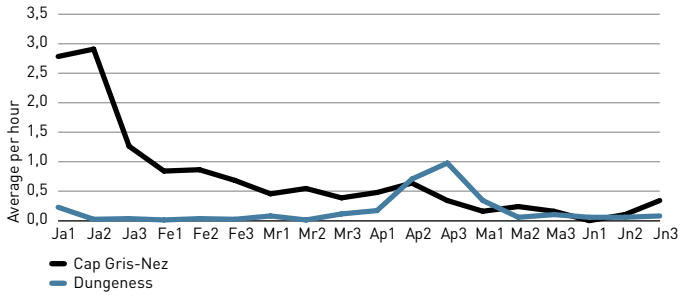
Migration movements pass over the North Sea and Atlantic Ocean towards the inter-tropical coastlines of Africa. The species is highly pelagic in the non-breeding season. Great Skua numbers rose dramatically in the 20th century due to industrial fishing in the North Atlantic. The Great Skua does in fact have a parasitic symbiotic relationship with other species, mainly the Northern Gannet.

WINTER MOVEMENTS AND SPRING MIGRATION *(80-300)*

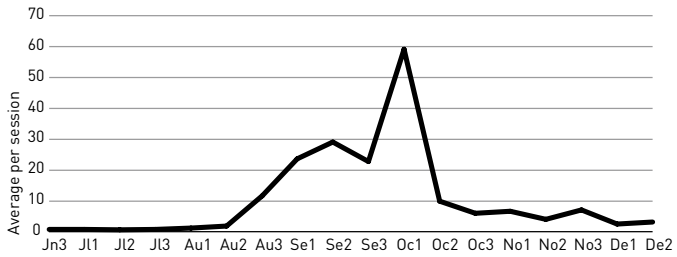
The species is present all winter in the North Sea in small numbers even though its habitual wintering zones takes it much further away to even the African coast.

The Great Skua's spring migration is not very marked on the French coast in the Dover Strait and it is difficult to differentiate wintering birds from spring migrants.

A slow passage acceleration is however noticed in mid-April on the English coast. Numbers on the French coast are small with rarely more than 10 birds per session during the remainder of the season.



Great Skua - pre-breeding migration (spring)



Great Skua - post-breeding migration (autumn)

AUTUMN MIGRATION *(1000-2800)*

Except during migration periods, the Great Skua is present in small numbers all year round. Passage really begins in mid-August with a rapid increase at the end of the month when numbers already reach 100-400 birds on a good day.

The first passage peak is observed in mid-September with large influxes (438 birds on 15 Sept. 2011, 1569 in 2 days between 10-11 Sept. 2007) followed by a sharp drop in numbers at the end of the month. A second much more marked period starts in early October, which sometimes results in remarkable 'rushes'; 787 birds on 7 Oct. 2011,1389 on 3 Oct. 2008.

Passage decreases very quickly in mid-October but remains important until the end of November.

From December onwards, it is no longer possible to distinguish migration from local movements as the species winters in the Strait.

ADDITIONAL ANALYSIS

Recent monitoring at Cap Gris-Nez has given us a better understanding of the Great Skua's movements in the Strait of Dover. The species is in fact quite pelagic and other sites that do not have the same geographical advantage observe far fewer migrants.

The strategic location of Cap Gris-Nez for monitoring the species is perfectly illustrated by the record influx on 2 October 2005. On this one day alone, a record 2411 birds were counted which is 10% of the world population for the species!

On the same day and over the same monitoring time, the nearest site at the Clipon Jetty counted only 435 individuals. Eight ringing recoveries have been recorded in the region.

Six of the recovered birds, all ringed in the Shetland Islands, were recovered in autumn between September-November. The two remaining birds were both ringed in Iceland and were recovered at the end of winter (February).One of these birds was aged 31years.

A comparison of English and French data at the end of winter shows that the species is present on the French side but are considered to be birds which have wintered in the Strait. They therefore continue to be included in the winter data with its indistinct migration and local movements while Dungeness records little local movement but a clear passage peak between mid-April and the start of May.

As with other skuas and all pelagic species, the Great Skua's presence in large numbers is dependent on stormy weather conditions from the north-west or even the north. It is possible however to see the species in small numbers whatever the wind conditions.

When migrating, the Great Skua tends to be solitary but may be seen in large groups during influxes. It is rarely seen in mixed groups for other species fear this large predator.

Although it is best to remain cautious when referring to the site's historical data, the population seems to be increasing with highest annual totals of less than 50 birds in the 1960s and around 200 at the end of the 1970s, 400 in the 1990s and 1,200-3,200 birds today.

Group of Great Skuas. Daniel Haubreux

Pelagic Gulls

Kittiwake (*Rissa tridactyla*)

Mouette tridactyle / Drieteenmeeuw

Adult Kittiwake. Frédéric Caloin

Kittiwake												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
NC/10000-40000												

Kittiwake	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Local breeder
National status	Uncommon breeder
Regional status	Regular migrant – present all year

GENERAL COMMENTS

The Kittiwake has a very wide distribution area: it nests not only on coastal cliffs of Western Europe but far north into the Arctic region (Norway, Russia).

The Nord – Pas-de-Calais region is home to one of the largest French colonies, being established on the cliffs of Cap Blanc-Nez and in the Port of Boulogne-sur-Mer. The species is pelagic and gregarious in winter.

It inhabits all the seas of Western Europe, as far as North-West Africa and even the Mediterranean Sea.

WINTER MOVEMENTS AND SPRING MIGRATION

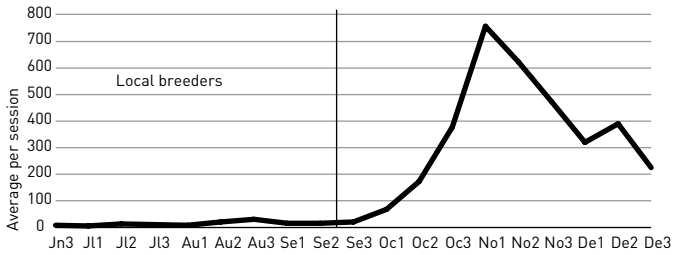
The species is widespread in winter and large influxes may be observed, for example 4653 birds on 8 Feb. 2004 at the Clipon Jetty and 4900 on 8 Jan. 2012 at Cap Gris-Nez.

The return to local colonies occurs very early in the season, and the separation of migrant from resident birds is no longer possible from February onwards, even if the majority of cases involving high numbers probably involve migrants at this time.

The presence of local colonies makes it impossible to monitor the spring migration accurately.

AUTUMN MIGRATION *(10000-40000)*

Local colonies are abandoned during August and it is not possible to distinguish local birds from possible migrants during this period. The species is still present on a daily basis in September but in small numbers. The first significant movements start in October with a progressive increase in numbers. At the beginning of the month, it is not unusual to count more than a hundred birds, and with north-



Kittiwake - post-breeding migration (autumn)

Juvenile Kittiwake. Julien Boulanger

Juvenile Kittiwake. Julien Boulanger

Group of Kittiwakes. Guy Flohart

westerly winds at the end of the month, over 1000 birds regularly. The first two 10- day periods of November mark the migration peak with impressive daily passages of up to 5000 birds. The Cap Gris-Nez record is 17201 birds on 9 Nov. 2007 while the Clipon Jetty record is 13165 on 30 Oct. 1998. Passage then decreases progressively but winter storms (December-January) may produce several thousand birds per day.

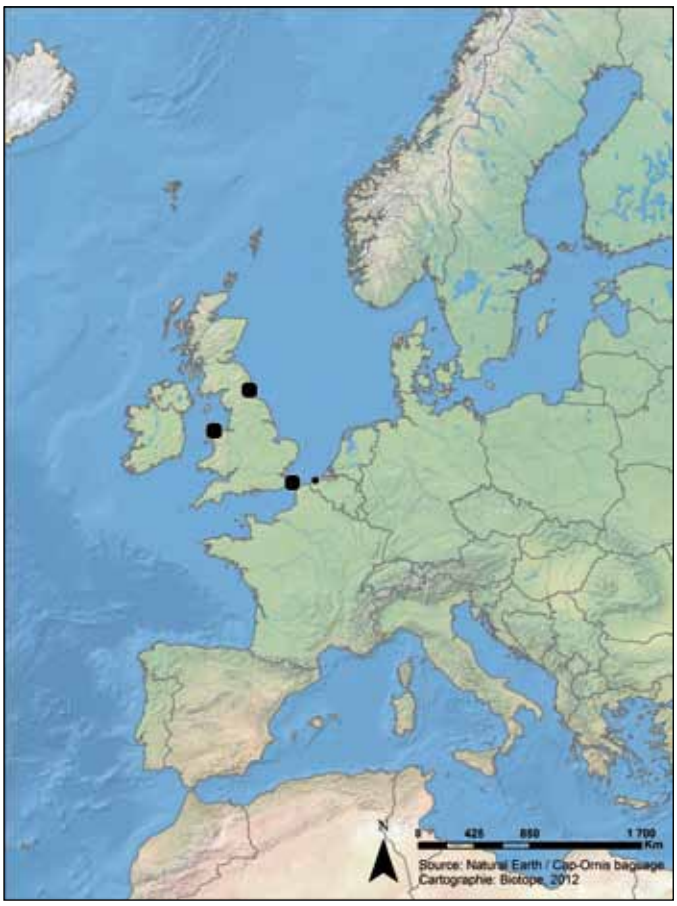
ADDITIONAL ANALYSIS

High passage numbers of Kittiwakes are dependent on strong northerly or north-westerly winds in the North Sea. If these conditions are recurrent, it is possible to see thousands of birds blown into the English Channel for several days in a row.

The geographical location of Cap Gris-Nez gives it an advantage over the Clipon Jetty where passage is generally lower.

Only five entries for bird controls/recoveries are on record for the region: A bird ringed in Belgium (probably at a rescue centre) and four ringed as young in English colonies.

Among the English birds, one was controlled in a Boulogne-sur-Mer colony four years after being ringed in the north of England, the other three birds being found dead along the regional coastline.



Little Gull (*Hydrocoloeus minutus*)

Mouette pygmée / Dwergmeeuw

Juvenile Little Gull. Julien Boulanger

Little Gull												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
5000-15000/6000-10000												

Little Gull	
Bird Directive	Annex I
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Uncommon
Regional status	Regular migrant

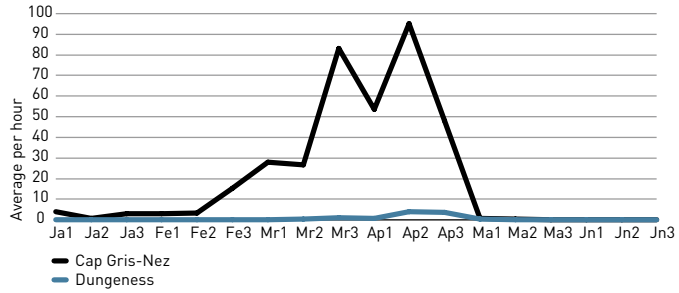
GENERAL COMMENTS

The Little Gull breeds around the Baltic Sea, western regions of Russia as far north as the Arctic Circle and the Great Lakes of North America and regularly in Central Europe. The wintering areas are along the coasts of Western Europe and the Mediterranean Sea. Outside the breeding season it is more pelagic although regularly seen from the shore during migration periods.

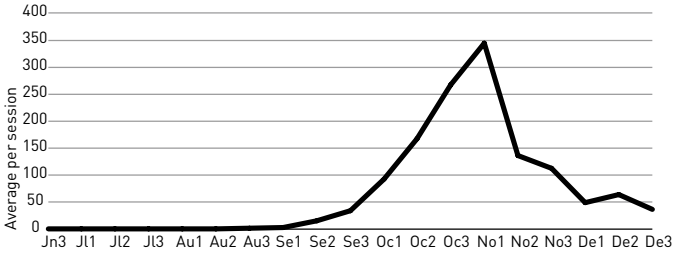
WINTER AND SPRING MIGRATION *(5000-15000)*

The Little Gull is found off the coasts of Western Europe where it is relatively common between December and February with a few dozen birds being seen in strong winds.

The first significant spring movements are noted at the end of February usually of a few dozen birds. From then until mid-March the species occurs regularly with sometimes several hundreds per day. From the start of the third decade of the month numbers generally increase (1744 birds on 24 March 2009). April is the month most favoured for the spring migration with birds being seen on many days and often several hundred birds in a day. It is the most important period of the spring migration with 1000 to 2000 birds on many days. In 2006 there were, 2022 on 12 April, 1045 on 14, 2081 on 17 and 1069 on 18. Numbers decline rapidly during the first days of May, there being only a few dozen birds a day and passage stops totally by mid-May.



Little Gull - pre-breeding migration (spring)



Little Gull - post-breeding migration (autumn)

AUTUMN MIGRATION *(6000-10000)*

The Little Gull is seen occasionally in July and August but the first perceptible movements are noted from the beginning of September, although the numbers are small. During the month numbers gradually increase and by the end of the month up to 200 birds can be counted during a session.

From the commencement of October birds are continually seen and from the middle of the month the numbers increase dramatically reaching a peak in the first days of November. Between mid-October and early November, with favourable wind conditions, counts of more than 500 birds per session are very regular while on several occasions the numbers have exceeded 2000. The maxima records at Cap Gris-Nez being 4069 birds on 23 October 2005 and 3930 on 1 November 2006. Although still present numbers decrease rapidly from the middle to the end of November but strong winds can still bring records of a thousand birds during a session.

ADDITIONAL ANALYSIS

The autumn migration of the Little Gull is closely assosciated with north-westerly winds in the North Sea making it easy to anticipate the best days to see the species.

Spring migration is more difficult to analyse . Wind direction apears less important and migration can happen on any day between mid-March and the end of April. In years without any major passage numbers can be only a third of normal.

Little has been published concerning the English coast.

The Little Gull mainly migrates in groups of their own species but occasionally some are seen travelling with Common or Black Terns.

Adulte Little Gull. Julien Boulanger

Sabine's Gull (*Xema sabini*)

Mouette de Sabine / Vorkstaartmeeuw

Adult Sabine's Gull. Willy Raitière/Biotope

Sabine's Gull												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
–/10-40												

Sabine's Gull	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Uncommon
Regional status	Regular in small numbers

GENERAL COMMENTS

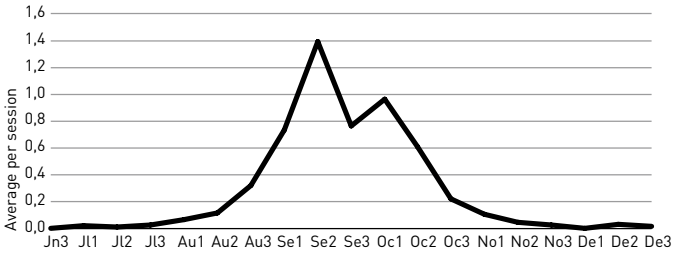
The Sabine's Gull is a breeding birds of the circumpolar regions nesting mainly in Alaska, Arctic Canada, Greenland and in Eurasia from the Taimyr Peninsula to the Bering Straits. Occasionally it nests in Spitzbergen. Atlantic populations migrate to the south-west African coasts through the Atlantic Ocean. The North Sea is a secondary route with the species being seen only in small numbers under favourable meteorological conditions to the north of Scotland.

WINTER AND SPRING MIGRATION

The species does not winter in the region and the spring passage to its northern breeding grounds is exclusively out in the Atlantic Ocean.

AUTUMN MIGRATION

Exceptionally the Sabine's Gull has been seen between early July and the beginning of August but the migration really only starts in mid-August with a few isolated individuals. At this time it is possible to see adults still in breeding plumage. The species then become regular with numbers between one and three and depend on favourable winds. Peak migration occurs between the beginning of September and early October. On the best days between ten and twenty birds can be seen with the record being 28 on 16 September 1994 at Clipon Jetty and 16 on 10 September 2007 at Cap Gris-Nez. Numbers have fallen rapidly by mid-October and there are only odd birds until the end of the month. There are occasional records in early November and even fewer until the end of December.



Sabine's Gull - post-breeding migration (autumn)

ADDITIONAL ANALYSIS

The presence of the Sabine's Gull is directly related to wind conditions in the seas around the Scottish coasts. Most of the migrants which migrate in European waters pass off the coasts of Ireland. The only occasions that a significant movement can be seen in the Strait of Dover is when there are strong to gale force winds from the west or north-west.

Without these weather conditions the annual numbers are limited to ten or so birds and only with the most favourable conditions will there be more than 50 birds.

The Clipon Jetty is twice as favourable to see birds than Cap Gris-Nez in that the jetty is more exposed for viewing pelagic species which normally fly closer to the wave tops. This is despite the fact that Cap Gris-Nez is more favourably located geographically.

Juvenile birds account for two-thirds of the total realised in a season with the adults being seen mainly at the beginning of the season.

Juvenile Sabine's Gull. Daniel Haubreux

Juvenile Sabine's Gull. Julien Boulanger

Other Gulls

Lesser Black-backed Gull (*Larus fuscus*)

Goéland brun / Kleine Mantelmeeuw

Lesser Black-backed Gull with ring. Philippe Dumont

Lesser Black-backed Gull												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
50-350				N	N	N	N	N	N	N	N	N	N	N	N	N

Lesser Black-backed Gull	
Bird Directive	Annex II
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Local breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

The Lesser Black-backed Gull nests in colonies on the coasts of Northern Europe, Iceland, Portugal and Northern Russia. In the Nord – Pas-de-Calais, it nests with the European Herring Gull (Larus argentatus) in mixed colonies of up to 200 pairs. Most of the populations are migratory and make multiple stopovers during their movements. The species is normally found at coastal sites (ports, coastal lagoons, estuaries...) in winter. It can also be found inland near rivers, lakes and sewage treatment works. The Nord – Pas-de-Calais population belongs to the sub-species graellsii (Dutch type) and for the most part winters between November-February from the Iberian Peninsula to Morocco. A colour-ring programme for breeding colonies was set up in the region from 2005-2009 in order to study the dynamics of this rapidly growing population and to compare it with Belgium, English and Dutch populations in the southern part of the North Sea. The colonies are located on industrial wasteland (Gravelines, Dunkirk, Calais) close to port facilities. The Lesser Black-backed Gulls in the region have mainly been ringed at their breeding grounds by means of coloured rings with individual codes. They can then be controlled at a distance by reading their rings. The birds are mainly present in the breeding season (April-September) and so it is at this moment that they are controlled in the Nord – Pas-de-Calais.

WINTERING AND SPRING MIGRATION

A relatively small number of birds ringed in the region do not migrate in autumn and winter in Nord – Pas-de-Calais. A study of ringing data has shown that mature adult birds migrate earlier (from March) to breeding grounds than younger birds in spring.

Ringing nestlings. Christophe Luczak

These adults, in competition of course at nesting sites, arrive earlier in the region in order to claim the best locations for their nests, thus optimising their chances of reproduction.

AUTUMN MIGRATION

During migration in autumn (September and October), Lesser Black-backed Gulls ringed in Nord Pas-de-Calais seem to employ several strategies: They leave first for Great Britain, then cross the English Channel to Brittany and the Bay of Biscay in order to reach either Northern Spain or the Portuguese coast by means of a more direct pelagic route.

The other route is flying along the coast of France and the Iberian Peninsula. They make a number of stopovers along the French, Spanish and Portuguese Atlantic coastlines. They then winter from November to February, mainly in Spain, Portugal and Morocco. Lesser Black-backed Gulls from Nord – Pas-de-Calais follow "Baker's" exploratory winter migration model: the youngest birds migrate to lower latitudes and disperse more than adults. Young birds explore greater areas to gain experience and to get an idea of the best wintering sites (Baker, 1980). The greater dispersal of and exploration by young birds also reduce the risk of kleptoparasitism (intra-specific competition) to which they are more likely to fall victim than adult birds. Wintering latitudes shift northwards with age and the most probable hypothesis for this behaviour is that, in a rush to reproduce in the best conditions, adults do not migrate too far from breeding grounds so as to return to them as quickly as possible.

Young gulls, reproductively immature before the age of 3-4 years, migrate further south.

ADDITIONAL ANALYSIS

From 2005-2009, 1648 birds were ringed in the colonies of Calais, Dunkirk and Gravelines (1514 young and 134 adults) in the framework of a private ringing programme (P.J. Dubois & C. Luczak).

Coloured rings made it possible to carry out more than 5,000 visual controls. The numerous controls helped to accurately establish the migratory pattern and the spatial dimension of the annual cycle of regional populations.

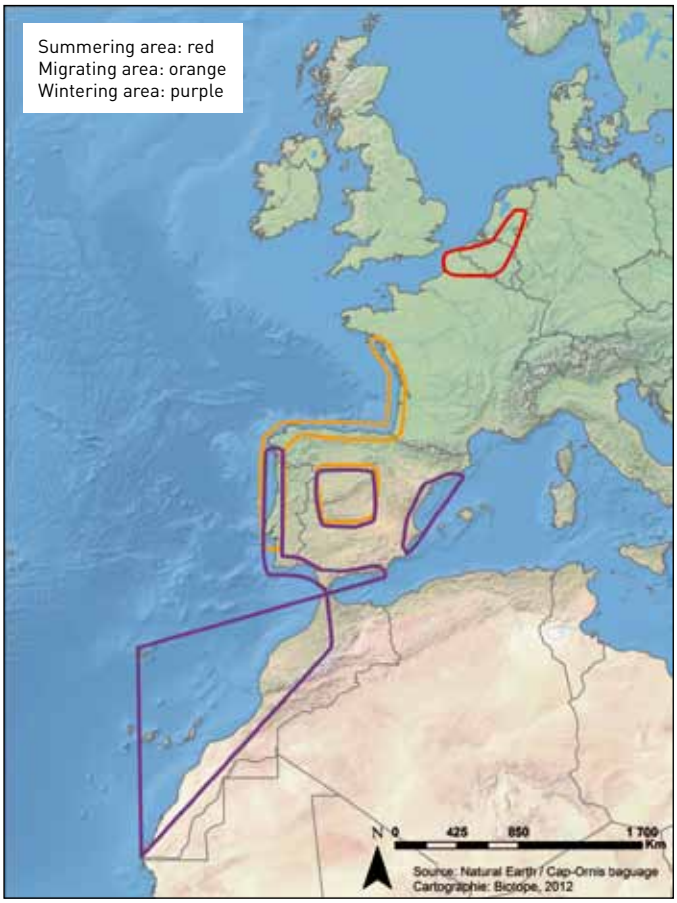
Half of the visual controls were carried out in France (52%), but other data came from Spain (25%), Portugal (10%) and Morocco (5%).

Three 'exceptional' controls should be noted:

- a young bird ringed in 2005 and observed in May 2011 in East Germany (730 kms.);
- a young bird ringed in 2005 and observed in February 2009 in the Canary Islands (2850 kms.);
- a young bird ringed in 2007 and observed in June 2012 at the southern tip of Norway (860 kms.).

Lesser Black-backed Gull carrying ring for reading with telescope. Philippe Dumont

The most southerly records concerns a young bird ringed in 2008 and observed in December 2012 in the islands of Mauritania (3850 kms.).



Mediterranean Gull (*Ichthyaetus melanocephalus*)

Mouette mélanocéphale /Zwartkopmeeuw

Mediterranean Gull. Ludovic Scalabre

Mediterranean Gull												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
300-700					N N N N N N N N N							

Mediterranean Gull	
Bird Directive	Annex I
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Local breeder
National status	Uncommon
Regional status	Regular migrant

GENERAL COMMENTS

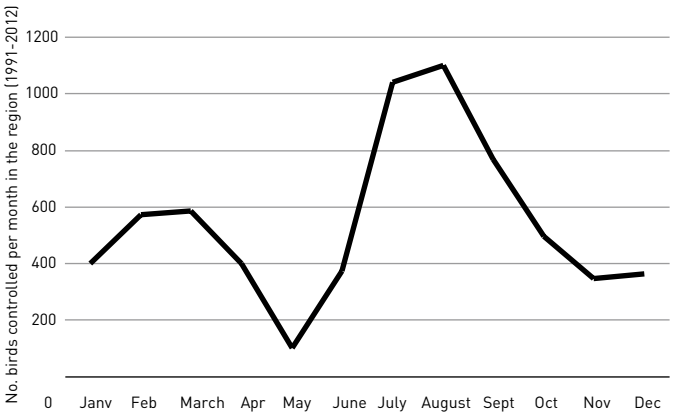
Long restricted to wetlands around the Black Sea where the species was threatened with extinction, the Mediterranean Gull has seen a population explosion since the 1960s, causing an expansion westwards across Europe. This migratory gull was found nesting in France for the first time in the Camargue in 1965 and its numbers have been growing since the 1980s. In Northern France, the species bred for the first time in the Pas-de-Calais in 1976.

The expansion continued not only along the Atlantic coastline (Vendée, Charente-Maritime...) but also inland (Maine-et-Loire, Alsace...). Present throughout the year in the region, it lives on beaches in the winter and breeds in coastal or inland marshland.

Birds born in French colonies winter along the coastlines of the North Sea, the English Channel and the Atlantic (from Ireland to Southern Spain) as well as on the Spanish Mediterranean coast. The species breeds in colonies, often in the company of the Black-headed Gull (Larus ridibundus).

MIGRATIONS, WINTERING AND BREEDING

Since the 1990s, the number of pairs in nesting colonies in the Nord – Pas-de-Calais has continually increased, to reach around 500 pairs in 2011. A colour-ring programme was implemented explicitly to explain this population trend. This programme allows individual identification at a distance. These sensitive operations are carried out not only on regional breeding grounds, but also on those of the Somme, Seine-et-Marne, Vendée and Camargue. They are organised with the approval and help of the natural areas administration (EDEN 62) or private partners (ARCELOR), in such a way as to minimise the



Numbers of monthly controls in the region

Colour-ringed Mediterranean Gull nestlings. Philippe Cannesson

disturbance of the birds' reproduction success rate as little as possible. Gulls ringed in the region are therefore controlled only after the breeding period (May-June) and at the beginning of the post-breeding migration period after young birds have fledged(July-August).

They are also present in large numbers in winter (November-February) and some catching sessions may be organised at this time.

A study of controls on birds born in the Nord – Pas-de-Calais colonies show two possible wintering strategies:

- a migratory strategy to spend winter further south on the Spanish, Portuguese, or even Moroccan Atlantic coastlines;
- a more sedentary strategy where individuals remain in the northern half of France (from Nord to Vendée), or move even further north to Belgium, the Netherlands or the British Isles

Adult birds tend to opt more for the 'sedentary' strategy than young ones, probably to remain closer to reproduction sites to facilitate an earlier return in spring. Juveniles adopt 'Baker's exploratory migration model': less experienced than adults, they are not familiar with optimal wintering grounds and therefore need to explore a larger territory.

Spring migration (March-April) only lasts two months and is therefore shorter than the autumn migration (July-October). This phenology may be explained in the case of reproductive adults: the first to arrive will have the best breeding locations. Departure of young birds from wintering grounds might therefore be triggered, in part, by the departure of adult birds.

ADDITIONAL ANALYSIS

Between 1991-2011, 3211 individuals were ringed in the region, mainly in breeding colonies at Oye-Plage (62), Conchil-Le-Temple (62) and Mardyck (59) (119 adults and 2324 young in total) while 768 birds were ringed at the wintering grounds of Le Portel, Boulogne-sur-Mer and Wimereux (62).

The coloured rings enabled nearly 50000 visual controls to be carried out on these individuals, which made the monitoring programme one of the most dynamic in Europe.

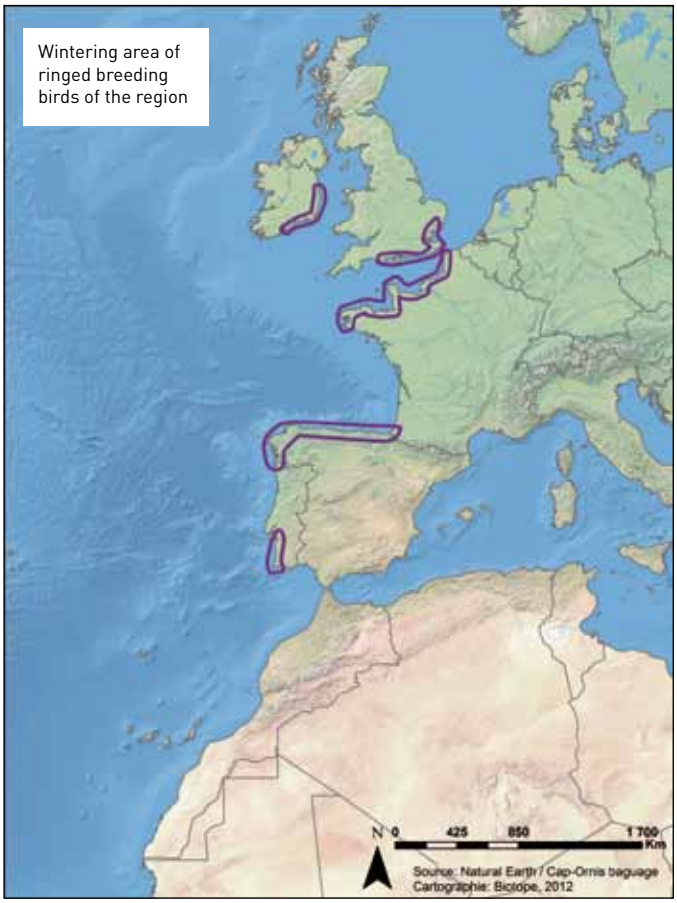
The numerous controls also enabled an accurate determination of the migration phenology and life cycle of regional populations.

Birds ringed in the Nord – Pas-de-Calais were observed in 21 different countries. 86% of these controls were carried out in France, 5% in Great Britain, 4% in Belgium and 1% in Spain.

Birds found furthest away from the site where they were ringed were as follows:

- to the north, a bird controlled in Lithuania (1370 kms.);
- to the south, a dozen birds controlled in Morocco (2400 kms.);
- to the east, two gulls controlled in Ukraine (2280 kms.).

The oldest bird ringed in the region was 19 years old when killed by a wind turbine.



Terns

The terns are mainly birds of the coastal areas rather than pelagic. Strictly migrants with the largest numbers occurring from the end of the summer to the early autumn with numbers exceeding several tens of thousands of birds. Rare migrant terns such as the Roseate Tern, Caspian Tern and White-winged BlackTern are not included in this analysis.

Sandwich Tern (*Thalasseus sandvicensis*)

Sterne caugek / Grote Stern

Sandwich Tern. Julien Boulanger

Sandwich Tern												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
5000-14000/13000-20000												

Sandwich Tern	
Bird Directive	Annex I
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Local breeder
National status	Common
Regional status	Regular migrant

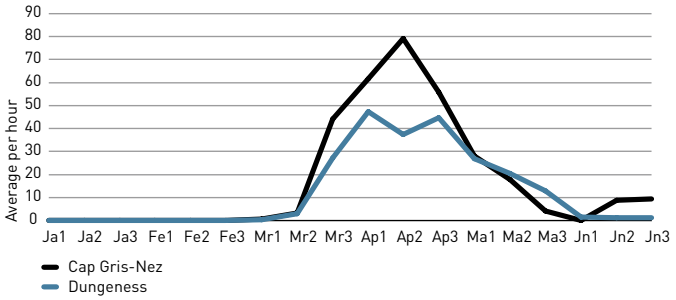
GENERAL COMMENTS

The Sandwich Tern occurs over a wide area of Europe nesting on the coasts of Western Europe, southern coasts of the Baltic Sea and around the Mediterranean Sea. Also, in the Black and Caspian Seas. The European populations mainly winter on the African coasts from the Mediterranean to South Africa while a few birds winter in European waters as far north as the Netherlands.

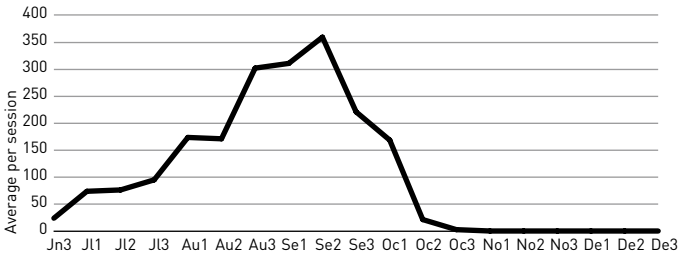
WINTER AND SPRING MIGRATION *(5000-14000)*

Exceptionally the Sandwich Tern has been seen on three occasions in winter, at Cap Gris-Nez between mid-December and mid-February.

In spring the first migrants appear between the last days of February and the first ten days of March and birds are seen more and more regularly as the month proceeds but only in low numbers. Passage accelerates rapidly in the last ten days of March with regularly 100 birds per day seen and even more with some days reaching 500 to 1000 birds. The peak of the migration is the month of April with the largest numbers in mid-month. Migration is often intense and most days sees between 200 and 500 birds passing. Exceptionally there are even greater numbers, the best days on record being 3067



Sandwich Tern - pre-breeding migration (spring)



Sandwich Tern - post-breeding migration (autumn)

on 15 April 2007 and 2960 on 24 April 2010. Passage diminishes gradually in May although the early days of the month can still be favourable for several hundred birds to be recorded. Migration ends in the last ten days of the month.

AUTUMN MIGRATION *(13000-20000)*

With nearby breeding colonies at Oye-Plage (Nord) and Dungeness in Kent it is difficult from June onwards to determine local movements from true migration. The first significant movements appear to commence at the end of the first ten days of July when several hundred birds have been seen passing (682 birds on 8 July 2007). The passage then increases progressively so that by the end of the month the numbers regularly exceed 200 per session. Movements intensify in August arriving at the peak period from the last ten days of August until mid-September. Numbers in excess of 1000 birds are fairly regular with the record counts being 3350 birds on 6 September at Cap Gris-Nez and 2500 on 2 September 1994 at the Clipon Jetty. Significant numbers continue to be seen but progressively decline until the beginning of October and drop rapidly by the middle of the month. A few individuals continue to be seen until early November.

ADDITIONAL ANALYSIS

The Sandwich Tern generally migrates on its own or in small groups and not with other tern species. Normally it flies above the other terns, the latter flying in compact groups at just above the height of the waves.

Spring migration at Dungeness occurs at the same time but is less than a third of the numbers on the French coast.

In autumn strong north to north-west winds seem to bring an increase in the number of birds but in spring it is not possible to anticipate an increase. However north-easterly conditions seem, as for most other birds following the coastline, to be the most propitious.

38 recoveries of ringed birds have been recorded for the region and concern mainly birds ringed in colonies in the Netherlands (16), Belgium (13) while there are birds ringed in Great Britain (4), Germany (1), Denmark (1) and Sweden (3).

The oldest bird concerns a bird which reached the age of 20 years having been ringed as a nestling at Dungeness, Kent.

Group of Sandwich Terns. Ludovic Scalabre

Common Tern (*Sterna hirundo*)

Sterne pierregarin / Visdief

Adult and juvenile Common Terns. Ludovic Scalabre

Arctic Tern (*Sterna paradisaea*)

Sterne arctique / Noordse Stern

Juvenile Arctic Tern. Julien Boulanger

Common Tern												
No. obs	Jan.	February	March	April	May	June	July	August	September	October	November	December
10000-30000/20000-60000												
Arctic Tern												
No. obs	Jan.	February	March	April	May	June	July	August	September	October	November	December
300-700/150-500												

Common Tern	
Bird Directive	Annex I
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Common breeder
National status	Common
Regional status	Regular migrant

Arctic Tern	
Bird Directive	Annex I
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Uncommon
Regional status	Irregular migrant

GENERAL COMMENTS

Different sub-species of Common Tern breed throughout most of the northern hemisphere concentrated on the coastal areas or inland of Europe, Asia and North America with the exception of the arctic zones. They are found along the coasts of the southern hemisphere with the European birds mainly wintering in West and South Africa. The Arctic Tern also breed throughout the northern hempisphere but occupies mainly the sub-arctic and arctic zones but extending south to the British Isles, the Netherlands, Germany, Denmark, Scandinavia and the Baltic states. The European populations winter to the far south of Africa in the Antarctic.

WINTER AND SPRING MIGRATION *(COMMON TERN: 10000-30000) (ARCTIC TERN: 300-700)*

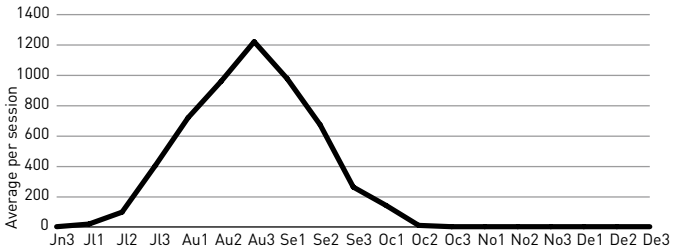
Neither species winter in the region.

The first Common terns arrive in the Strait of Dover at the end of March and by the beginning of April migration is under way with daily totals of a few tens of birds. Numbers quickly increase and from mid-April the passage is near the peak and numbers remain high until mid-May. Numbers are regularly in excess of 1000 birds a day with several impressive counts, as at Cap Gris-Nez, 9855 birds on 2 May 2005 and 8244 on 24 April 2010. Thereafter numbers decline rapidly with the last birds being recorded at the end of May.

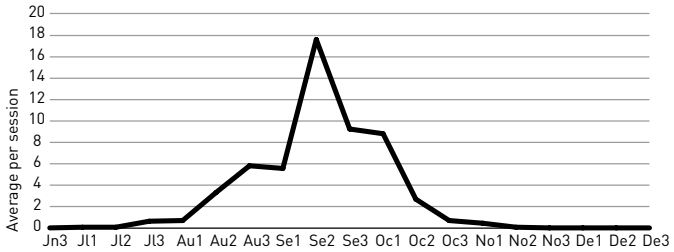
The spring migration of the Arctic Tern can be seen on both sides of the Strait of Dover with a few isolated records from early April but the main passage gets under way in the second ten days of the month and reaches it height at the end of the month. Generally the records are of several tens of birds but on the best days it is possible to see 200 to 300. There was a record influx in 2005 when 2800 birds were seen in two days with the record being 2291 on 17 April. Birds are regularly seen until mid-May but the numbers fall very rapidly and very few are seen in the last ten days of the month.

AUTUMN MIGRATION *(COMMON TERN: 20000-60000) (ARCTIC TERN: 150-500)*

The autumn migration of the Common Tern commences in the first days of July with, at most several tens of birds. From mid-July there are daily movements of between a few hundred and a thousand birds per day. Migrants are abundant from the beginning of August to mid-September with numbers in excess of 1000 birds per day. The peak



Common Tern - post-breeding migration (autumn)



Arctic Tern - post-breeding migration (autumn)

is reached at the end of August and early September with very large numbers. The records are 8500 birds on 6 September 2009 at Cap Gris-Nez and 8837 at the Clipon Jetty on 5 September 2001. From the third decade of September numbers fall rapidly but are still significant until early October with an average of 300 birds a day and several influxes such as 2744 on 23 September 2003 at the Clipon Jetty and 2144 on 3 October 2006 at Cap Gris-Nez. Migration ends at the end of October with the exception of isolated individuals.

The autumn passage of Arctic Terns mainly concerns juvenile birds, arriving later than the Common Tern and in much lower numbers. Isolated individuals can occur from mid-July but no significant numbers are seen until mid-August. From early September there is a small migration (1-20 birds per session) but with up to 50 birds when there is a strong north-west wind. The best period is during the second half of September through the first days of October when during days of strong winds more than 100 birds may be seen. There is an exceptional record of 1000 birds on 11 September 2007 at the Clipon Jetty with the second highest number being 211 on 26 September 2007 at the same site. By mid-October the numbers fall quickly until odd birds are seen in early November.

ADDITIONAL ANALYSIS

Identifying Arctic Terns during seawatching is difficult and can only be made at close range. Most of the autumn idenifications concern juvenile birds which is relatively easy. Nevertheless it is important to note that no influx of adults have been noted at regional sites nor at Dungeness, Kent. To the contrary the migration of adults in the spring is clear in the Dover Strait.

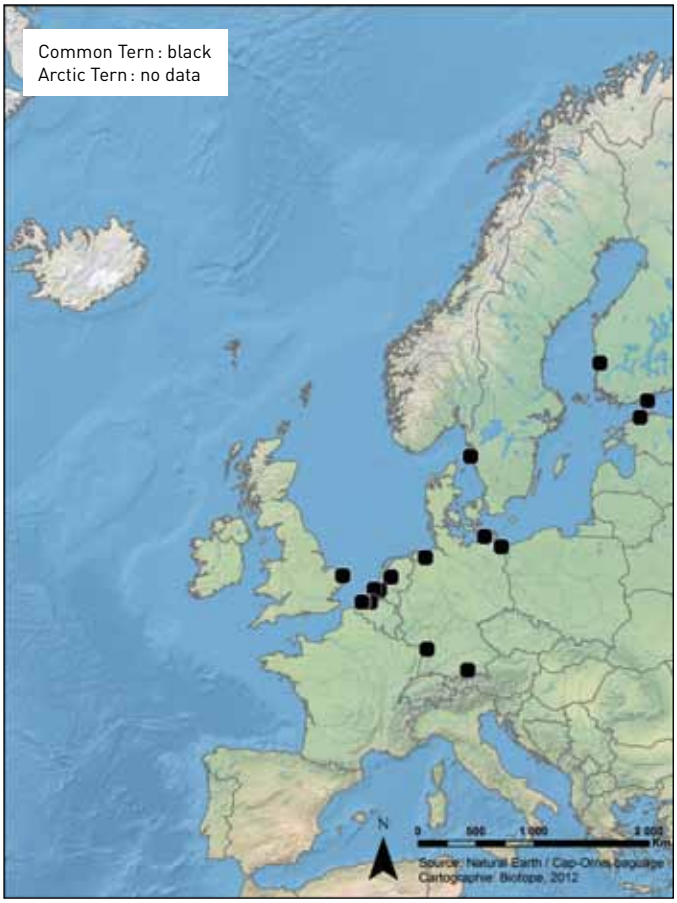
In autumn strong winds from the west and north-west are essential for the Arctic Tern while influxes of Common Terns are less predictable at either season.

The Common Tern often passes in large groups and frequently have Arctic, Little and Black Terns or Little Gulls mixed in the flocks.

The Arctic Terns has the same characteristics of flying in groups in spring while in autumn it is invariably individual birds or very small groups of juveniles, often with Common Terns.

On the English coast one sees the same pattern of migration but with numbers clearly smaller.

In total there are 26 ringing recoveries of Common Terns ringed in the region but there are no Arctic Terns recorded. These recoveries come from the North Sea coast and the Baltic Sea. Ten of these recoveries are from birds ringed in the colony at Zeebrugge, Belgium. Two other are of birds ringed as young in June/July in the south-west of Germany and controlled or recovered in the region the same year.



Little Tern (*Sternula albifrons*)

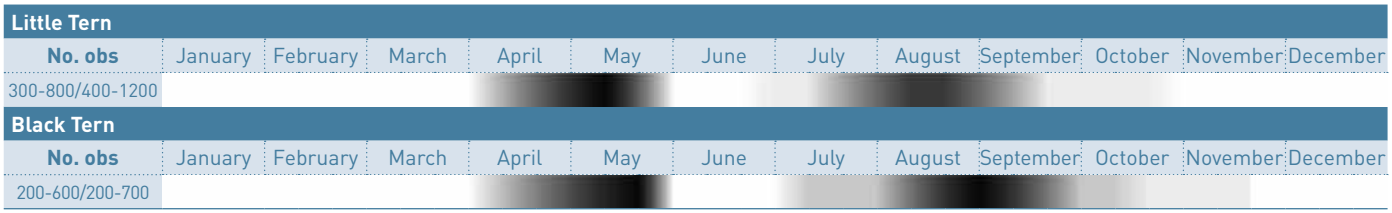
Sterne naine / Dwergstern

Little Tern. Ludovic Scalabre

Black Tern (*Sterna paradisaea*)

Guifette noire / Zwarte Stern

Black Tern in breeding plumage. Julien Boulanger



Little Tern	
Bird Directive	Annex I
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Local breeder
National status	Uncommon
Regional status	Regular migrant

Black Tern	
Bird Directive	Annex I
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

The Little Tern has a cosmopolitan distribution in Europe, Africa, Asia and Indonesia with migrant populations while others are sedentary. European birds are strictly migratory and nest in Europe as far north as Southern Scandinavia, Baltic States, the south of Finland with a small isolated pocket in Lapland. The birds nesting in the region winter in West Africa.

The Black Tern also has a wide distribution, being found throughout Europe (except the north) and eastwards as far as Central Asia. European birds winter in the west and south-west of Africa.

WINTER AND SPRING MIGRATION *(LITTLE TERN: 300-800) (BLACK TERN: 200-700)*

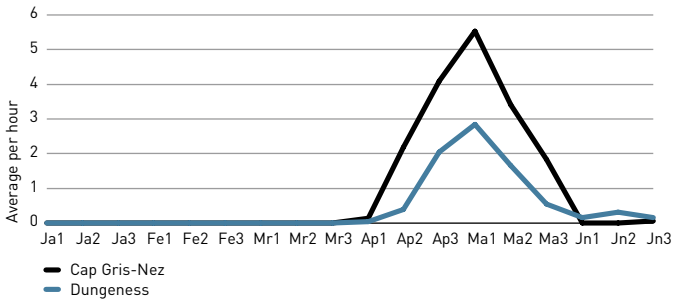
Neither species occur in the winter.

The Little Tern and the Black Tern have a very similar pattern of migration. The first spring migrants are seen mid-April for both species. The Little Tern essentially migrates in small parties and the numbers quickly reach a few tens of birds at this period. Only a few Black Terns are seen which migrate singly, often associated with other species. The number of both species rises rapidly with a peak in early May for the Little Tern and mid-May for the Black Tern. At this time birds are seen almost daily and the numbers are in the order of several tens to 100-150 birds per day. The best recorded days in spring being 231 birds on 24 April 2010 for the Little Tern and 179 birds on 14 May 2010 for the Black Tern. The Black Tern migration ceases soon after this peak while the Little Tern numbers gradually fall to the end of May.

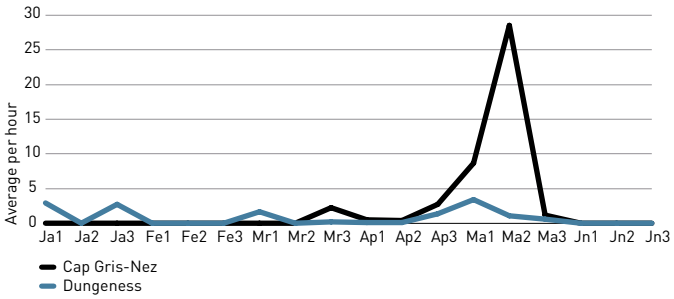
AUTUMN MIGRATION *(LITTLE TERN: 400-1200) (BLACK TERN: 200-700)*

For the two species the autumn migration commences in mid-July but with very few birds, one exception being a remarkable 632 Black Terns on 20 July 2003 at the Clipon Jetty.

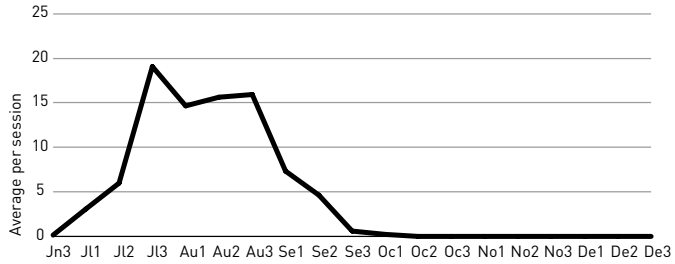
For the Little Tern the peak passage is between the end of July and the end of August with birds seen nearly every day varying between a few birds to fifty or more. Only a few days have been recorded with more than 100 birds, the best days being 518 on 23 August 2008 at the Clipon Jetty and 474 birds on 29 August 1982 at Cap Gris-Nez. Numbers fall rapidly from the first days of September with only a few



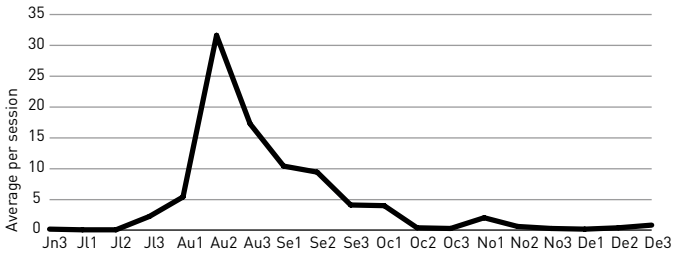
Little Tern - pre-breeding migration (spring)



Black Tern - pre-breeding migration (spring)



Little Tern - post-breeding migration (autumn)



Black Tern - post-breeding migration (autumn)

Little Tern. Ludovic Scalabre

birds by the last ten days of the month. One or two birds have been seen at the start of October.

Black Tern passage increases progressively during August to reach a maximum from the middle of the month until mid-September with birds present daily in almost identical numbers to that of the Little Tern. Numbers in excess of 100 are regular with several exceptional days recorded (maxima being 913 birds on 13 September 1998 at the Clipon Jetty and 417 on 10 August 2005 at Cap Gris-Nez.

Migration ceases abruptly at the end of September with occasional birds at the beginning of October.

ADDITIONAL ANALYSIS

The English records (Dungeness) confirm the timing of the spring passage for the two species but the numbers there are very small for the Black Tern and about half for the Little Tern.

The Black Tern is commonly seen associating with the Common Tern and Little Gull and quite often several Black Terns can be found flying in flocks of these two species. Also, the Little Terns can be seen migrating in groups of their own species. In autumn at times of larger numbers the Black Tern can be seen doing likewise.

Auks

Common Guillemot (*Uria aalge*)

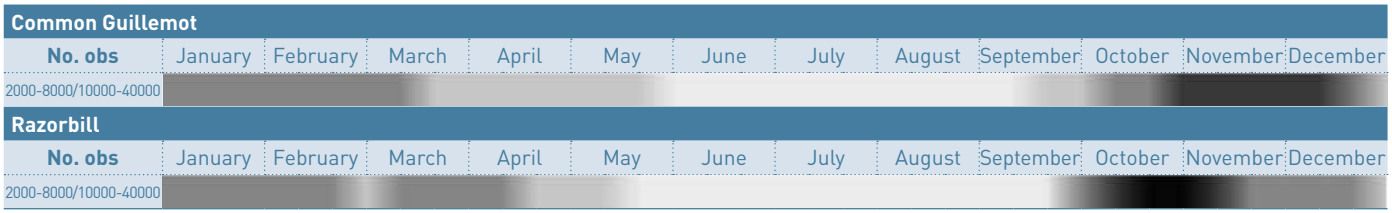
Guillemot de Troïl / Zeekoet

Common Guillemot – breeding plumage (left) and winter plumage (right). Frédéric Caloin

Razorbill (*Alca torda*)

Pingouin torda / Alk

Razorbill in winter plumage. Frédéric Caloin



Number of birds for all auk species

Common Guillemot	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Common
Regional status	Regular migrant and winter visitor

Razorbill	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Common
Regional status	Regular migrant and winter visitor

GENERAL COMMENTS

The Common Guillemot nests on the west coast of Continental Europe from Portugal and Spain (a few pairs) to the extreme north of Norway and even beyond to Spitzbergen. The Razorbill has a more restricted distribution area, from the Brittany coast to the Russian border with Norway. Both species also nest on the Swedish and Finnish coastlines along the Baltic Sea (more occasionally for the Common Guillemot), but the most important colonies are located in the British Isles, Iceland and on the cliffs in Norway. The northern coastline of Brittany and the Channel Islands have the colonies closest to the region.

At the end of autumn, the Common Guillemot migrates a short distance to take up residence in coastal waters all over Western Europe, from Norway to Portugal. The Razorbill inhabits the same zones but may travel to the Western Mediterranean, passing by the Strait of Gibraltar and along the Moroccan coastline. The two species are difficult to tell apart from far off when in flight and so are generally grouped together under the heading of alcidaes.

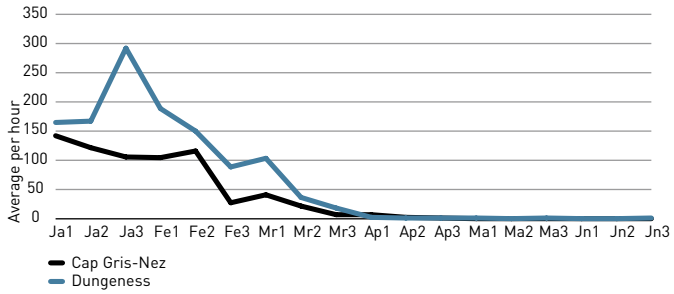
WINTER MOVEMENTS AND SPRING MIGRATION

(AUKS: 2000-8000)

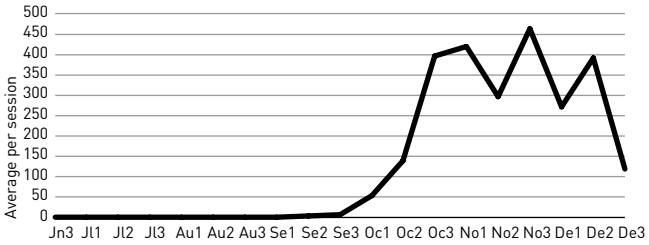
The two species are common during wintertime. It is therefore difficult to differentiate local movement of wintering birds on the Nord – Pas-de-Calais coast from migratory movements that might occur during this period. These movements concern several hundred or thousands of birds (e.g. 2604 birds on 2 Jan, 2007). The most important spring movements occur until mid-February with the possibility of observing several thousand birds on a good day (3151 birds on 15 Feb. 2009 at Cap Gris-Nez). Passage then declines quickly but remains very significant until the beginning of April, with a general passage intensity of between 50-200 birds per session and occasionally a thousand or so birds. In spring, the phenological behaviour of the two species differs: the number of Common Guillemots decreases quite quickly from the beginning of March while that of Razorbills remains stable until the beginning of April.

POST-BREEDING MIGRATION *(AUKS: 10000-40000)*

Both species may be observed together throughout summer. Migration only begins in mid-September, with movements generally



Common Guillemots - Razorbills - pre-breeding migration (spring)



Common Guillemots - Razorbills - post-breeding migration (autumn)

limited to a few birds but are more or less daily. Passage intensifies progressively at the beginning of October but numbers generally remain limited to a few dozen and rarely a few hundred birds.

Passage then increases enormously from mid-October to reach its peak from the end of the month and until the end of November.

The whole period is just one long and impressive procession of Auks on passage.

A typical day regularly exceeds 500 birds and on a day of heavy passage, thousands may be observed. The best day on record is 1 Nov. 2006 (8963 birds at Cap Gris-Nez). The pattern for the two species is very similar with a shorter but more intense passage peak for the Razorbill, from mid-October to the beginning of November, while the maximum passage for the Common Guillemot stretches from the end of October to the beginning of December.

ADDITIONAL ANALYSIS

The passage of auks usually takes place far out to sea. Therefore, only around 10% of birds belonging to the alcidae family are actually identified. Nevertheless, this is enough to note the few phenological differences between the two species. The Cap Gris-Nez site is far better located with three times as many birds on average compared to the Clipon Jetty site.

Auk numbers on the English side of the Strait are double or triple those of Cap Gris-Nez in winter and at the start of the spring migration. The pattern seems to be identical.

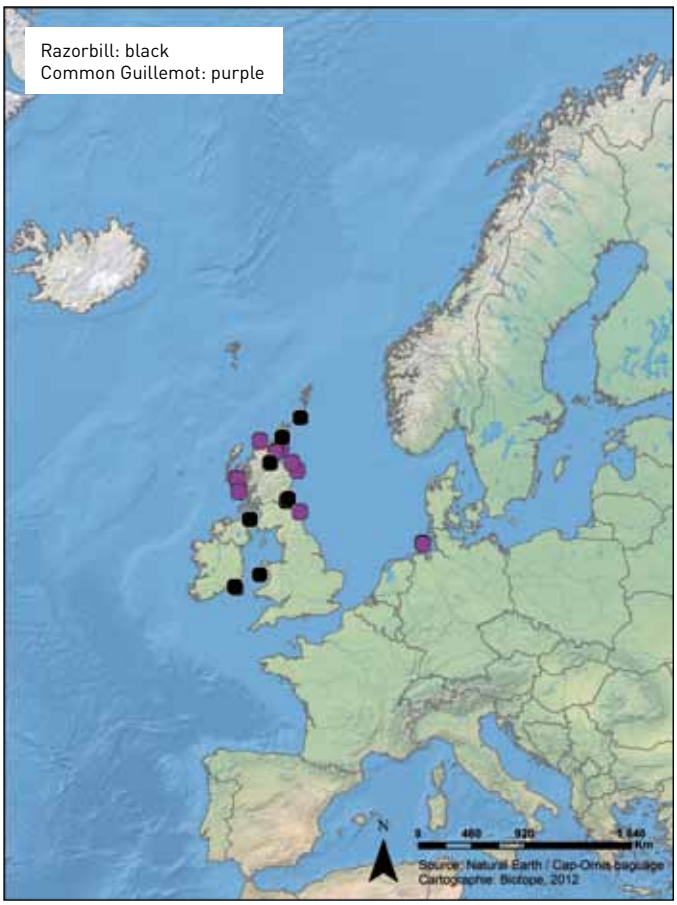
This difference in number counts not only between the Clipon Jetty and Cap Gris-Nez in autumn but also between Dungeness and Cap Gris-Nez can perhaps be explained by the origins of the birds. 96% of birds initially ringed in colonies (many were actually ringed in rescue centres after oil spillages) and recovered in the region came from the English and Irish coasts.

Only three birds came from Helgoland Island (Germany) where more than 2000 pairs of Common Guillemot nest. Not a single bird came from the colonies of Norway, Iceland or the colonies of the Baltic Sea where the birds probably winter. Among the most interesting data we have is that of a bird rescued by a regional centre in the winter of 2002-2003 and controlled the following two winters in an English

Mixed group of Razorbills and Common Guillemots. Frédéric Caloin

breeding colony. This goes to show the importance of rescue operations for birds that are victims of oil spillages at sea. However, 70% of auks ringed in rescue centres are found dead less than a month after their release or taken to another rescue centre a short distance away.

The oldest Common Guillemot recovered in the region was at least 17 years and the oldest Razorbill at least 16 years.



Little Auk (*Alle alle*)

Mergule nain / Kleine Alk

Little Auks. Daniel Haubreux

Little Auk												
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
0/0-100												

Little Auk	
Bird Directive	-
Protected species	Yes
Nesting status in the Nord – Pas-de-Calais	Non-breeder
National status	Rare
Regional status	Irregular migrant

GENERAL COMMENTS

The Little Auk nests exclusively in coastal regions of the High Arctic, in highly dense colonies.

These important populations (tens of millions of pairs) probably make it one of the most abundant seabirds in the world.

Populations are found in Greenland, Iceland, Spitzbergen and sometimes further east off the Russian coast.

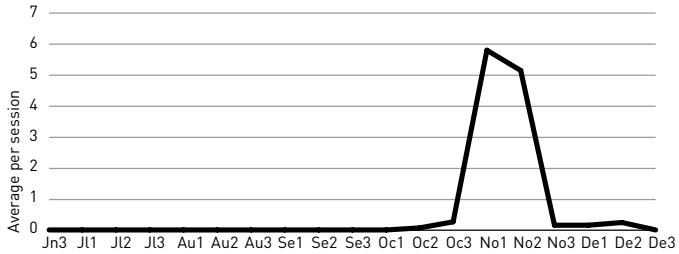
It moves out to sea in winter to inhabit zones of the North Atlantic, the most northerly part of the North Sea and unfrozen areas of the Barents Sea.

WINTER MOVEMENTS

There are only a few records for alive birds in winter (Port of Boulogne-sur-Mer, Dunkirk) and limited data for beached birds recorded on the coast during influxes but the species is not normally present in the region. The species is normally absent in the pre-breeding migration period.

AUTUMN MIGRATION *(CAP GRIS-NEZ: 0-100)*

The presence of the Little Auk in the observation zone is by chance, the nearest wintering zone being located in the North Sea. Particular conditions are needed if the species is to make an appearance. Influxes only occur if a very strong north to north-westerly air stream prevailes for several days during which the species is migrating between the Northern colonies and the Atlantic Ocean at the end of October and beginning of November. The birds are then blown into the North Sea by the stormy conditions. A few solitary or small groups of birds are then observed in general, often for two or three days. Influxes of the species are rare events and the records show



Little Auk - post-breeding migration (autumn)

Little Auks. Daniel Haubreux

Little Auk. Julien Boulanger

ADDITIONAL ANALYSIS

Little Auks seen in the Strait of Dover in autumn or winter are generally exhausted birds. Blown hundreds of kilometres off course from their habitual wintering grounds by extremely fierce storms, they find themselves stranded here.

Their mortality rate is therefore very high in such periods and stranded birds are found along the beaches. The Clipon Jetty site, located further north, is thus more likely to observe Little Auks in distress than Cap Gris-Nez.

Little Auk alighting on sea. Julien Boulanger

only four sessions of more than 100 birds, all at the Clipon Jetty, the best of which recorded 299 birds on 10 Nov. 2007. The Cap Gris-Nez record is only 84 birds on the same day. From the last ten day period of November and until mid-December, it is possible to see single birds.

Swallows and Martins

Three species nest in the region. The Sand Martin, Barn Swallow and the House Martin. The latter is not treated here as very little regional data is available on the species' migration. Long distance migrants par excellence swallows and martins travel tens of thousands of kilometres, not only to migrate but also to feed.

Barn Swallow (*Hirundo rustica*)

Hirondelle rustique / Boerenzwaluw

Barn Swallow. Frédéric Caloin

Sand Martin (*Riparia riparia*)

Hirondelle de rivage / Oeverzwaluw

Sand Martin. Frédéric Caloin

Barn Swallow												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
80-400						N	N	N	N	N		

Sand Martin												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
60-330				N	N	N	N	N	N	N	N	N	N	N		

Barn Swallow	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Very common breeder
National status	Very common
Regional status	Regular migrant

Sand Martin	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Fairly common
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

The Barn Swallow commonly nests in the region. It is found in inhabited zones, mainly in rural areas. It settles where there are rich habitats in terms of flying insects (natural grasslands, hedgerows, woodlands, ponds, pools, marshes etc.) and accessible buildings (barns, out-houses etc.). In the region, the Sand Martin has established itself principally on artificial cliff faces that are the result of human activity (embankments, sand quarries). Both species display broad-front migratory behaviour and tend to mass in great numbers on coastal wetlands, in humid inland zones and in mountain passes.

The greatest flights of Swallows and Sand Martins are observed near bodies of water at this period. They are particularly fond of reed beds, where they form roosting parties.

Between 1960-1975, a big effort was made to catch Barn Swallows, in particular to ring nestlings and adults at breeding grounds (18800 birds were ringed in all, which means over 1100 birds annually compared to a hundred or so from the year 2000 onwards). These operations uncovered some interesting facts about wintering zones of the species in Africa.

WINTERING AND SPRING MIGRATION

The Sand Martin winters in the African sahel. Wintering zones of the Barn Swallow are more widespread. They are located in Western Africa and as far south as Angola and South Africa. It seems that Western European populations winter mainly in West Africa with the exception of the population of the British Isles which winters in South Africa. Spring migration starts to be seen in the region from the end of March and culminates in the second half of April for the Barn Swallow (the earliest record is 25 March). For the Sand Martin, the main arrival at nesting sites is in April (the earliest record is 23 March).

AUTUMN MIGRATION

From July, both species gather to form flocks, from hundreds to several thousand birds that roost together. Swallows and martins are

Sand Martin colony. Karel Vandemeulebroecke

actually building up their fat reserves in order to migrate. Migration starts at the beginning of August, but takes place in stages as they visit a number of stopover sites. Autumn migration of the Sand Martin therefore occurs from the beginning of August to the beginning of October.

The Barn Swallow passage also starts in August but reaches its maximum during the second half of September with perhaps some late migrants until December.

Catches during the autumn migration period are made at dusk in the reed beds where they roost at night.

It is quite normal to catch several hundred birds with just a few linear metres of netting. There are few important regional roosting sites for swallows and martins and so ringing at roosting sites is little used in August in the region. Regional catches of both young birds and their parents are more often made in the breeding period.

ADDITIONAL ANALYSIS

On average only a hundred or so Barn Swallows are ringed annually in the region. Other than in reed beds, the species is sometimes accidentally caught in small numbers in other habitats.

It seems that the majority of migrating birds in the region come from Belgium and Great Britain.

These birds continue on their way south without, it seems, any preferential routes as there are recoveries in Spain and Italy.

There are two African records for the Barn Swallow:

- a bird ringed 24 Jan. 1997 in Nigeria by an Italian team and recovered 16 Jul. 1998 in the region (4965 kms.);
- a bird ringed 2 Jun. 1987 in the region and controlled 1 Jan. 1991 in Nigeria (3.5 years later and 4956 kms. away) in the same area as the previous bird mentioned.

Concerning the Sand Martin, an average of 243 birds are ringed annually in the region, the great majority in colony monitoring programmes. An analysis of control records shows migratory stopovers in very humid zones:

Moëze-Oléron, bodies of water in the Champagne region (France), Port of Zeebrugge (Belgium) and Laguna de Sariñena (Spain). Records also show that the Sand Martin may easily change their nesting site from one year to the next. In addition this adaptive species is an opportunist frequently changing colony sites and depending largely on industrial activity in sand quarries for creating a colony.

Birds ringed in France may be controlled during the nesting period in Belgium colonies more than 100 kms. away in subsequent years and vice versa.

Three Sand Martins controlled had travelled more than 1000 kms. :

- a bird ringed 22 Jul. 2007 in the region and controlled 7 Aug. 2007 in Spain (1005 kms.);
- a bird ringed 21 Jun. 2003 in the region and controlled 7 Sept. 2003 in Spain (1002 kms.);
- a bird ringed 22 Aug. 2002 in the region and controlled 22 Sept. 2002 in Spain (1084 kms.).

There is also the case of a bird ringed in Switzerland 17 Apr. 2008 and controlled in July of the same year in a colony in the region. There are no control records from the African continent where the species winters.

The longevity record for birds controlled in the region is 4.5 years for the Barn Swallow and 4 years for the Sand Martin.

The Wryneck

Wryneck (*Jynx torquilla*)

Torcol fourmilier / Draaihals

Wryneck. Stephan Peten (Suisse)

Wryneck												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
20-40												

Wryneck	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Occasionnal breeder
National status	Uncommon
Regional status	Regular migrant in small numbers

GENERAL COMMENTS

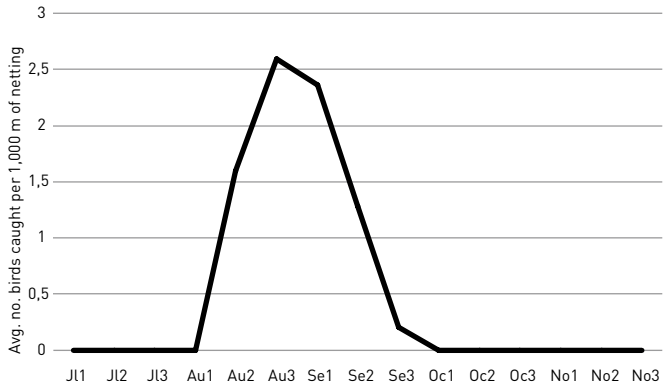
The Wryneck nests throughout Europe, but rarely in North-West France, the Benelux countries and Great Britain. It has a liking for orchards and pastureland with hedgerow and copses. It feeds almost exclusively on ants that it finds on the ground. The entire population is migratory with the exception of the most southerly located populations (Southern Spain, North Africa). Individuals abandon their nesting site in August and September to join their winter quarters, mostly in tropical Africa. It is only in this post-breeding migration period that the species is caught in the Nord– Pas-de-Calais region. The species with its well-camouflaged plumage is quite difficult to observe despite its medium size.

WINTERING AND SPRING MIGRATION

European populations winter in Africa, mainly in the tropics. The spring migration is not apparent in the region. There are no records of any spring captures for the species in Nord– Pas-de-Calais. It is possible that lower ringing activity in the spring together with the birds' need to rejoin their nesting sites limit detection at this season. But it is also possible that the species takes a more continental route. Birds returning to their nesting sites are noted in April.

AUTUMN MIGRATION

The Wryneck is a species with a relatively early autumn migration. It is during the first 10-day period of August that the first individuals are caught (7 Aug. is the earliest date on record). Peak passage occurs



Wryneck - post-breeding migration (autumn)

during the third 10-day period of August and then numbers decrease progressively until the second 10-day period of September. After this period, the species is a very occasional visitor.

There are no records for the species after 8 November at Cap Gris-Nez. Average annual numbers vary between 13-37 catches, the record for one day is 6 birds on 31 Aug. 2008 at Slack Dunes in Wimereux (more often 1-3 birds per ringing session).

Although the species is observed in different types of habitat during its migratory stopovers, it is mainly caught in dune shrubland belts.

ADDITIONAL ANALYSIS

The small number of birds caught is insufficient to give a precise idea of the origin and destination of individuals passing through the Nord– Pas-de-Calais. It is not unusual for the species to stopover for a few days at ringing station sites. The longest stopover recorded is 12 days. Between the date of ringing and the last control, the bird in question had gained 6 grams.

There is only one foreign control in the regional database: a bird ringed August 2003 in the region and controlled in September 2004 in Belgium.

The Wryneck was often observed in the Cap Gris-Nez sector, with up to twelve sightings per year. Since the beginning of 2000, it has become rarer with a maximum of eight sightings per year. The very local decrease is contrary to the constant numbers obtained by ringing and reflects perhaps a degradation of habitats affecting insect numbers in farmland areas, as opposed to ringing stations in protected dune areas. The very large number of visitors around Cap Gris-Nez may also provide an explanation.

Wryneck. Simon Dutilleul

Juvenile Wryneck (adults have reddish-brown iris colour). Simon Dutilleul

Larks

The lark family comprises several species of bird. The Nord– Pas-de-Calais coastline receives up to three different species depending on the time of year: the Shore Lark, a rare winter visitor, the Woodlark, which rarely nests in the region and the Skylark,which is found commonly nesting here. Only the last species, which is the most widespread, has been the subject of regional ringing programmes during the migration period.

Eurasian Skylark (*Alauda arvensis*)

Alouette des champs / Veldleeuwerik

Eurasian Skylark resting on migration. Julien Boulanger (Lettonie)

Eurasian Skylark												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
600-2000				N N N N N N N N N N N N								

Eurasian Skylark	
Bird Directive	Annexe II
Protected species	Hunting allowed
Nesting status in Nord–Pas-de-Calais	Very common
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

The Skylark is very widespread on a European scale. It breeds over almost all of Eurasia as far as the north of China.It inhabits essentially what may be described as 'open' terrains such as farmland, grassland, wasteland, dunes etc. Its diet mainly consists of grains of wild or grown plants that it supplements with small insects or other invertebrates in spring. The most northerly populations are migratory. Nevertheless, the Skylark is present in Nord– Pas-de-Calais throughout the year.

During migration and wintertime, the species is gregarious and gathers in flocks that are sometimes quite large (several hundred).

During the migration period, it favours the same types of habitat as in the nesting period which makes catching the species difficult, if not impossible, in the daytime. Therefore, it is listed as one of the few species that may be caught at night for scientific purposes. Its migration movements are usually nocturnal but are regularly prolonged into the morning on a good day.

WINTER MOVEMENTS AND SPRING MIGRATION

During winter, important movements of several thousand birds fleeing from repeated snowfalls can occur (for example, more than a million birds observed at Cap Gris-Nez on 30 Dec. 1968). The birds move southwards looking for open habitats where they can feed. At this time the species, often in a poor physical condition, can be seen on beaches, in estuaries or even at the side of roads where the snow has been cleared away.

Site for catching Skylarks at night. Jean Delannoy

Wing lenght differentiates male and female Skylarks. Iris Prudhomme

There is very little information on the spring migration of the Skylark along our coasts and on a regional scale. But we do know that the species reappears from January with more birds arriving in February.

So, most locally nesting birds have already settled in on their nesting site by March. The males are the first to return to their nesting site to defend their territory and to prepare for the females return.

AUTUMN MIGRATION

The first migration movements start from mid-September. The most intense migration passages occur when there are north-easterly winds, often on clear nights (gibbous moon and clear skies). Stopovers of several hundred birds may then been observed in ploughed or stubble fields across the region.

During this period, more than 200 birds may be ringed in one night.

The migratory flux is at its maximum in the region between the second and third 10-day periords of October (4300 birds ringed during this period between 2006 and 2010). From the first 10-day period of November, regional movement dwindles and finishes in the second 10-day period of the same month. A national study showed that in France between 1988-2007, the Skylark brought forward its average departure date in autumn by 12 days.

Furthermore, ringing of the species during this period revealed a different migratory pattern according to sex. Females are first to leave the nesting sites, followed by males. The latter occupy favourable nesting locations for as long as possibly to stop other males from claiming them.

ADDITIONAL ANALYSIS

The number of birds ringed in the region gives a good idea of the origin of individuals and migratory schema of the species.

For example, regional recovery data between December and January comes from birds ringed in October in Belgium or Nord–Pas-de-Calais. This confirms the local or supposed northern origin of individuals wintering here. We do know that some individuals nesting in the region embark on a partial south-westerly migration. Two birds ringed in wintertime in Landes and Pyrénées-Atlantiques were controlled in Nord– Pas-de-Calais in July, a period when migration of the species has not yet started.

The majority of migrants in transit in the region seem to head towards South-West France (Gironde, Landes, Pyrénées-Atlantiques) during autumn movements. Traditional hunting methods using spring loaded traps, nets and firearms are still very intensely used in these regions which may explain the high number of ringing recoveries in these regions. 68% of recoveries are the result of birds falling victim to hunting in the region (79%), or in the Landes 14%). The species can cover a distance that varies between 74-106 kms. in a night.

The record distance travelled is held by a bird ringed in the region and recovered in Norway around 1100 km away (a lark caught in the region in November1998 was recovered in July 2002 to the south of Oslo, at a stopover site for Hobbies (Falco subbuteo).

The oldest bird controlled in the region was aged 12.

Wrens and Accentors

Wren (*Troglodytes troglodytes*)

Troglodyte mignon / Winterkoning

Wren. Guy Flohart

Wren												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
150-300				N N N N N N N N N N N N								

Wren	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Very common breeder
National status	Very common
Regional status	Regular migrant

GENERAL COMMENTS

The Wren breeds throughout Europe and as far away as Asia and North Africa. It nests commonly in the region. This little bird is present in all types of habitat, including reed beds, as long as there are bushes in which to nest. A partial migrant, the Scandinavian populations moves south in the harshest weather. The Wren is sedentary in all of Western Europe. Strictly insectivorous, it feeds on insects and spiders that it catches mostly on the ground.

WINTERING AND SPRING MIGRATION

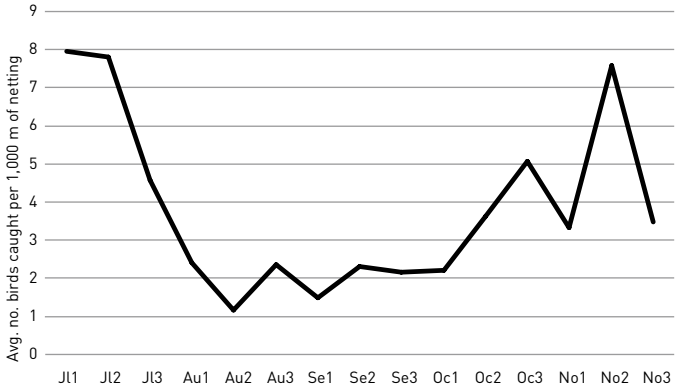
The species is present throughout the year including winter in our region. There is no real detectable passage for spring in the data available. Local nesting birds have settled in at their nesting site by mid-March.

AUTUMN MIGRATION

The Wren's movements are discernible above all at the very end of autumn. Movements really start from the second 10-day period of October, the number of birds caught increasing to reach its maximum in the third 10-day period of October. In this period, it is not unusual to catch several new individuals at each ringing session.

ADDITIONAL ANALYSIS

The number of Wrens caught is quite low (150-250 per year for all of Nord– Pas-de-Calais). The small number of controls is not enough to determine accurately the origin of birds passing through the region. Only three controls outside the region have been made, one of which was abroad:



Wren - post-breeding migration (autumn)

- a bird ringed 13 Oct. 1999 in Denmark was recovered in the region 19 Oct. 1999. In just seven days, it had covered about 1250 kms. at an average of 178 kms. per night;
- strangely, the other two records are for juvenile birds ringed in the breeding period (in June) in Oise and Morbihan and controlled the following spring in the region.

A long dispersal for a species said to be sedentary! The oldest birds controlled in the region are aged 4 (only two records) but more often aged 3.

Juvenile Wren. François Cavalier

The wing lenght determines sex of a Wren. Savina Bracquart

Wren. Karel Vandemeulebroecke

Dunnock (*Prunella modularis*)

Accenteur mouchet / Heggenmus

Dunnock. Guy Flohart

Dunnock												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
600-800			N N	N N N N N N N N N N N								

Dunnock	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Very common breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

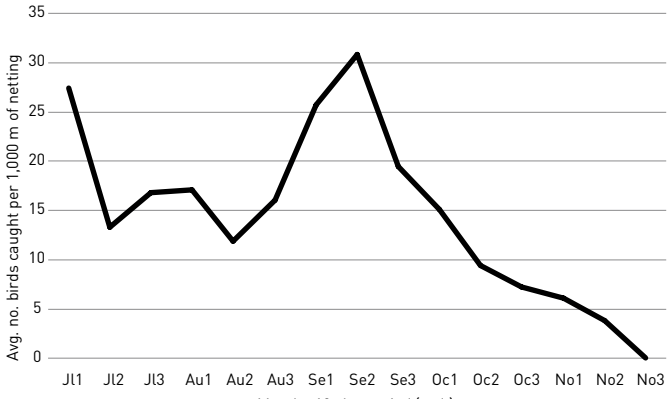
The distribution area of the Dunnock stretches across all of Europe, from the northern half of Spain to the Urals. The species is migratory although, strictly speaking, only the northern and central European populations migrate. Breeding and wintering birds are seen throughout the year in the region, so the birds present in the region are probably sedentary. It is found in all types of habitat: bush and thickets, undergrowth, dune shrubland and even public parks. The Dunnock is a solitary bird outside the nesting period but it accepts the company of its own kind. It often moves around discretely, under cover near the ground. It feeds on the ground, mainly on invertebrates that it sometimes supplements with seeds in winter. British birds that migrate to France are exceptional cases.

WINTERING AND SPRING MIGRATION

In the region, the species is already established at its nesting site from mid-March or the beginning of April at the latest. Spring passage is not evident in ringing programmes.

AUTUMN MIGRATION

Birds ringed from the beginning of July to the third 10-day period of August are all local breeding pairs and young birds in their first year at the post-juvenile dispersal stage. The first peak observed between the third-10 day period of July and the first 10-day period of August might be from second broods. In this period, 15-20 birds are caught per 10-day period (1-2 per session). The beginning of post-breeding migration really starts in the third 10-day period of August. The peak is observed in the second 10-day period of September.



Dunnock - post-breeding migration (autumn)

Dunnock. Armelle Guillo

This peak coincides with more than 50% of all birds caught annually. Bird counts show important numbers until mid-October and then fall steadily until the end of November. The record is held by Slack Dunes with 66 birds caught 15 September 2011. Visual observations also show the arrival of migrants in autumn. Several hundred birds may be observed around Cap Gris-Nez at this time.

Dunnock showing reddish-brown eye of an adult. Savina Bracquart

Dunnock. Karel Vandemeulebroecke

ADDITIONAL ANALYSIS

600-800 birds are ringed every year in the region. The number of foreign controls remains extremely low and is not enough to describe the migratory pattern of the species accurately. Among the birds passing through the region, the majority are from Belgium and the Netherlands while there is an unusual record from the Channel Islands.

Notable recoveries are:

- a bird ringed in Oct. 2009 in Wimereux (Slack Dunes) and controlled 25 months later on Jersey (C.I.) (315 kms.);
- another bird ringed in Oct. 2004 in Wimereux and controlled more than 10 months later in August in Norway (946 kms.);
- a bird ringed in September in Denmark was controlled a month later in October 2012, in Dannes (860 kms.).

This recent data does not figure on the map. The data is not sufficient to determine with accuracy the species movements over long distances.

The oldest bird controlled in the region was aged 7.

Robins and chats

The Turdidae family is a number of species that are very different from each other. Besides the larger members (blackbirds and thrushes), there are also the smaller ones such as robins, chats, redstarts and wheatears. The Robin, Common Nightingale and Bluethroat all belong to this group. Ringing is well-suited for a better understanding of the migration of these species of nocturnal migrants.

Robin (*Erithacus rubecula*)

Rougegorge familier / Roodborst

Robin. Armelle Guillo

Robin												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
1 500-2 500				N N N	N N N	N N N	N N N	N				

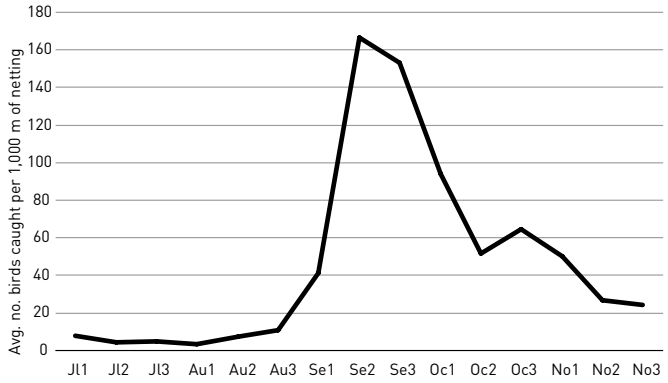
Robin	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Very common
National status	Very common
Regional status	Regular migrant

GENERAL COMMENTS

The Robin breeds throughout Europe as far as Asia and North Africa. It is a partial migrant and the populations in Northern France are probably sedentary for the most part as are the populations of the British Isles. The populations of countries further north are migratory and winter from Great Britain to the south of Morocco. When migrating, it visits all types of habitat. The species feeds mainly on invertebrates that it catches mostly on the ground, but it will eat fruit and seeds in wintertime. A nocturnal migrant, the Robin is very active during the early hours of the day. The arrival of migrants in autumn coincides with the resuming of local birdsong. Although they are more gregarious in wintertime, local birds continue to display a marked territorial behaviour.

WINTERING AND SPRING MIGRATION

The species is present throughout the winter period. There is no really detectable spring passage in the data even in March-April, the principal migration period. Locally nesting birds are already settled in at their nesting sites by the end of March. No control has ever been made (further than 20 kms. away) on birds ringed in the nesting period which confirms the sedentariness of birds in the Nord– Pas-de-Calais region.



Robin - post-breeding migration (autumn)

AUTUMN MIGRATION

With 1500-2500 birds ringed each year in Nord– Pas-de-Calais, the Robin is one of the ten most ringed species in the region. Few birds are ringed at the end of the nesting period which confirms the low density of the species in dune habitats. The species inhabits orchards, copses and hedgerows at this period. Migration proper starts from the third 10-day period of August with the number of birds caught increasing rapidly to reach its maximum in the second and third 10-day periods of September (almost 150 birds per 1000m. of netting).

The record was set 18 September 2009 with more than 360 birds caught at the Slack Dunes. From the first 10-day period of October, numbers drop but a second smaller peak is detectable in mid-October. The species remains present all winter.

ADDITIONAL ANALYSIS

The number of birds ringed in the region gives a good idea of the migratory pattern of the species. Two hundred birds need to be caught on average for every control. Birds passing through the region in autumn come mainly from Belgium, the Netherlands and Germany (60%) as well as Norway and Sweden (23% of controls). 60% of controls are on birds ringed near the North Sea and the Baltic Sea.

Some of the birds continue on their way towards Spain and Morocco. Only two controls have been made more than 1800 kms. away:

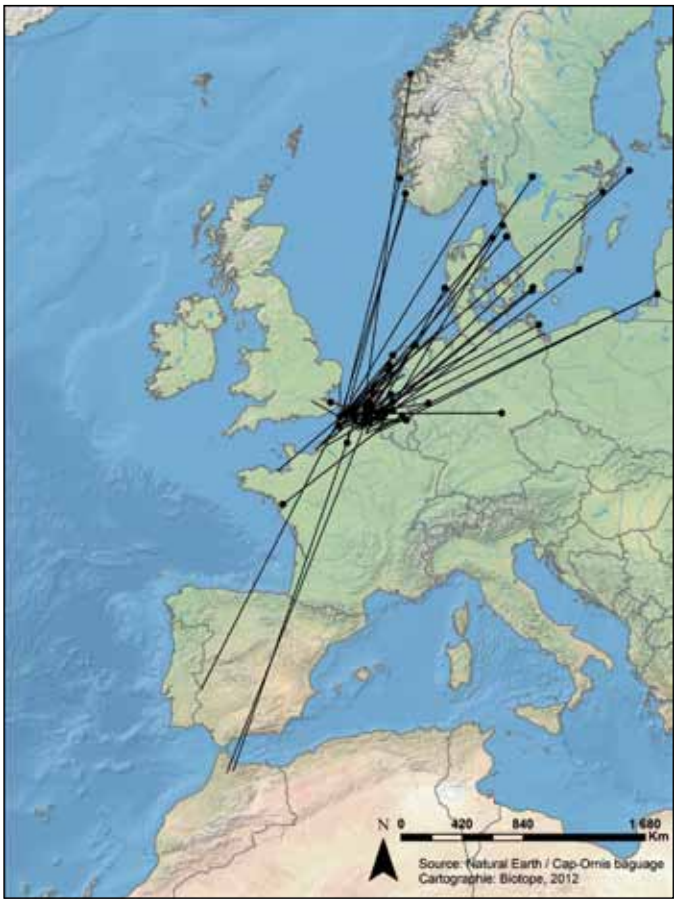
- a bird ringed in September 1989 in the region was recovered in November of the same year in Morocco;
- a bird ringed in April 1974 in the region and recovered in February 1975 in Morocco.


Juvenile Robin showing yellowish palate (Black in adult).
Savina Bracquart


Juvenile robins often show yellow marks on the primary coverts. Simon Dutilleul

The fastest movement recorded is of a bird ringed in the region and controlled two days later on the Côtes d'Armor (Brittany). It had covered 366 kms. at an average speed of 183 kms. per night.

The oldest bird controlled in the region was aged 4.



Nightingale (*Luscinia megarhynchos*)

Rossignol philomèle / Nachtegaal

Nightingale. Yves Dubois

Nightingale												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
180-400				N	N	N	N	N	N	N	N	

Nightingale	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Common breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

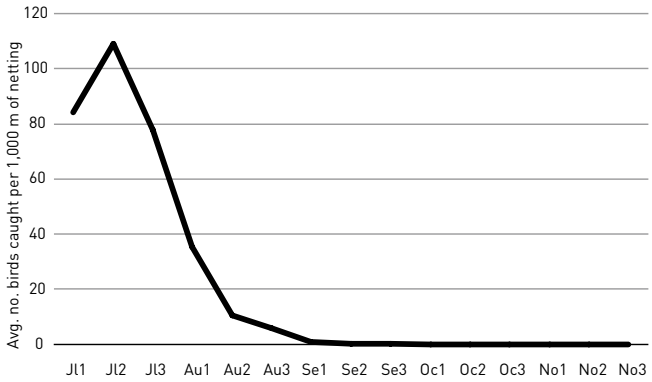
The Common Nightingale breeds in Europe, from Spain to Denmark as well as in southern England. In the east, its distribution area extends to Central and Southern Europe. The species is widespread in the region but it is in the coastal dune areas that its density is greatest. The nightingale prefers to nest in bushes and dense scrubland. The species often remains in cover and feeds mostly on the ground. In the breeding season usually only its song gives away its presence. A nocturnal and discrete migrant, the nightingale is very difficult to spot by simple observation. It is most active in the early hours of the morning like the Robin. Ringing provides vital information to understand the little known migration movements of the species.

WINTERING AND SPRING MIGRATION

The Common Nightingale is a trans-saharan migrant. It winters between the Sahara and the tropical forests of West Africa east to Uganda. Its precise wintering zones are not known. No regional data is available from this part of Africa. The first returning birds are recorded at the beginning of April, sometimes at the end of March (earliest date on record is 31 March). Most have settled in during the third 10-day period of April.

The only controls in the pre-breeding period seem to suggest that the species returns north via the Atlantic route:

- a bird ringed in the region 4 Jul. 1987 and recovered in Morocco 6 Apr. 1988 during the spring migration (1781 kms.);
- a bird ringed 22 Jul. 2008 and recovered 8 Apr. 2011 in the Gironde.



Nightingale - post-breeding migration (autumn)

Juvenile Nightingale before first molt showing mottled coverts. François Cavalier

Adult Nightingale showing worn coverts. Simon Dutilleul

AUTUMN MIGRATION

Since 2008, the start of catching sessions in the autumn migration period has been brought forward specifically for the species. Ringing has therefore provided some information on the early autumn passage of the species and has doubled the number of annual catches in the region (from 150 before 2008 to more than 300 birds today). If catches in the first 10-day period of July are mainly of local birds, a distinct movement is visible from the second 10-day period of July onwards but which still partly comprises local birds (juveniles in post-juvenile moult).

The movement then starts to diminish until the third 10- day period of August. Catches start to become rare events in September and concern only a few stragglers (latest date 27 September).

The record number of 63 caught was made at Mont Saint-Frieux Dunes on 20 July 2011.

The Common Nightingale seems to particularly appreciate this site, which was responsible for more than half of all regional catches in 2009.

ADDITIONAL ANALYSIS

The recent efforts made to catch the Common Nightingale have enabled a rapid acccumulation of data (more than 70% of records are post-2008). Nevertheless, the number of external controls remains low (only 11).

They seem to indicate however that regional nightingales and those in transit here (birds ringed in Belgium and the Netherlands) take the Atlantic migration route (two records from Charente-Maritime and Gironde) before crossing the Iberian Peninsula (one record in Portugal) to rejoin the African continent.

Among the 11 controls, we can note:

- two birds ringed or controlled in Charente-Maritime on the Moëze-Oléron Nature Reserve (550 kms.);
- a bird ringed 13 Jul. 2009 at Mont Saint-Frieux and controlled in the south of Portugal 30 Aug. 2010 (1700 kms.).

The data obtained does not give any real idea of the migratory abilities of the species as no information is available from the African continent where the species spends the winter.

The oldest bird controlled in the region was aged 5.

Bluethroat (*Luscinia svecica*)

Gorgebleue à miroir / Blawborst

Male Bluethroat. Philippe Cannesson

Bluethroat												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
150-200				N	N	N	N	N	N	N	N	N

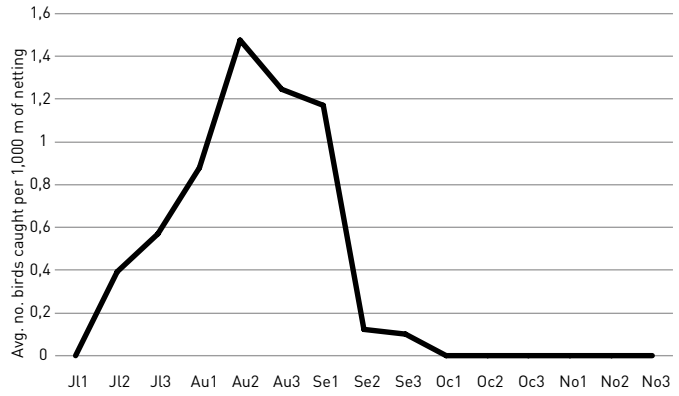
Bluethroat	
Bird Directive	Annexe I
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Uncommon
National status	Uncommon
Regional status	Regular migrant

GENERAL COMMENTS

Several sub-species nest in Europe. The Bluethroat svecica breeds for the most part from Scandinavia to Siberia. The sub-species cyanecula nests throughout Central Europe as far as Russia and more occasionally in Western Europe. It is this sub-species that nests in the Nord– Pas-de-Calais region. Only males in breeding plumage are distinguishable, which makes identification of sub-species in the migration period impossible. The third sub-species, namnetum, nests in France along the Atlantic coastline and therefore does not visit the region. The Bluethroat nests essentially in humid areas and reed beds in the region, even if cases of nesting in crops (oilseed rape) are not unusual. At migration time, it prefers humid areas but may sometimes visit cropland, shrubland and moorland. The species feeds mainly on small invertebrates. A nocturnal migrant, the Bluethroat moves, often unnoticed, in stages. Ringing is therefore essential if we wish to know more of its migration movements.

WINTERING AND SPRING MIGRATION

The species winters in North Africa and sometimes in Spain and Portugal. Ringing information shows that a great majority of birds that nest in or pass through the region spend the winter in the south of Spain or Portugal. No data is available from the African Continent. The spring passage is not really detectable in the limited data available. The first returning birds are normally observed from the second 10-day period of March (earliest record 11 March) until mid-April.



Bluethroat - post-breeding migration (autumn)


Female Bluethroat illustrating duller markings. Julien Laignel


The characteristic tail of a Bluethroat. Simon Dutilleul

AUTUMN MIGRATION

The Bluethroat is a species not often ringed in the region (150-200 birds per year) of which the majority are ringed in the migration period in humid zones. The species is occasionally found in other habitats (one out of five catches per year). Birds ringed in July are locally nesting birds and their young. Migration really gets under way from the beginning of August. Catches increase on a regular basis to reach a maximum in the second 10-day period of August.Numbers remain high until the first 10-day period of September. After that, they fall quickly but the species remains present until mid-October (latest 14 October).

ADDITIONAL ANALYSIS

The number of Bluethroats caught is rather low. The small number of controls is not enough to determine accurately the origin of birds passing through the region.

Only two regional controls on birds ringed abroad have been carried out on this species:

- a bird ringed 20 Dec. 1998 in Spain was controlled in May 1999 in the region;
- a bird ringed 13 Sept. 1995 in Portugal was controlled July 1997 in the region.

Nine birds ringed in the region were controlled outside France:

- a bird ringed Aug. 2010 in the region was controlled two weeks later in Belgium;
- a bird ringed Aug. 2000 was controlled two years later in the Netherlands;
- six birds ringed in the region were controlled in Spain between mid-September and March;
- and a bird ringed 24 Aug. 1999 was controlled 3 Sept. 1999 in Portugal.

This last bird was caught eleven days later having travelled 1700 kms., at an average speed of 155 kms. per night.

The oldest bird controlled in the region was aged 7: born in the region in spring 1997, it was last controlled at its place of birth in 2004.

Common Redstart *(Phoenicurus phoenicurus)*

Rougequeue à front blanc / Gekraagde Roodstaart

Female Common Redstart. Armelle Guillo

Whinchat (*Saxicola rubetra)*

Tarier des prés / Paapje

Whinchat. Guy Flohart

Common Redstart												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
30-70					N	N	N	N	N	N	N	N

Whinchat												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
10-20												

Common Redstart	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Uncommon
National status	Common
Regional status	Regular migrant

Whinchat	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Very rare
National status	Uncommon
Regional status	Regular migrant in small numbers

GENERAL COMMENTS

The Common Redstart, a cavity-dwelling species, nests in the open forests of Europe. The Whinchat on the other hand prefers semi-open terrains such as wet meadows and the hedgerows of South-West Europe. Both species where nesting in France are somewhat unequal in distribution, and even more so in the Nord– Pas-de-Calais region. They may be found in shrubland in the migration period, but the Whinchat shows a strong preference for more open terrains that offer numerous places to perch (fenced pastures, wasteland). These often nocturnal migrants are rather solitary in the migration period even if certain attractive areas may welcome several dozen individuals on stopovers. Although both species are mainly insectivorous, the Common Redstart will eat fruit at the end of summer.

WINTERING AND SPRING MIGRATION

Both these thrushes are mainly Trans-Saharan migrants. The wintering zones of both species are mainly in tropical Africa and more occasionally North Africa. They are rarely recorded wintering in Europe with the exception of the Mediterranean basin. The spring passage of both species is very low (around 5 sightings per year) on the region's coastline: there are no ringing data for the Whinchat while, for the Common Redstart, there are two ringing records in May (the earliest 5 May), which could be attributed to local nesting birds. It is likely that both species take a more continental route during pre-breeding migration.

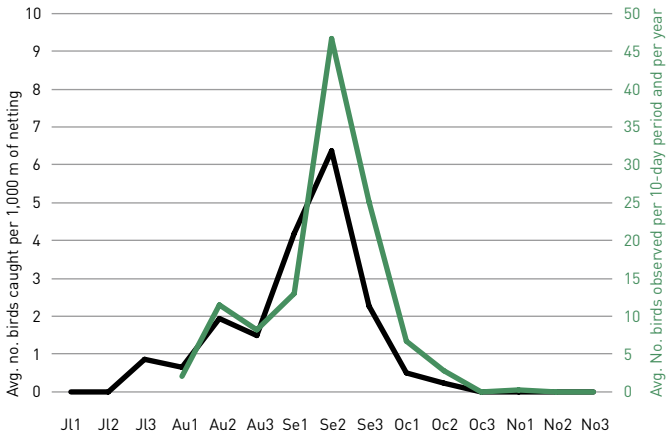
AUTUMN MIGRATION

Only 10-20 Whinchats and 50-70 Common Redstarts are ringed in autumn each year. The numbers observed are far superior to those caught. This difference is explained by the fact that these species do not often hide in cover from observers and that, moreover, they do not respond to playback systems. Furthermore, regarding the Whinchat, the habitats around Cap Gris-Nez (visual observation location) are well-suited (cropland in particular) to seeing the species.

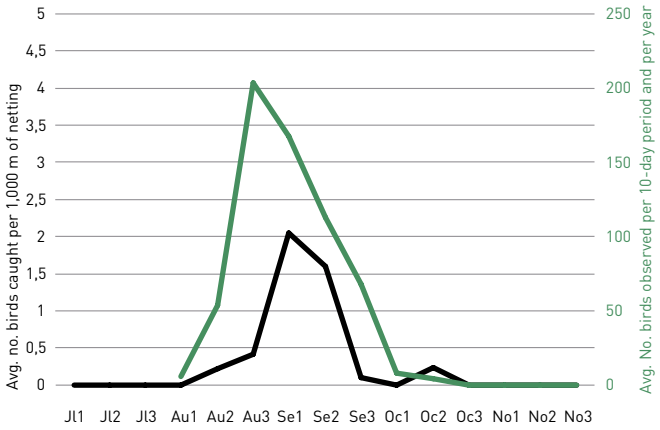
It should be noted however that there is quite a clear correlation between the lines for the two species, both lines indicating a time-shift of one 10-day period for the Whinchat's peak.

For the Whinchat, the first sightings are recorded at the end of the first 10-day period in August (9 August at the earliest), with the peak occurring between the third 10-day period in August. and the first 10-day period in September.

Passage has finished by the end of the third 10-day period of September (one record at a later date for 2 birds ringed 14 Oct. 2011 at Slack Dunes).



Common Redstart - post-breeding migration (autumn)



Whinchat - post-breeding migration (autumn)

Adult male Common Redstart (breeding plumage acquired during the winter by ear of tips of feathers). Simon Dutilleul

For the Common Redstart, the first birds are observed from the third 10-day period of July.

Numbers then increase in a regular way to reach a relatively clear peak in the second 10-day period in September

before falling quickly until the second 10-day period of October (the latest ever records are the end of October and exceptionally the beginning of November).

The number of birds seen on stopover in the Cap Gris-Nez region is clearly in decline for both species.

This trend is not confirmed by ringing.

The difference may be due not only to the fact that ringing is carried out in protected dune areas (Sensitive Natural Areas) that always offer the necessary food resources to the birds but also to the low "catchability" of the species.

ADDITIONAL ANALYSIS

A single control has been carried out on each of the two species:

- a Whinchat ringed 13 Sept, 2003 in the Netherlands and found dead 06 Oct. 2003 in the east of the region;
- for the Common Redstart, a more interesting case is of a young bird ringed in Sweden in July 2005 and controlled in October of the same year on our coastline 2100 kms. from where it was hatched.

Specific catching operations could be put into place for both species in order to obtain more data. Such operations use catch devices such as a spring trap or clap-net which are adapted for species that prefer semi-open terrains.

Juvenile female Winchat (sex determined by proportion of white at base of wing). Simon Dutilleul

Large Thrushes

In the large and very varied turdidae family, large thrushes figure among the most often caught species in autumn. They are also the only species in this group that may be hunted. Four species are mainly concerned: the Blackbird, Song Thrush, Redwing and Fieldfare. Also we can note that the Mistle Thrush and Ring Ouzel are also observed on passage but in smaller numbers.

Blackbird (*Turdus merula*)

Merle noir / Merel

Adult male Blackbird. Armelle Guillo

Blackbird												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
1000-2000				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N				

Blackbird	
Bird Directive	Annexe II
Protected species	Hunting allowed
Nesting status in Nord–Pas-de-Calais	Very common
National status	Very common
Regional status	Regular migrant

GENERAL COMMENTS

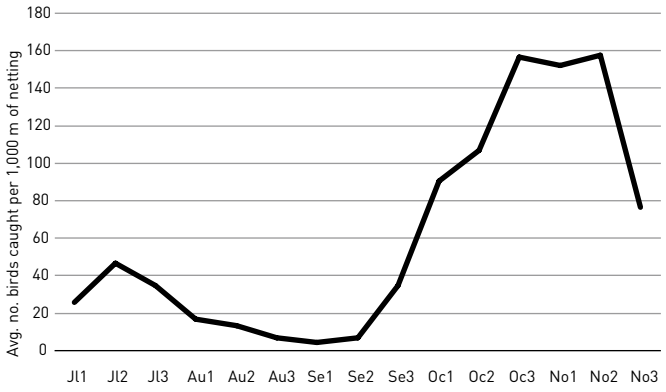
The Blackbird breeds throughout Europe and is one of the most widespread nesting birds in France. It is a partial migrant and the populations in the most northerly countries are migratory while the more southerly populations are sedentary for the major part, like the Irish and English populations. They visit all types of habitat with a preference for semi-open and wooded habitats during migration.

The species feeds on the ground, seeking out invertebrates and especially earthworms, but it also eats fruit and berries. The Blackbird's liking for fruit is more marked in autumn and winter.

Thicket (elderberry, sea buckthorn...) and orchards therefore represent an important food source. Migration takes place at night and during the early hours of the morning, probably in loosely formed flocks. From the end of October to mid-November, it is not unusual to observe Blackbirds arrive in their thousands on the coastline along the English Channel. This thrush, like the majority of turdidae that feed on the ground, finds it difficult to feed when there is prolonged periods of frost or snow cover.

WINTERING AND AUTUMN MIGRATION

The species is present in the region throughout the winter. Recovery data shows that a certain number of nesting birds in the region win-



Blackbird - post-breeding migration (autumn)

ter further south, in particular along the English Channel or Atlantic coastlines and as far south as Northern Spain. It also shows that some wintering birds in the region come from Scandinavia, Germany, the Netherlands and Belgium. Birds moving between Great Britain and France in both directions have also been observed. There is no real detectable passage for spring in the data available.

Nevertheless, spring migration must certainly start from February and continues until the end of April, especially for northern birds.

Flocks comprising several individuals are recorded in this period.

AUTUMN MIGRATION

The Blackbird belongs to one of the species most often caught in the region with 1000-2000 birds ringed per annum. The birds ringed in July are breeding pairs with their young. Blackbirds are late migrants and it is not until the first or second 10-day periods of October to see the first wave of migrants arrive. But it is only in the last days of October and the first and second 10-day periods of November that the majority of the migratory population crosses the region, for example, 110 birds flying south in an hour and 320 birds on stopover around Cap Gris-Nez on 20 Oct. 2007. From mid-November, numbers drop rapidly but the species remains present throughout winter. The record number of catches is held by the ringing station at Fort-Vert Dunes (Marck) with more than 600 birds ringed on 30 Oct. 2012. This recent site (opened 2011) uses a specialised catch device (Helgoland trap), particularly effective for catching Blackbirds.

ADDITIONAL ANALYSIS

The number of birds ringed then controlled or recovered (almost 200) in the region gives a good idea of the migratory pattern of the species.

This data is normally produced from a high rate of recovery due to hunting (50% of identified recoveries) and Blackbirds killed by road traffic (18% of identified recoveries).

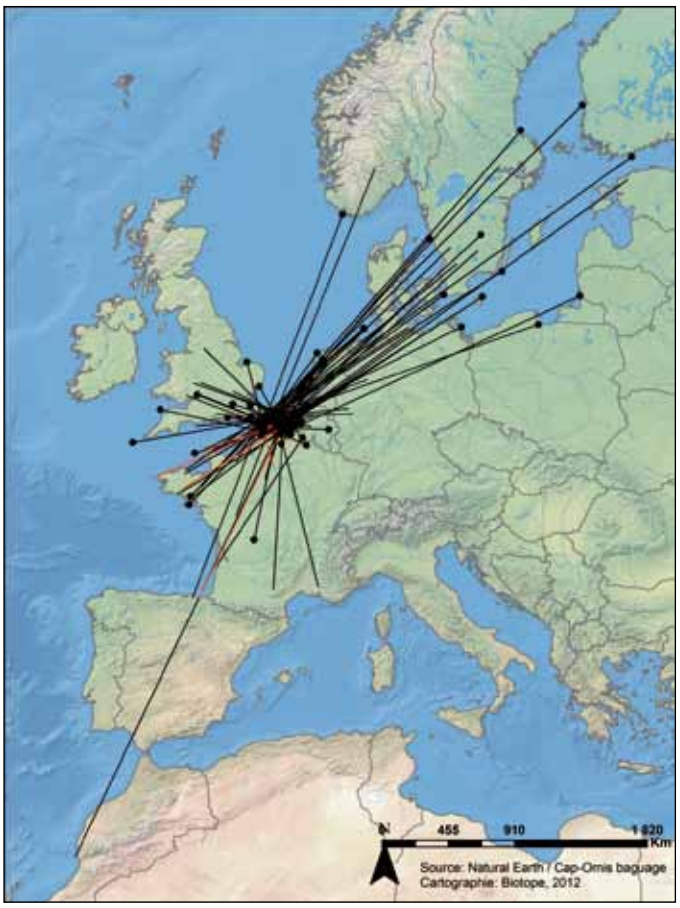
Birds that are in transit in autumn in the region come mainly from Belgium, Great Britain and the Netherlands (52%) as well as other countries around the North Sea or Baltic Sea coastlines.

Some of these birds winter in the region. The remainder of the migrants continue on their way to South-West France and a few go still further towards Spain or even Morocco. There are two control/recovery records for the Mediterranean region namely in the Tarn and Vaucluse departments of birds ringed in the autumn migration period in the region. Many controls (13) have been carried out on birds from more than 1000 kms. away from where they were ringed, including a bird ringed in Finland in 2001 and recovered a year later in the region after having travelled 1700 kms.

The distance record for a blackbird ringed in the region is one recovered in January 1986 in Casablanca, Morocco (2471 kms.).

The oldest bird controlled in the region was aged 12.

First year male Blackbird (black beak changes to yellow-orange in first winter; young females remain unchanged). Guy Flohart



Song Trush (*Turdus philomelos*)

Grive musicienne / Zanglijster

Song Trush. Armelle Guillo

Song Trush												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
600-1 800				N N N N N N N N N N N N N N								

Song Trush	
Bird Directive	Annexe II
Protected species	Hunting allowed
Nesting status in Nord–Pas-de-Calais	Very common breeder
National status	Very common
Regional status	Regular migrant

GENERAL COMMENTS

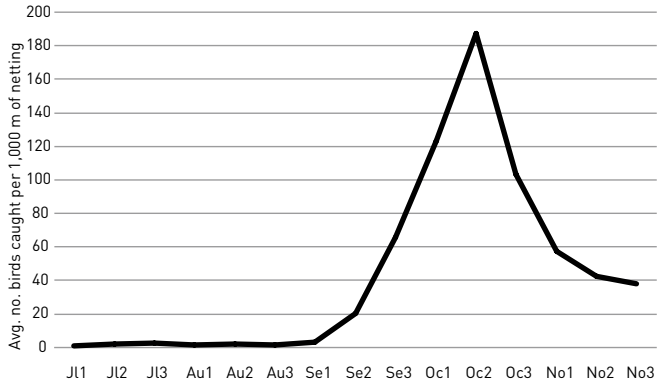
The Song Thrush commonly nests throughout Europe. Sedentary and present all year round in France, it is migratory in northern and eastern Europe. The northern populations winter on the Iberian Peninsula and in North Africa. The Nord– Pas-de-Calais region is therefore crossed by migrating birds twice a year. The Song Thrush frequents forests, hedgerow and dune habitats that provide it with berries (sea buckthorn and elderberry) necessary for it to continue its journey. Mainly a nocturnal migrant, it may sometimes continue its migration in the morning when conditions are favourable.

WINTERING AND SPRING MIGRATION

Birds controlled in January show that, at this time of year, wintering birds are for the most part from the region and nearby Belgium. Nevertheless, an important percentage of birds ringed during nesting spend the winter in S.W. France (Gironde, Côtes d'Armor, Landes), Spain and Portugal. Spring migration starts early (from the end of February until April) and is not really detected in the region, in particular due to the absence of ringing activities at this time.

AUTUMN MIGRATION

The Song Thrush is one of the most ringed species in the Nord– Pas-de-Calais region: between 600 –1800 birds ringed each year, mainly at Slack Dunes. The record number was at this site with 179 birds ringed on 11 Oct. 2008. Migration is perceptible from mid-September and migration peak is traditionally reached during the second 10-day period of October which sees the bulk of passage through the area. More than a hundred birds may then be ringed in a morning and more than a thousand birds may stopover in the Cap Gris-Nez sector.



Song Trush - post-breeding migration (autumn)

Juvenile Song Thrush showing ceam coloured marks extending along centre of feather. Simon Dutilleul

Catches are made in the early hours of the day when nocturnal migrants are arriving. Numbers of birds visible in active migration remain relatively low in relation to nocturnal numbers (for example, 320 birds observed in 2 hours on 12 Oct. 2003 in Audinghen).

Once the October peak has passed, numbers fall quickly but the species stays to winter in the region.

ADDITIONAL ANALYSIS

An analysis of ringing data gives a good idea of the migratory pattern of the species. The number of net controls is particularly low for the species (4% of control/recovery data) as opposed to the number of recoveries due to hunting (+40% of control/recovery data). Between 2006-2010, out of 1000 birds ringed, 10 birds on average were subsequently controlled or recovered. Out of these ten birds, six were victim to hunting and more than half (60%) on the Iberian Peninsula.

The birds controlled in the region come from Northern Europe for the most part: Belgium (where catching is high – 66% of controls), the Netherlands, Germany, Finland, Sweden, Baltic countries. The Nord– Pas-de-Calais region is therefore situated on the north-east/south-west axis taken by Northern European thrushes. The Pas-de-Calais coastline is an important stopover zone for the species before it continues on towards South West France and the Iberian Peninsula to winter. Among birds ringed in the region and controlled outside Nord– Pas-de-Calais, 31% are from Spain or Portugal. However, there is no data from the Maghreb, where the species is known to winter.

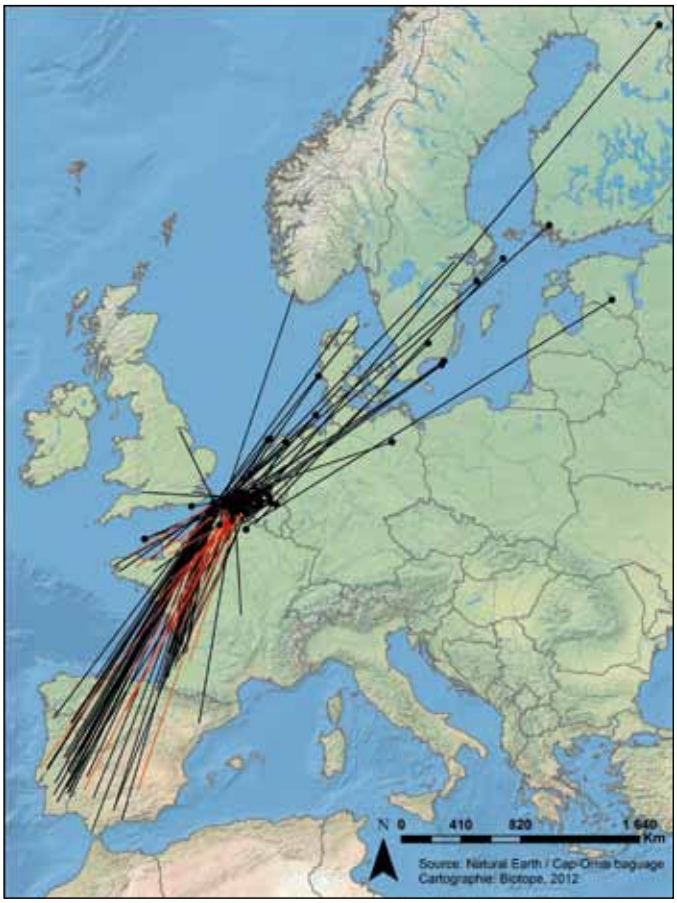
Only two recoveries have been from more than 2000 kms. away:

- a bird ringed in Jun. 1978 in Finland was recovered in Oct. 1988 in the region;
- a bird ringed in Sept. 1977 in Finland and recovered in November of the same year in the region.

Birds ringed in the region travel between 1000-1700 kms. to winter in Spain or Portugal.

- a bird ringed at the end of September 2008 in Estonia was controlled a month later in the region (1700 kms. in 32 days).
- another bird ringed in October 1986 at Cap Gris-Nez was recovered seven days later in Gironde more than 680 kms. away (an average of 98 kms. per day).

The longevity record for a recovered bird in the region is more than 11 years of age but it seems unusual for this species to be older than 6-7 years (only one record).



Redwing (*Turdus iliacus*)

Grive mauvis / Koperwiek

Redwing showing typical features of red underwing and white eyebrow. Philippe Cannesson

Redwing												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
200-700												

Redwing	
Bird Directive	Annexe II
Protected species	Hunting allowed
Nesting status in Nord–Pas-de-Calais	Non-breeder
National status	Very common
Regional status	Regular migrant

GENERAL COMMENTS

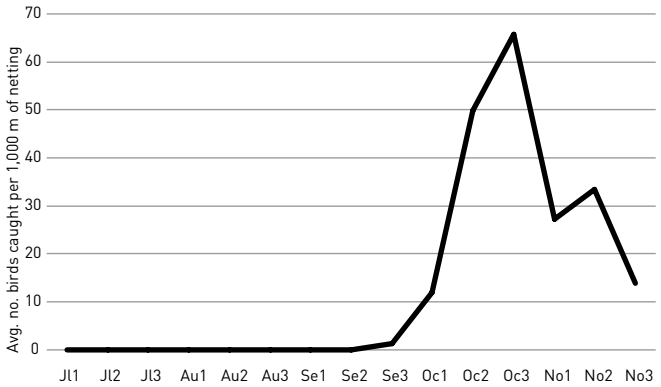
The Redwing nests in the conifer or birch forests found in Northern Europe and winters in the south and west of the continent. It is only present in the Nord– Pas-de-Calais region during migration and in winter. Essentially a nocturnal migrant, it is regularly seen in large flocks in flight or in fields and hedgerows. Its natural habitats are varied and depend directly on the availability of fruits. It feeds on berries (elderberry, sea buckthorn...). The species prefers open forests or high hedgerows in which it can roost in large numbers, especially in the spring. The species is very mobile in winter and may completely abandon certain regions if there is a very cold spell or heavy snowfalls. The birds move south or westwards in such cases in search of milder conditions.

WINTERING AND SPRING MIGRATION

The species is present in the north of France in winter. An analysis of recovery data for January shows that the majority of birds present in this period migrated from Scandinavia (Norway, Sweden) the previous October.

The species presence in the region in winter depends on climatic conditions. During winter, important contingents of wintering birds in Belgium or the Netherlands may take shelter in France if there is a cold period. For example, on 28 Dec. 2005, more than 3500 birds were counted at Audinghen.

Pre-breeding migration (March-April) is hardly detectable in the region, in particular due to few ringing sessions at this time.



Redwing - post-breeding migration (autumn)

AUTUMN MIGRATION

Several hundred Redwings are caught in the Nord– Pas-de-Calais region, mainly on the coast. Migration is similar to that of the Song Thrush with the first movements from the end of September but the maximum is reached a little later during the third 10-day period of October (for example, 2000 birds on stopover and 1500 birds seen flying south in less than two hours on 21 Oct. 1995). The majority of birds that pass through Nord– Pas-de-Calais in autumn continue their journey towards the south of France and the Iberian Peninsula. Other birds choose a more easterly route towards Greece.

ADDITIONAL ANALYSIS

Three quarters of birds controlled in the region have previously been caught in Belgium (where catching is high – 68% of controls), the Netherlands (6%) and Germany (1%) during migration between breeding and wintering sites.

Data concerning countries where they nest is also more frequent: nearly 20% of birds controlled in Nord– Pas-de-Calais come from Norway (9%), Finland (6%), Sweden (3%) and Russia (1%).

Among twenty birds ringed in the region and controlled outside Nord– Pas-de-Calais, five were later recorded on the Iberian Peninsula, four in the British Isles, one in Italy and one in Greece.

A bird ringed in the region in November 2002 and recovered in February 2006 in Greece is a good example of the ability of the species to change its migration route from one winter to the next.

Apart from this case, only two have been recovered more than 2000 kms. away from the initial ringing site:

- a bird ringed in September 2001 in Norway was recovered in November 2001 in the region;
- a bird ringed in Russia in April 2006 and recovered in November 2006 in the region.

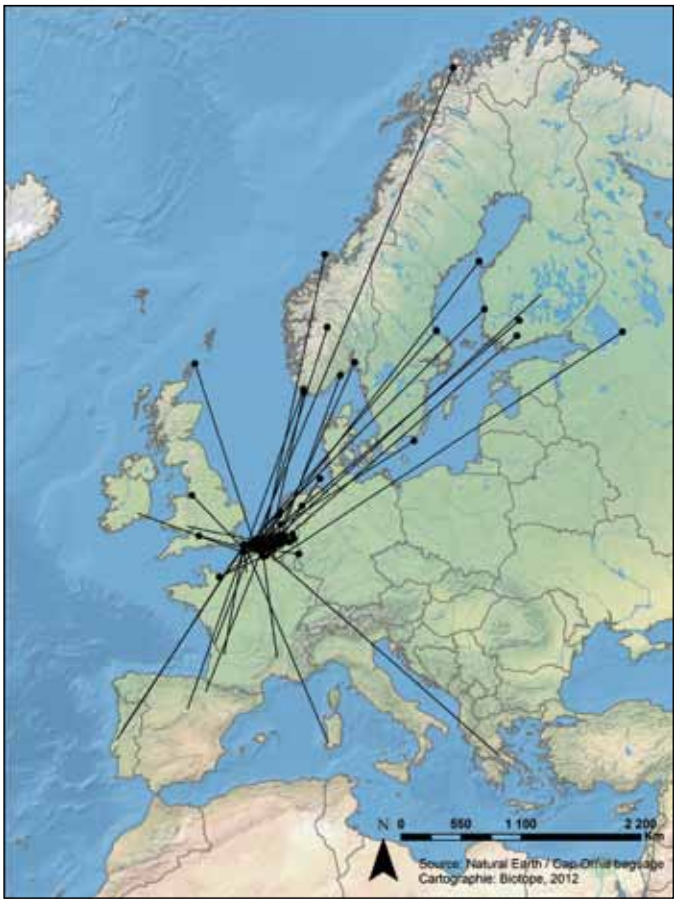
Among the 97 controls and recoveries on record for the species, only three were trapped compared to 80 birds killed by hunting.

The species' ability to move around seems similar to that of the Song Thrush. A bird ringed at the end of October in Belgium was killed by hunters in the region the next day having travelled 106 kms.

The longevity record in the region is for a bird aged 5.

Redwing. Guy Flohart

Juvenile Redwing showing white tips to the tertiaries, usually absent in adults. Simon Dutilleul



Fieldfare (*Turdus pilaris*)

Grive litorne / Kramsvogel

Fieldfare. Guy Flohart

Fieldfare												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
50-700												

Fieldfare	
Bird Directive	Annexe II
Protected species	Hunting allowed
Nesting status in Nord–Pas-de-Calais	Rather rare
National status	Very common
Regional status	Regular migrant

GENERAL COMMENTS

The Fieldfare nests in Eastern and Northern Europe and is found in Eastern France. It is semi-migratory and moves location depending on climatic conditions. During migration, it visits all types of habitat with a preference for semi-open and wooded habitats such as dunes, orchards or hedgerows. It can find food where there are fruit trees, pastureland or ploughed land. The species feeds mainly on invertebrates but it also eats berries and fallen fruit in winter. The Fieldfare migrates more often in groups in the daytime, contrary to other species of large thrushes which are nocturnal migrants. The species, being very shy, is difficult to catch. Specialised catching devices are needed (snare nets, clap traps) that are little used in the region. As the species is not protected, most recovery data is due to hunting.

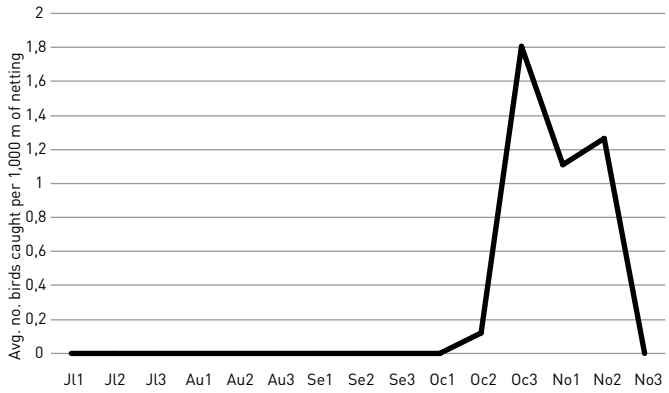
WINTERING AND SPRING MIGRATION

It winters in Western Europe and on the northern shoreline of the Mediterranean basin from Turkey to the Iberian Peninsula. The species is seen in the region mainly from October to March.

Large roosting parties may be formed at this time. In January 1975, a roost of more than 200000 individuals was observed in Nord– Pas-de-Calais.

The species is more or less abundant each year depending on climatic conditions. A cold period (ground frost or snow cover) can give rise to a large movement of birds in the region. Spring migration takes place from the end of February to mid-April.

After this period, only nesting pairs remain in the region, above all in Avesnois.



Fieldfare - post-breeding migration (autumn)

Adult Fieldfare showing white tips to wing coverts. Savina Bracquart

The Fieldfare as other large thrushes feeds on fallen fruit particularly in cold winter. Armelle Guillo

AUTUMN MIGRATION

With an average of 10-20 birds caught each year, the Fieldfare is rarely ringed in the region. However, 2010 was a record year with 772 birds ringed. This record is due to the installation of a ground bird trapping system at the 'Cinq Tailles' Ornithological Site in Thumeries (Nord). The site is today the only one able to catch the species in large numbers. The autumnal migration starts at the beginning of October and continues into November.

The number of birds caught then increases rapidly to reach the peak maximum between the second and third 10-day periods of October. Numbers starting falling in the first 10-day period of November but a second lower peak is detectable around mid-November.

ADDITIONAL ANALYSIS

The number of birds caught is rather low. The small number of recoveries is not enough to determine accurately the origin of birds passing through the region. Nevertheless, recoveries made due to hunting (84% of recovery data) give a reliable idea of the origin of migrating and wintering birds in the region.

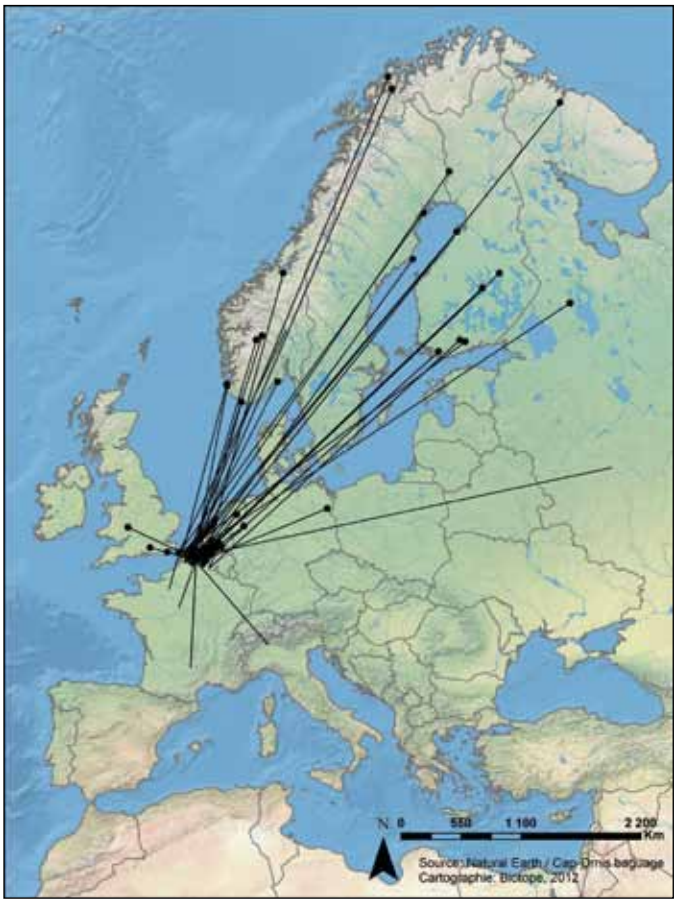
Birds passing through the region in autumn are, for the most part birds ringed in the breeding season and from Finland (8), Norway (9) and Russia (2) and have passed through Sweden (2), Germany (1), the Netherlands (7) and Belgium (77).

Some of these birds seem to move to Great Britain in the middle of winter (January-February). Only eight birds ringed in the region have been controlled/recovered including four abroad:

- a bird ringed in February 1959 in the region was recovered the following October in Belgium;
- a bird ringed in December 1963 was recovered in July 1970 in Norway;
- a bird ringed in April 1964 was recovered a month later in Russia;
- a bird ringed in February1966 was recovered two years later in January in Italy;
- four other birds were recovered in France (2 in the region, 1 in Eure and 1 in Aveyron).

The record for the greatest distance travelled in one day goes to a bird ringed in Belgium on 13 October 2007 and killed the next morning by hunters in the region. It had covered 136 kms.

The oldest bird ringed in the region was recovered 6 years later.



Wetland Warblers

Marshland birds figure among the "flagship" migratory species that inhabit wetland areas, which primarily includes reed beds. Six species are concerned: the Marsh Warbler, Reed Warbler and Sedge Warbler caught in great numbers each year; and then the Aquatic Warbler, Grasshopper Warbler and Cetti's Warbler, which are regularly ringed but in small numbers.

Marsh Warbler (*Acrocephalus palustris*)

Rousserolle verderolle / Bosrietzanger

Marsh Warbler. Guy Flohart

Marsh Warbler												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
300-550					N	N	N	N				

Marsh Warbler	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Fairly common
National status	Uncommon
Regional status	Regular migrant

GENERAL COMMENTS

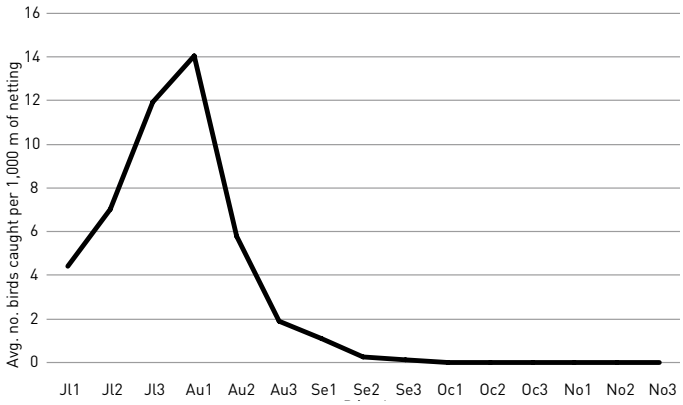
The Marsh Warbler has a strong liking for tall marshland grasses such as that found in drier reed beds and nitrophilous tall grasses (megaphorbia) during the breeding season. It is also found in bushy areas with willows and alders. Its habitat preferences are however less pronounced in the migration season when it frequents a larger range of biotopes, damp for the most part.

This migration, the longest for a wetland warbler, will take it to its winter quarters in South-East Africa (from South-East Kenya to South Africa), far from its nesting sites situated in latitudes further north in the Western Palaearctic for the most part.

Migration movements of this difficult to identify warbler occur at night. Identifying the difference between Marsh and Reed Warbler is a real challenge, not only for observers but for ringers. Outside the breeding period when their songs are different, telling the species apart from the Reed Warbler (Acrocephalus scirpaceus) necessitates great care. Ringing does however allow a more reliable evaluation of the movements of this marshland bird than visual monitoring.

WINTERING AND SPRING MIGRATION

Completely Trans-Saharan, the species does not winter in the region but settles here in the breeding season. It arrives relatively late, as the first small communities are only observed from mid-May (earli-



Marsh Warbler - post-breeding migration (autumn)

est caught: 12 May) with a passage intensification during the third 10-day period of May and the first one in June. The Marsh Warbler is, in effect, one of the last passerines that settles in to breed in the region.

AUTUMN MIGRATION

Even if the species establishes itself very late, it is one of the first to leave the region. The majority of birds ringed at the beginning of July are mostly local breeding pairs with their young. They are gradually replaced by birds arriving for the most part from more northerly latitudes.

Migration takes place in two stages. The first phase (from mid-July to the beginning of August) comprises adults and then the second phase, a classic post-breeding peak passage around the first 10-day period of August, is almost exclusively composed of juveniles.

Migration then dies down very quickly and finishes completely in mid-September, after which date it is very rare (latest caught: 9 October). Between 300-500 birds are ringed annually in the region, mostly in wetland habitats. In the best periods, 30-40 birds are ringed per session at inland sites but less than 10 birds at coastal sites.

ADDITIONAL ANALYSIS

Controls indicate that most of the birds are of local origins as more than 96% of birds are from Nord– Pas-de-Calais and the Benelux countries. Half of the birds ringed in the region between July-August were controlled again a few days later to the north-east of their initial position. Furthermore, controls have never revealed a bird being caught at Atlantic coastal sites, despite there being important ringing programmes of wetland warblers (Reed and Sedge Warblers). This suggests that the birds take a more easterly route when passing through the region. Contrary to other species, the Marsh Warbler migrates towards the south-east, passing through the Balkans towards Turkey and then across the Arabian Peninsula before reaching South-East Africa.

The control rate for this species is relatively low. In effect, 110 birds need to be ringed on average in order to carry out one control. Only one such control is especially worth noting: a bird controlled in Russia in 2008, 1300 kms. away from Nord– Pas-de-Calais where it had been ringed almost a year before!

Another bird ringed on 5 August in Belgium was controlled three days later in the region which indicates a movement of 264 kms. (an average of 88 kms. per night), a figure probably quite far removed from the species' real ability to change location.

The oldest bird controlled in the region was aged 5.


Adult Marsh Warbler. Simon Dutilleul


Precise measurements are essential to separate Marsh and Reed Warblers. Savina Bracquart

Reed Warbler (*Acrocephalus scirpaceus*)

Rousserolle effarvatte / Kleine Karekiet

Reed Warbler. Frédéric Caloin

Reed Warbler												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
2500-4500					N	N	N	N	N	N		

Reed Warbler	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Common breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

The Reed Warbler nests in a large part of Europe. With little liking for northerly latitudes, its nest sites are limited to the south of Finland. The entire population is migratory and winters in Africa. It depends mainly on wetland areas and especially reed beds at migration time. It is nevertheless possible to occasionally observe it in grassland and shrubland environments.

The Reed Warbler is a strict insectivore and feeds on small prey caught in dense vegetation; the species is therefore not very visible to observers in the migration period.

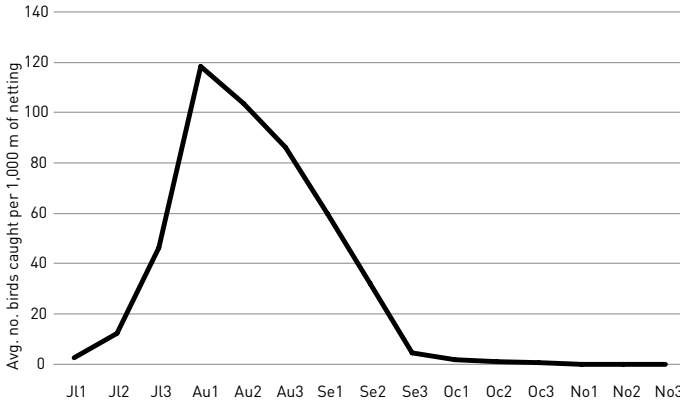
On stopover sites, its numbers can nevertheless be high and several hundred may be present on the same site during passage peaks. Ringing gives us a better idea of and means of quantifying this discrete and nocturnal migrant's passage in the region.

WINTERING AND SPRING MIGRATION

The species is strictly migratory and winters mainly in tropical Africa. The first returning birds are recorded during the second 10-day period of April and the earliest trapping date on record is 20 April.

Passage intensifies progressively until mid-June but it is difficult to distinguish late migrants from already established nesting birds at this time.

Despite the high number of birds ringed each year in the region (maximum 4568 individuals in 2009), few controls are recorded from Africa and the wintering destinations of birds seen passing through the Nord– Pas-de-Calais region are not really known.



Reed Warbler - post-breeding migration (autumn)

AUTUMN MIGRATION

The Reed Warbler is one of the most ringed species in the Nord–Pas-de-Calais region, with an average of 3230 birds ringed each year (2006–2010). The species is a relatively early migrant and migration starts at the end of July to reach a peak during the first 10- day period of August, with an average of 120 birds caught per 1000 m. of netting. Numbers then decrease progressively until the third 10-day period of September.

In October numbers are low and the species has totally disappeared by the end of October (latest sighting 28 October).

Several controls in Spain and Morocco indicate that the birds take, for the most part, an Atlantic route with a south-west trajectory to rejoin their Sub-Saharan winter quarters.

ADDITIONAL ANALYSIS

The abundance of the species during migratory stopovers, especially post-breeding ones, has enabled 500 controls abroad to be entered in the databases at the present time.

From this information one is able to form quite a clear picture of the migratory pattern of individuals passing through the region.

In autumn during the migration, the large majority of birds controlled come from Belgium (71%), the Netherlands (12%) and Great Britain (5%). Several controls in the Baltic countries (Lithuania, Latvia) as well as Eastern European countries (Poland, Czech Republic) show that some individuals from more easterly populations migrate via Western Europe as well. Birds from the most northern limits of the species' distribution area also pass through the region as confirmed by several controls on birds from Norway and Sweden. Birds ringed in the region fly mainly towards South-West France and the Iberian Peninsula before rejoining their African winter quarters.

There are only two records from Africa:

- a bird ringed in August 1987 in the region and recovered in Agadir, Morocco in May 1993 (2466 kms.);
- a bird ringed in September 1995 in the region and controlled in Agadir, Morocco in September 1997 (2460 kms.).

The fastest movement recorded was of a bird ringed in the Netherlands in August 2007 and controlled the next day in the region. It had covered 301 kms. in a night. Another bird ringed in October 2009 was controlled in the Finistère two days later (611 kms. travelled at an average of 305 kms. per night).

Several birds reach the age of 7-8, but the oldest bird ever was controlled during the breeding season at the same place where it had hatched 10 years before.


Adult Reed Warbler. Charles Gosset


In autumn juvenile Reed Warbler have fresh plumage contrasting with worn plumage of adult. Simon Dutilleul

Aquatic Warbler (*Acrocephalus paludicola*)

Phragmite aquatique / Waterrietzanger

Aquatic Warbler. Christophe Capelle

Aquatic Warbler												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
50-120												

Aquatic Warbler	
Bird Directive	Annexe I
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Non-breeder
National status	Rare
Regional status	Regular migrant in small numbers

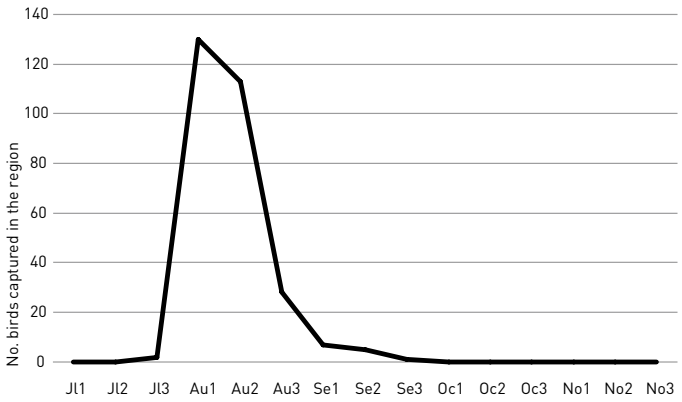
GENERAL COMMENTS

The historic distribution of the breeding population of the Aquatic Warbler was far more extensive than today. At the beginning of the twentieth century, it stretched from North-East France to beyond the Urals in Russia, and from Northern Germany to the Caspian Sea. Today, 97% of the population breeds in Poland, Belorussia and the Ukraine. The world population of the species has fallen by 90% in a century, which makes it the most threatened passerine in Europe. Some of the winter quarters of this migratory species have recently been discovered in the Western Sahara of Africa. In the autumn migration period, the species is found in wetland areas. It likes a mosaic of habitats comprising reed beds and wet meadows in particular. The Aquatic Warbler feeds on large invertebrates (spiders, dragonflies, beetles, moths) that it searches for in wet meadows (vegetation between 50-100 cm). The Aquatic Warbler is a nocturnal migrant and difficult to detect. Direct observations of the Aquatic Warbler are not a regular event (10-15% of data collected) and recourse to ringing for monitoring operations is necessary in order to study its movements.

France has a great responsibility for the future of the whole population of Aquatic Warblers which, without exception, pass through France. The wetland regions of Nord– Pas-de-Calais have a very important role in the migrations of this species as they are recognised as a migratory stopover between the breeding grounds and winter quarters. Their global preservation is therefore of major importance.

WINTERING AND SPRING MIGRATION

The Aquatic Warbler is a Trans-Saharan loop migrant. The spring migration taking place between March and June with the species



Aquatic Warbler - post-breeding migration (autumn)

seeming to follow the Rhone corridor but there is little data. Only recently has the discovery of its winter quarters in Western Sub-Saharan Africa been made. The present fragmented information at our disposal should be used with care. There is no regional ringing data for the Aquatic Warbler during the spring migration.

AUTUMN MIGRATION

Almost all the birds fly along the Atlantic coast in the autumn. Until 2009, the species was not very often ringed in Nord– Pas-de-Calais as it was not regarded as a special effort species.

The setting up of a standardised protocol by the CRBPO means that research on the species is now better coordinated. Many ringers now work at regional sites to study the autumn migration of this species and the timing of its passage in the region. The question of setting up new sites is to be explored for the future. Autumn passage takes place from the end of July to September.

Migration peak clearly occurs during the first two 10-day periods of August. Within the Caps and Marais d'Opale Regional Natural Park, the Wissant-Tardinghen and Guînes sites receive the most birds. Numbers caught at the inland sites (Audomarois marshlands, Sonneville Marshes, the Cinq Tailles ornithological site in Thumeries) are lower but nevertheless quite regular. The earliest bird caught was on 20 July and the latest on 22 September.

ADDITIONAL ANALYSIS

Taking into account the number of birds ringed in the region (66 per year on average since 2008), controls are few in comparison to other wetland birds such as the Sedge Warbler or Reed Warbler.

Autumn migration of the Aquatic Warbler seems to follow the coastline for the most part, but individuals caught more than 100 km from the coast suggest that the birds arrive directly from their breeding grounds, making Nord– Pas-de-Calais a strategic region for migratory stopovers for the species. Most controls come from birds ringed in Nord– Pas-de-Calais and subsequently controlled outside the region. The only regional record concerning a foreign control is for a bird ringed in Belgium in 2005 and controlled in Nord– Pas-de-Calais in 2008. The most remarkable control is for a bird ringed in the region on 18 August 2009, controlled three days later at the same site and then controlled again at the Trunvel site (Finistère) on 25 August 2009, having travelled 560 kms. in just four days.

In 2008, a bird ringed in Wissant was controlled eight days later in Villefranque (Pyrénées-Atlantiques), having travelled 860 kms. More recently (not yet added to the map), a bird ringed 11 July 2011 in the Marais de Balançon was controlled in June 2012 in Belorussia (1576 kms.).

The oldest bird controlled in the region was just over 3 years of age.

Aquatic Warbler (the crown stripe is lacking in the Sedge Warbler). Manon Ghislain

Sedge Warbler (*Acrocephalus shoenobaenus*)

Phragmite des joncs / Rietzanger

Juvenile Sedge Warbler. Guy Flohart

Sedge Warbler												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
1100-2500					N	N	N	N	N	N	N	N

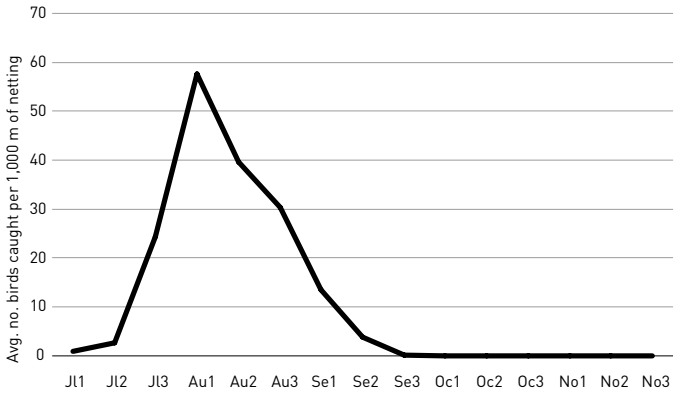
Sedge Warbler	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Fairly common breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

The Sedge Warblers has a large range from the west to the centre of the Palaearctic zone and extends from the north of Turkey to the coasts of Norway and as far east as Central Siberia. However, it is rare to the south of the 45° parallel while in France the Sedge Warbler is only found north of a line Bordeaux-Strasbourg. It uses different sorts of habitat which are usually located close to open water. Whilst the Reed Warbler is found in reed beds the Sedge Warbler is found more in the scrubby land of damp areas. On migration it is found in humid zones but also in other habitats such as cultivated areas. During the breeding season it is strictly insectivorous but has a more varied diet than at other seasons. It is a night migrant which is quite secretive during the day and it is only by trapping and ringing that it is possible to estimate the numbers of migrants present.

WINTER AND SPRING MIGRATION

The Sedge Warbler is a trans-saharan migrant and the known wintering areas of the French populations seem to be in the Niger Delta, Senegal in West Africa. Controls of birds ringed in the region show that they winter there as shown by several controls. The first migrants arrive in France in mid-March and reach the Nord– Pas-de-Calais by the end of the month with the first song being heard as early as 31 March. Migration peaks between mid-April and mid-May with local nesting commencing at the same time. It seems that the spring migration route follows the same as in autumn which is along the Atlantic seaboard.



Sedge Warbler - post-breeding migration (autumn)

AUTUMN MIGRATION

The Sedge Warbler mainly uses the coastal marshes at this season. with the movements starting in the second decade of July and concerns mainly Western European birds. Numbers then build up to the end of the month and then reach a peak in mid-August when more northern birds arrive. Like the Aquatic Warbler adults pass through first followed quickly by the juveniles. In the region the last Sedge Warblers are caught at the end of September-beginning October with the latest record being 11 October. The majority of the birds follow the Atlantic coastline on their return south.

ADDITIONAL ANALYSIS

There are several humid zones not only in the region but in France which ring birds in the autumn period and many birds are caught during the breeding season. As a result there have been a good number of controls and recoveries which has made it possible to follow the movements.

The majority of birds which pass through the region come from Belgium, Great Britain, the Netherlands and Norway, these birds going south follow the French, Spanish and Portugese coasts before reaching N.W. Africa and crossing the Sahara.

The absence of controls from countries surrounding the Baltic Sea suggests that these birds take a different route.

The three most notable birds ringed in the region concerns controls made in their wintering areas in West Africa (more than 4100 kms.):

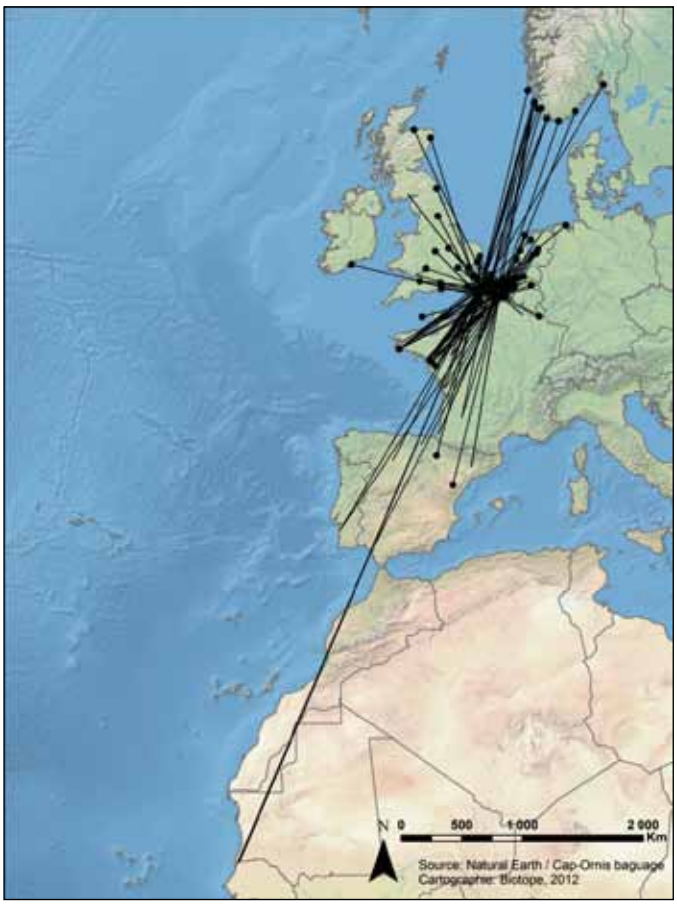
- a bird ringed at Merlimont on 19 Jul. 2010 was controlled in Jan. 2011 in the National Parc of Djoud, Senegal.
- a bird ringed at Guines on 8 Aug. 2009 was controlled on 27 Dec. 2009 in Mauritania, 177 day later.
- a bird ringed at Clairmarais on 25 Aug. 2010 was controlled in Dec. 2010 in the National Parc of Djoud, Senegal.

Recently (not shown on the map) a bird ringed at the Tardinghen Marsh in August 2011 was controlled in January 2012 in the Gambia, West Africa.

A bird ringed in September 2008 in the Netherlands was controlled in the region the next day having travelled 206 kms. Distances covered regularly vary between 110 and 130 kms. in a night.

The oldest bird controlled in the Nord– Pas-de-Calais was an adult ringed in 2006 and controlled at the same site in 2011 six years later, making the bird at least seven years old.


In autumn adult Sedge Warblers retain their plumage and moult in winter quarters. Simon Dutilleul



Common Grasshopper Warbler (*Locustella naevia*)

Locustelle tachetée / Sprinkhaanzanger

Common Grasshopper Warbler. Julien Laignel

Cetti's Warbler (*Cettia cetti*)

Bouscarle de Cetti / Cetti's Zanger

Cetti's Warbler. Simon Dutilleul

Common Grasshopper Warbler												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
130-300				N	N	N	N	N	N	N	N	

Cetti's Warbler												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
100-140				N	N	N	N	N	N	N	N	N

Common Grasshopper Warbler	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Uncommon breeder
National status	Uncommon
Regional status	Regular migrant

Cetti's Warbler	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Fairly common breeder
National status	Uncommon
Regional status	Regular migrant

GENERAL COMMENTS

The Grasshopper Warbler is widely distributed in Europe, from Southern Scandinavia to Northern Spain. The distribution of Cetti's Warbler is more complicated. It is present from North Africa to the South of France but can extend its distribution area northwards as far as Germany if there is a succession of mild winters, declining southwards again if there are harsh winters.

The Grasshopper Warbler inhabits a large range of damp or dry biotopes in the nesting period. It seems to particularly appreciate low and dense grasslands or areas with young saplings.

Cetti's Warbler has a much more marked preference for habitats in damp zones and especially those with a relatively well-developed bushes. Both species are commonly observed in the region.

As with habitats, the two species have divergent migration strategies.

The Grasshopper Warbler is, in fact, a strict migrant whose winter quarters are located in Sub-Saharan Africa and more precisely, in the case of the nominal race nesting in the region, most certainly from the Mauritanian Islands to Ghana including Senegal, Mali, Gambia, Guinea, Sierra Leone and Liberia.

On the other hand, Cetti's Warbler is relatively sedentary, which can be rather to its disadvantage during severe cold spells in winter.

A drastic fall in numbers due to a very high rate of mortality can be observed on such occasions.

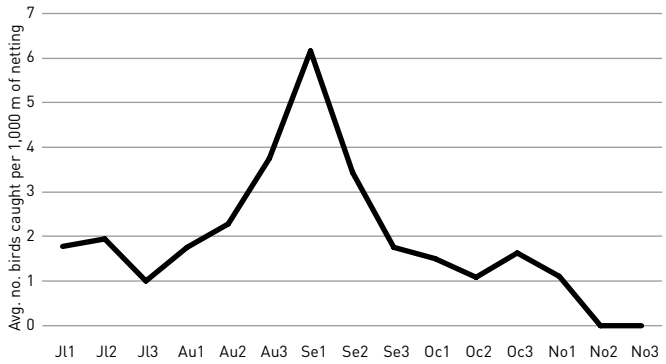
WINTERING AND SPRING MIGRATION

Only Cetti's Warbler winters in the region. The number of wintering birds is very probably underestimated due to, on the one hand, the reduced activity of the species, and on the other hand, the reduced ringing activity in the biotopes that the species inhabits.

The Grasshopper Warbler is not observed in the region after mid-October (the latest ever caught is 9 October.).

In spring, the first individuals are observed from the beginning of April (earliest date is 3 April). The spring catching peak is reached in the last ten day period of April when around 40% of birds flying back north and/or settling in on their nesting grounds are ringed.

The migration pattern agrees completely with other field observations (excluding ringing), and which place the migration peak for the species at the end of April in Great Britain and an occupation of the majority of nesting sites by the end of May.



Cetti's Warbler - post-breeding migration (autumn)

The Cetti's Warbler is the only European passerine with 10 tail feathers, there being 12 for all other species. François Cavalier

AUTUMN MIGRATION

The autumn migration of the Grasshopper Warbler is relatively discrete. This, together with the relatively small number of sightings at the main monitoring sites, only allow a very approximative plotting of the species' migration routes in autumn.

On the southern coast of England, ringing operations have detected three passage peaks concerning mostly young birds. The first at the end of July, the second and principle one in mid-August and the last one at the end of September. In the Nord– Pas-de-Calais region, these migration peaks seem to be less pronounced but there is a dramatic increase in catches from the end of July with the peak in the first 10 day-period of August, followed by a progressive decline and then a slight upward trend in the second 10 day-period of September.

Cetti's Warbler only shows post-breeding movements which are, for the most part, attributable to juvenile dispersal and in relatively limited numbers. This is confirmed by the majority of controls (seven birds were re-caught in the region and three in the Benelux countries). This reinforces the findings according to which north-west European population movements are almost exclusively young birds and may move in a southerly or northerly direction.

These movements are mainly detectable between the third 10-day period of August and the third 10-day period of September. These birds being caught in habitats where the species does not nest.

ADDITIONAL ANALYSIS

The number of Cetti's Warblers ringed is comparatively low (around a hundred per year for the entire region) in relation to other wetland birds regularly caught in Nord– Pas-de-Calais.

The number of Grasshopper Warblers caught are higher (around 200 birds per year). There have been 11 controls of Cetti's Warbler. Among them, the exceptional recovery of a bird ringed on 24 August 1993 in Wissant and which flew into a window of the Scottish Natural Heritage building in Edinburgh, a distance of 650 kms.and 42 days later. This was the first record of Cetti's Warbler in Scotland!

As for the Grasshopper Warbler, there are just three controls:

- two birds ringed in the region were later controlled within the Nord– Pas-de-Calais region;
- a bird ringed in Kennemerduinen (Netherlands) in the autumn migration period in 1989 was re-caught in the breeding season of the following year at Fort-Mardyck (59).

The oldest Cetti's Warbler controlled in the region was aged 6. For the Grasshopper Warbler, the oldest bird was only aged 3.

Woodland and Scrub Warblers

The woodland warblers are among the "flagship" migrant species ringed in the dune shrubland. Four species are concerned: Blackcap, Garden Warbler, Common Whitethroat and Lesser Whitethroat.

Blackcap (*Sylvia atricapilla*)

Fauvette à tête noire / Zwartkop

Adult male Blackcap. Mikaël Jaffré

Blackcap												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
5000-8000					N	N	N	N	N	N	N	N	N			

Blackcap	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Very common breeder
National status	Very common
Regional status	Regular migrant

GENERAL COMMENTS

The Blackcap breeds in a large part of Europe as far north as Southern Finland and Sweden. The most nordic populations are migratory and winter in North Africa and Spain. The Western European populations are, on the contrary, more sedentary.

When migrating, it visits all types of habitat including damp environments. It is the most ringed species in the region.

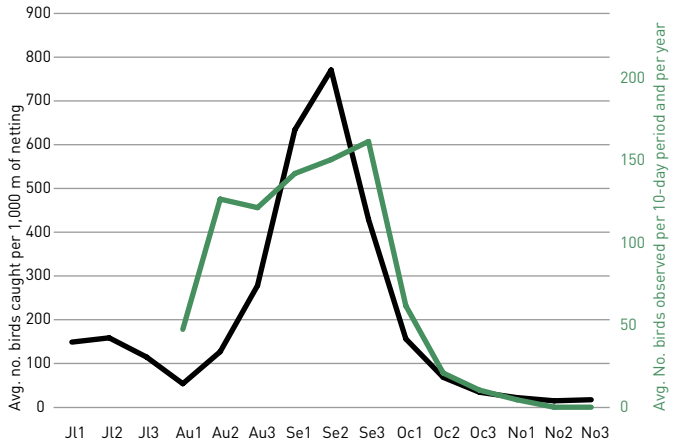
The species feeds on different berries (brambleberry, sea buckthorn, elderberry) during migration.

Although a nocturnal migrant, the Blackcap sometimes moves around in quite large groups in the daytime.

Despite this however, it often goes unremarked by observers in the migration period and the few birds seen do not give a reliable indication of their true numbers. Ringing is therefore essential if we wish to understand its migration movements.

WINTERING AND SPRING MIGRATION

The species winters in the region, but in small numbers. It is often observed near bird tables which offer fruit titbits. Nevertheless, ringing information shows that the great majority of birds that pass through or nest in the region spend their winter in the south of Spain or perhaps even the Maghreb. 80% of bird controlled or recovered between November and January are to the south of the Pyrenees. In Great Britain, wintering birds are not only breeding birds but probably birds from Continental Europe.



Blackcap - post-breeding migration (autumn)

Before first moult all juvenile Blackcaps show a brown cap.
Simon Dutilleul

In spring, the first migrants return to their nesting site from the third 10-day period in March onwards. The number of returning birds increases during the first and second 10-day periods of April.

AUTUMN MIGRATION

The Blackcap is the most ringed species in the Nord– Pas-de-Calais region (between 5000-8000 birds each year). The birds ringed in July are local breeding pairs with their young. Migration really starts from the second-10 day period of August and numbers caught increase regularly from then onwards to reach their maximum in the second 10-day period of September (almost 800 birds per 1000 m. of netting). The record was set on 19 September 2009 with more than 400 birds caught at Slack Dunes. From the third 10-day period of September, numbers fall quickly but the species remains present in November in small numbers. Direct field observations confirm the same phenology but in smaller numbers.

ADDITIONAL ANALYSIS

The number of birds ringed in the region gives a good idea of the migratory pattern of the species. 120 birds need to be caught on average for every control. The birds passing through the region in autumn come mainly from Belgium, the Netherlands and Great Britain, or have passed through these countries (87% of controls). There is the occasional record of German birds and one for the south of Norway.

Several controls carried out on birds from the east of Belgium suggest that the more continental populations join birds migrating along the coastline.

The birds then leave to winter in the south of Spain and Portugal, even in the Maghreb (Algeria, Morocco).

Only two recoveriess have been carried out more than 2000 kms. away:

- a bird ringed August 1976 in the region was recovered in September1981 in Morocco;
- a bird ringed in Morocco in April 1980 was recovered in the region in July of the same year.

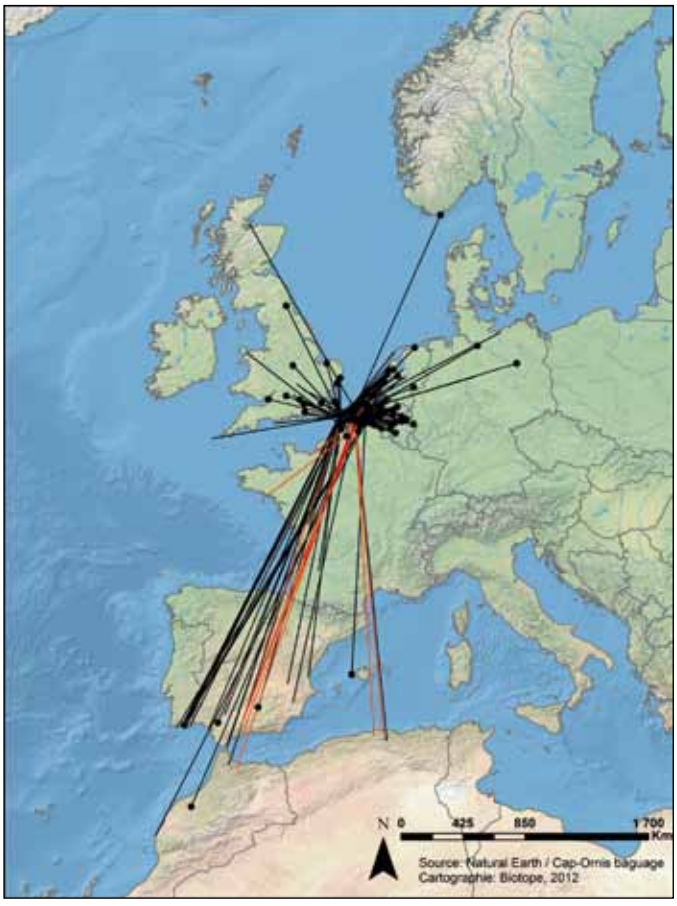
An analysis of distances travelled shows that the species is able to cover more than 200 kms. in a night on a regular basis.

The record belongs to a bird ringed in Norway and controlled 3 days later in the region. It had covered 840 kms. at an average of 280 kms. per night.

Among the 268 bird controlled, 41 concerned birds changing sites over short distances along the Nord– Pas-de-Calais coastline. The data shows that the species migrates regularly by means of short hops along the coastal fringe, perhaps to take advantage of the abundance of food and to build up the necessary fat reserves for migration.

It should be noted that playback systems are very successful in increasing the number of controls.

The oldest bird controlled in the region was more than 6 years old.



Garden Warbler (*Sylvia borin*)

Fauvette des jardins / Tuinfluiter

Garden Warblers – left adult, right juvenile. Vincent Cohez

Garden Warbler												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
1000-1500					N	N	N	N	N	N		

Garden Warbler	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Very common breeder
National status	Very common
Regional status	Regular migrant

GENERAL COMMENTS

The Garden Warbler nests over a large part of Europe (from Spain to Russia) and winters in Sub-Saharan Africa. During migration, it visits bushy shrubland and seems to appreciate a nearby woodland environment as shown by the number of birds caught at Mont Saint-Frieux Dunes. A nocturnal migrant, the Garden Warbler is a shy bird during the migration period. The species is particularly attracted by berry-bearing shrubs and bushes such as the elderberry or bramble bush.

WINTERING AND SPRING MIGRATION

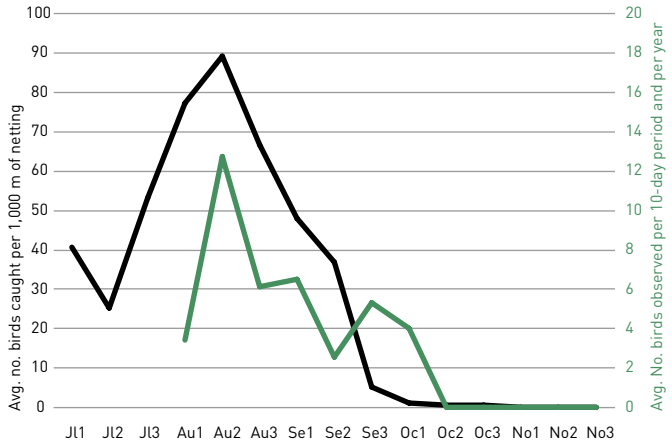
The species winters in Sub-Saharan Africa. No birds have ever been recorded in the region in winter. The first individuals return to their nesting site in spring from the second 10-day period of April (earliest record 10 Apr.). But the majority only return in the third 10-day period of April, if not the first 10-day period of May.

AUTUMN MIGRATION

As for the majority of species, the data for the first 10-day period of July concerns mainly local birds or those in post-breeding dispersal. Migration really starts from the third 10-day period of July. Movements then intensify until the second or third-10 day period of August. Numbers caught are then in the order of 20-30 birds per session, the record being 80 on 27 August 2007 at Slack Dunes. The number of birds caught may remain high until 20 Sept. After the third 10-day period of September catches are very few. The latest date ever recorded was for a bird ringed 6 November 2011. Visual observations confirm an identical pattern but in smaller numbers.

ADDITIONAL ANALYSIS

There are very few controls for the species in relation to the number of birds ringed (1000–1500 birds per year for the entire Nord–Pas-de-Calais region). 260 birds need to be ringed on average for



Garden Warbler - post-breeding migration (autumn)

Plumage wear, particularly wing coverts, allow ageing of Garden Warblers (left adult, right juvenile). François Cavalier

Garden Warbler. Guy Flohart

every control. There are no controls from the African continent where the species winters. Most of the birds controls come from the Netherlands, Belgium and Great Britain.

Only two controls have been carried out more than 500 kms. away:

- a bird ringed July 1989 in the region was controlled May 1990 in Portugal;
- a bird ringed in the south of Norway in August was controlled 28 days later in Merlimont (62), France.

An analysis of distances travelled shows that the species is able to cover 290 kms. in a night. Among the forty controls carried out, seven concerned birds changing sites along the Nord– Pas-de-Calais coastline. The longevity record for a bird controlled in the region is almost 6 years.

Common Whitethroat (*Sylvia communis*)

Fauvette grisette / Grasmus

Common Whitethroat. Guy Flohart

Common Whitethroat												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
700-1 500					N	N	N	N	N	N		

Common Whitethroat	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Very common breeder
National status	Very common
Regional status	Regular migrant

GENERAL COMMENTS

The Common Whitethroat nests from Russia to North Africa and winters in the Sub-Saharan African savannah as far as Southern Africa. It frequents semi-open terrains during migration: wasteland with a few trees, hedgerows, forest clearings or shrubland dunes with thicket. The species is strictly insectivore in the nesting period but its diet is modified to include more fruit during the course of its migration. The Common Whitethroat is often easy to spot as it is very mobile, curious, and loves to show itself to the world by perching on top of bushes. It is rather solitary though and rarely moves around in groups.

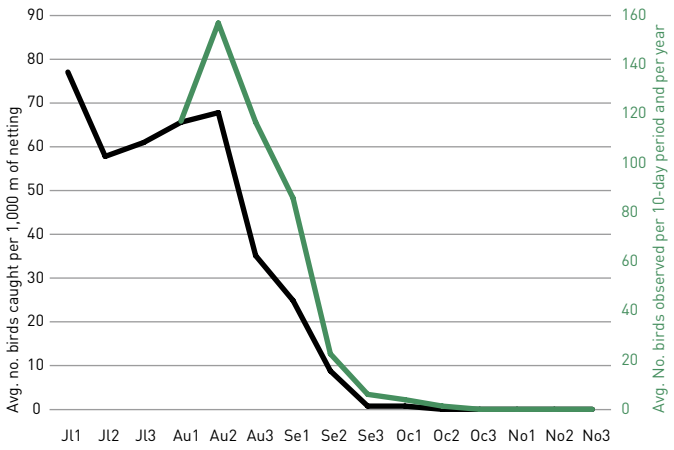
WINTERING AND SPRING MIGRATION

The species winters in Sub-Saharan Africa. No winter data has ever been recorded in the region. The first individuals return to their nesting site in spring from the second 10-day period of April, but sometimes a few individuals are noted from the first 10-day period of April (earliest record ever 2 April). But the majority of birds only return in the third 10-day period of April.

Among the few spring controls, one in May 2010 in the Netherlands of a bird ringed in August 2009 in Dannes is worth noting.

AUTUMN MIGRATION

From the beginning of July, movements of adults are detectable but mixed with the dispersal of juveniles. Adults account for 25% of all birds caught at this time. In the third 10-day period of July, they only account for no more than 5% of all catches, a rate that drops even lower in the following 10-day periods. Movements of young birds only really begin in the third 10-day period of July and reach their maximum in the first and second 10-day periods of August.



Common Whitethroat - post-breeding migration (autumn)

Common Whitethroat showing yellow-orange colour of iris. Frédéric Caloin

The numbers caught are then in the order of 10–30 birds per day according to the year (the record being 44 on 27 August 2007 at Slack Dunes). Numbers then quickly fall to virtually zero in October. The latest sighting ever of a bird was 18 October at the coast. Visual observations confirm an identical pattern to that obtained by ringing but in higher numbers, no doubt due to the relative ease with which the species may be observed.

ADDITIONAL ANALYSIS

The number of birds ringed per year in the region varies enormously: between 500-1500 per year. The percentage of controls for the species is very low (1 for every 760 birds ringed). There are no controls from the African continent where the species winters.

Only three controls have been carried out more than 1000 kms. away:

- a bird ringed September 2008 in Norway and controlled at the same site in September 2009 was then caught 16 days later in the region (1530 kms.);
- a bird ringed August 2008 in Norway was recovered at the end of September in the region (1050 kms)
- a bird ringed at the end of August 1989 in Spain was controlled in May 1991 and June 1992 in the region (1330 kms.).

Juvenile Common Whitethroat showing dull colour of iris. Karel Vandemeulebroecke

The small number of controls is not enough to determine accurately the species' ability to change location. There is a record for a bird ringed 25 August 2007 in Wissant and controlled the next day in Wimereux, which gives a distance travelled of 14 kms.

Among the 11 bird controls carried out, 6 concerned birds changing sites along the Nord– Pas-de-Calais coastline.

The longevity record for a bird checked in the region is 4 years.

Lesser Whitethroat (*Sylvia curruca*)

Fauvette babillarde / Braamsluiper

Juvenile Lesser Whitethroat. Simon Dutilleul

Lesser Whitethroat												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
200-500					N	N	N	N	N	N		

Lesser Whitethroat	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Common breeder
National status	Uncommon
Regional status	Regular migrant

GENERAL COMMENTS

The Lesser Whitethroat breeds in Western Europe, from the north of Italy to Siberia. It winters in arid regions from the east of Niger to Eritrea as well as in Egypt and the Arabian Peninsula. It visits the same semi-open terrains as the Common Whitethroat during migration. The species feeds on a variety of berries during migration. A nocturnal migrant, the Lesser Whitethroat is a shy bird during the migration period. It is difficult to spot as it often stays under cover of the vegetation.

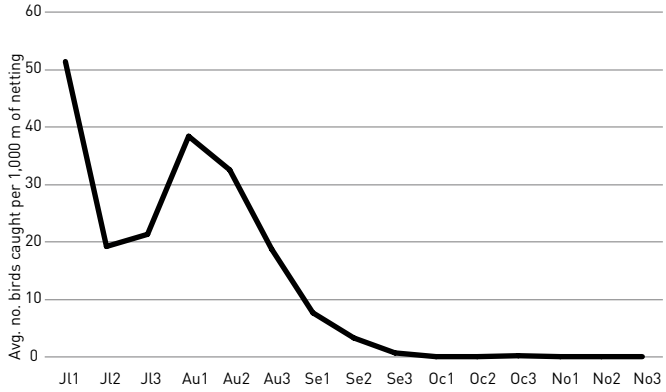
WINTERING AND SPRING MIGRATION

Two winter entries have been recorded on the West Bank and in Israel to the north of the known winter quarters for the species (see below). The first individuals return to their nesting site in spring from the second 10-day period of April (earliest record 30 March), with the majority of birds returning during the third 10-day period of April.

AUTUMN MIGRATION

As with the Common Whitethroat, it seems that the migration of adult Lesser Whitethroats starts earlier than that of juvenile birds.

In fact, adults account for more than 50% of birds caught during the first 10-day period of July, 15% during the second 10-day period and 8% during the third 10-day period. It is during this third 10-day period of July that movements of juveniles begin. Maximum numbers are reached in the first and second 10-day periods of August. Catching numbers then fall until the third-10 day period of September when the species becomes a rare sight (latest ever caught 25 October). The



Lesser Whitethroat - post-breeding migration (autumn)

Lesser Whitethroat. Guy Flohart

Adult Lesser Whitethroat showing distinguishing white crescent above iris. Pierre Caron

numbers caught regularly exceed ten or so birds per session in the optimal period, and even twenty or more in a good year (record is 26 birds 6 August 2008 at Mont Saint-Frieux Dunes).

ADDITIONAL ANALYSIS

The number of birds ringed is rather low (200-500) per year for the entire Nord– Pas-de-Calais region. 280 birds need to be ringed on average for every control. The few controls (10) performed in the region have however revealed the eastern route used by the species. Contrary to numerous other species, the Lesser Whitethroat migrates towards the south-east which takes it towards the Middle East and East Africa.

Only two controls exceed a distance of 3000 kms.:

- a bird ringed Aug. 2007 in the region was controlled in March 2008 on The West Bank;
- a bird ringed Aug. 2009 in the region was controlled in March 2011 in Israel.

Apart from these two cases, two other controls have occurred in the region of foreign birds from the south of England and the Belgium border.

The small number of controls is not enough to determine accurately the species' ability to change location. There is a record of a bird ringed 17 August in Wimereux and controlled the next day in Wissant, which gives a local movement of 14 kms., without doubt far under the maximum ability of the species to move around. Among the ten bird controls carried out, five concerned birds changing sites along the Nord– Pas-de-Calais coastline.

The longevity record for a bird checked in the region is under 3 years.

Warblers

Physically similar to wetland birds, these breeding warblers of the region may be differentiated by their yellowish tint and the wider base of their beak among other things. They keep more to shrubland and have a complicated song which often imitates other birds in part.

Icterine Warbler (*Hippolais icterina*)

Hypolaïs ictérine / Spotvogel

Icterine Warbler. Guy Flohart

Melodious Warbler (*Hippolais polyglotta*)

Hypolaïs polyglotte / Orpheusspotvogel

Melodious Warbler. Guy Flohart

Icterine Warbler												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
10-20					N	N	N	N	N	N		

Melodious Warbler												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
10-20					N	N	N	N	N	N	N	

Icterine Warbler	
Bird Directive	-
Protected species	Yes
Nesting status in Nord– Pas-de-Calais	Uncommon breeder
National status	Rare
Regional status	Regular migrant

Melodious Warbler	
Bird Directive	-
Protected species	Yes
Nesting status in Nord– Pas-de-Calais	Common breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

Although the Melodious Warbler is a common nesting bird in France, that is not the case for the Icterine Warbler for which the majority of the French breeding population is located in Nord– Pas-de-Calais and Alsace, which mark the southern limit of its breeding distribution. Both species appreciate the same habitats: hedgerow, young forest plantations and bushes, even in gardens. Although the populations of the Icterine Warbler extend northwards as far as Siberia, those of the Melodious Warbler reach no further than the Benelux countries. The two species are basically insectivores.

WINTERING AND SPRING MIGRATION

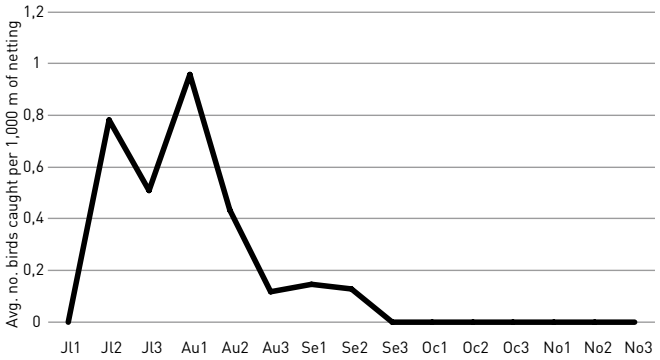
The Icterine Warbler winters principally in Sub-Saharan Africa mostly south of the equator. As for the Melodious Warbler, it winters mainly in West Africa. Both species start to return to the region during May (earliest record ever 6 May for the Melodious Warbler and 16 May for the Icterine Warbler). Most data is available for the second 10-day period of May for the Melodious Warbler and third 10-day period of May for the Icterine Warbler. Both species are then regularly caught during the nesting period but always in small numbers. Most data comes from the STOC-Ringing sites along the Nord– Pas-de-Calais coastline in this period.

AUTUMN MIGRATION

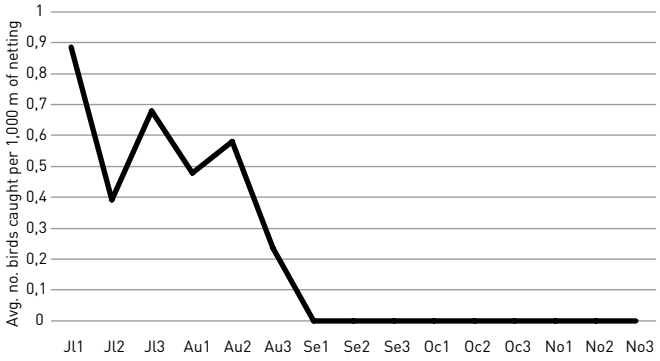
The low catching numbers for both species are not sufficient to define the exact pattern of the autumn migration. In fact the number of birds ringed each autumn does not exceed 10–15 birds for species for the entire region. Nevertheless, it seems that their movements extend from July to the beginning of September with maxima being reached between the second 10-day period of July and the second 10-day period of August. The latest ever recorded dates are 11 September for the Icterine Warbler and 6 September for the Melodious Warbler.

ADDITIONAL ANALYSIS

Almost all controls come from catches at the same site as ringed during the nesting period. The oldest birds were aged 3.



Icterine Warbler - post-breeding migration (autumn)



Melodious Warbler - post-breeding migration (autumn)

Wing measurement is the best means of separating the two species. François Cavalier

Only one control has been made of a foreign bird, namely, an Icterine Warbler ringed on 14 May 2009 in Great Britain and controlled on 20 May 2009 in the region (a distance travelled of 109 kms. in 6 days).

Icterine Warbler. Simon Dutilleul

Melodious Warbler. Simon Dutilleul

Feet of Icterine Warbler are grey-blue and grey-brown in Melodious Warbler. Simon Dutilleul

Warblers

Two species belonging to this group are regularly caught during ringing sessions: the Common Chiffchaff and the Willow Warbler. These two small species, weighing 6-8 grams, are very mobile and often move around in the foliage of trees and bushes.

Common Chiffchaff (*Phylloscopus collybita*)

Pouillot véloce / Tjiftjaf

Common Chiffchaff. Armelle Guillo

Common Chiffchaff												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
1100-1700				N	N	N	N	N	N	N	N	N	N	N		

Common Chiffchaff	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Very common breeder
National status	Very common
Regional status	Regular migrant

GENERAL COMMENTS

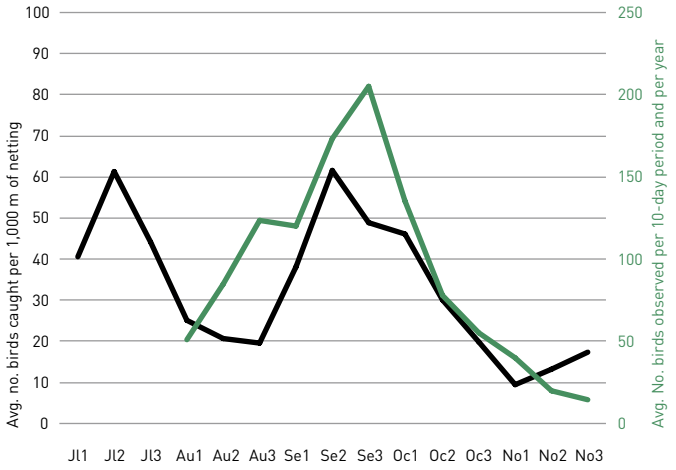
The Common Chiffchaff breeds in a large part of Europe from Russia to France. Birds in the more northerly parts of its distribution areas are migratory. The further south the population, the more the species becomes a partial migrant as is the case in Great Britain. When migrating, it visits all types of shrubs and woodland. A rare visitor to the region in winter, it appreciates alluvial willow woodland. The species feeds mostly on insects but also eats berries in autumn and winter. The Common Chiffchaff also feeds on nectar in spring: it is therefore common to see birds with feathers stuck on their beaks. The species is quite vocal on migration at stopover sites and sometimes sings. The Common Chiffchaff may often join troops of tits.

WINTERING AND SPRING MIGRATION

The species is present in winter but rare and often localised. In spring, the first migrants return to their nesting sites from the second 10-day period of March, sometimes earlier (earliest record 28 February). The number of returning birds increases during the first and second 10-day periods of April.

AUTUMN MIGRATION

Autumn migration starts in the third 10-day period of August. Migration passage increases to reach its maximum in the second and third 10-day periods of September. At this time of the year, it is



Common Chiffchaff - post-breeding migration (autumn)

not unusual to catch 20-30 birds per session (record is 59 birds on 15 September 2011 at Mont Saint-Frieux Dunes). From the first 10-day period of October, the number of catches slowly declines until the end of the month. Only single birds are then caught from time to time throughout winter.

ADDITIONAL ANALYSIS

There are very few control records for the species in relation to the number of birds ringed (1100-1600 birds per year for the entire Nord–Pas-de-Calais region). 560 birds need to be ringed on average for every control.

Only two recoveries exceed a distance of 1000 kms.:

- a bird ringed in June 1986 in the region (in the breeding period) and recovered in January 1987 in Morocco;
- a bird ringed 3 August 1988 in the region and recovered the following November in Spain.

The small number of controls is not enough to determine accurately the species' ability to change location. There is however a record for a bird ringed 20 September in the Netherlands and controlled a week later in the region, which gives a distance travelled of 360 kms. in 7 days. The longevity record for a bird controlled in the region is 6 years.

Common Chiffchaff. Frédéric Caloin

Very young Chiffchaffs after leaving the nest show a downy appearance. Savina Bracquart

Willow Warbler (*Phylloscopus trochilus*)

Pouillot fitis / Fitis

Willow Warbler. Guy Flohart

Willow Warbler												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
400-700					N	N	N	N	N	N	N	

Willow Warbler	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Common breeder
National status	Very common
Regional status	Regular migrant

GENERAL COMMENTS

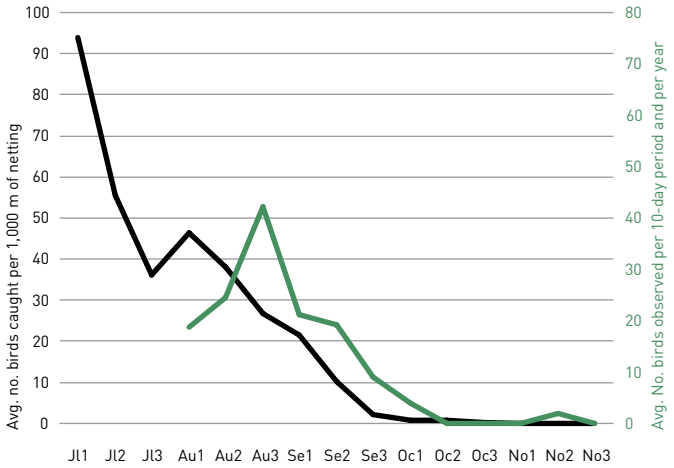
The Willow Warbler is strictly a Trans-Saharan migrant. The species nests throughout Europe from the Arctic to Northern France. It prefers shrubland but avoids thick woodland at migration time. It feeds exclusively on insects and spiders. The Willow Warbler is mainly silent in the autumn migration period when compared with the Common Chiffchaff. On the other hand, the species is prone to sing even on migration in the spring.

WINTERING AND SPRING MIGRATION

The Willow Warbler winters in Sub-Saharan Africa. The first migrants return in spring to their nesting sites from the first 10-day period of April. (earliest 27 March). The number of returning birds increases during the second and third 10-day periods of April.

AUTUMN MIGRATION

Data in July concerns local individuals or post-breeding dispersal, as is the case for the majority of species. It is not unusual to catch a family group (an adult with its young) in this period. Autumn migration really starts from the third 10-day period of July. The major movements are during August with some fifty birds observed or ringed on



Willow Warbler - post-breeding migration (autumn)

Juvenile Willow Warbler showing yellow vent area – adults show white area.
François Cavalier

average during these ten day periods. During August, it is possible to catch a dozen or so birds per session (the record is 46 birds on 6 August 2011 at Mont Saint-Frieux Dunes).

A number of birds continue to be caught until the second 10-day period of September. There are some records during the third 10 day-period of September and during October.

The latest record is for two birds observed 13 November (the only one ever for this month).

ADDITIONAL ANALYSIS

Between 400-700 birds are ringed annually in the region. There are very few controls for the species in relation to the number of birds ringed. 320 birds need to be ringed on average for every control. There are no controls from the African continent where the species winters. Spanish controls can only be used to help plot the species' journey to wintering sites.

Only two controls exceed a distance of 1000 kms.:

- a bird ringed at the end of July 1991 in the region was controlled at the beginning of September in the Balearic Islands;
- a bird ringed in July 2007 in the region and controlled in April 2008 in Spain.

The small number of controls is not enough to determine the species' ability to change location. There is however a record for a bird ringed 7 September in Norway and controlled 10 days later in the region, which gives a distance travelled of 900 kms. in 10 days. More recently (not shown on the map), a control in August of a bird ringed the day before in England on the other side of the Strait, which had made a crossing of 75 kms.

Among the 13 controls carried out, only one concerned a change of sites along the region's coastline.

The longevity record for a bird controlled in the region is almost 8 years.

Crests

With an average body weight of just 4.5 grams, the Goldcrest and Firecrest are the smallest European species. They are partial migrants.

Common Firecrest (*Regulus ignicapilla*)

Roitelet triple-bandeau / Vuurgoudhaan

Common Firecrest. Frédéric Caloin

Goldcrest (*Regulus regulus*)

Roitelet huppé / Ghoudaan

Goldcrest. Frédéric Caloin

Common Firecrest												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
100-160												

Goldcrest												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
80-500				N N N	N N N	N N N	N N N	N N N				

Common Firecrest	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Uncommon breeder
National status	Uncommon
Regional status	Regular migrant

Goldcrest	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Common breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

The Goldcrest is commonly found nesting in woodlands in the Nord–Pas-de-Calais region with a preference for conifers. The species is present in Europe as far as the north of Scandinavia. The Firecrest rarely nests elsewhere than in large woodlands found mainly in the east of the region. In Western Europe it occurs mainly as far east as Belorussia. In winter flocks of Nordic birds arrive to join the local and more sedentary birds of the region. In the migration period, both species particularly appreciate coniferous woodlands where birds can be found in large numbers.

WINTERING AND SPRING MIGRATION

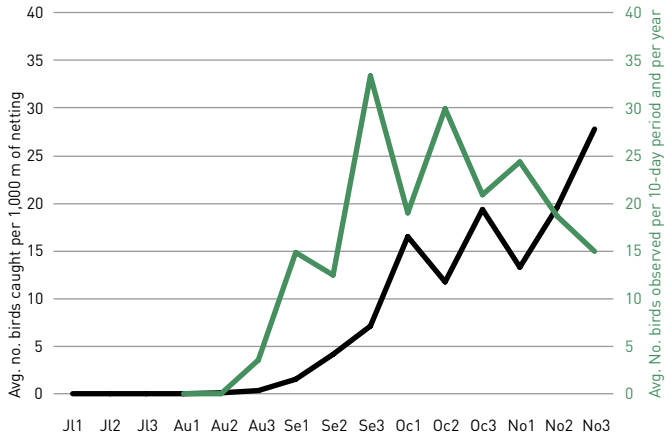
Both species winter in the region, but in small numbers. In spring, wintering birds remain until the end of March, sometimes April (latest date recorded for the Firecrest is 25 April).

AUTUMN MIGRATION

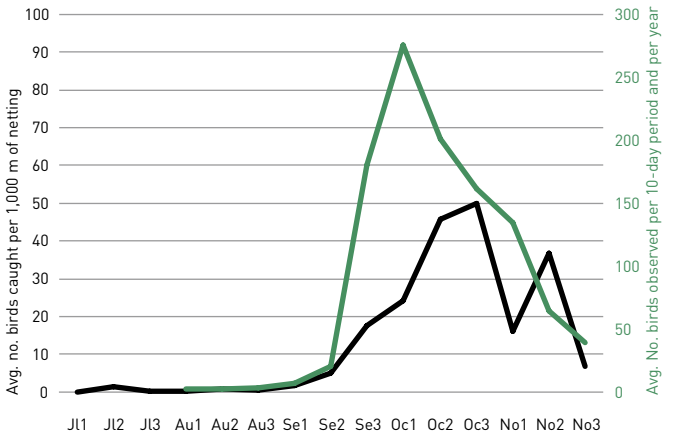
Both species are late migrants: the first movements for the Firecrest are normally recorded in the third 10-day period of August (earliest date is 25 August). Movement increases gradually with numbers reaching its maximum between the third 10-day period of September and the first 10-day period of October. The Goldcrest movements begin at about the same time, mainly in the second 10-day period of September. Both species are most often caught in October. Numbers show tremendous variability from one year to the next (invasions). In a good period, catches vary from 5-15 birds per session for the Firecrest (record is 27 birds on 18 October 2009) and 10-40 birds for the Goldcrest (record is 49 birds on 26 October 2010). The Mont Saint-Frieux Dunes site is especially attractive to both species where they winter in large numbers. This might well explain the catching peaks observed in November.

ADDITIONAL ANALYSIS

The number of Firecrests caught is rather low (100-150 per year for the Nord– Pas-de-Calais region). Higher numbers are more variable for the Goldcrest (80-500 per year for the entire region). 300 birds need to be ringed on average for every foreign control of the Firecrest and 450 for the Goldcrest.



Common Firecrest - post-breeding migration (autumn)



Goldcrest - post-breeding migration (autumn)

The small number of controls is not enough to determine accurately the origin of birds passing through the region. It seems, nevertheless, that Firecrests come from Western Europe while Goldcrests have a more northern origin.

The Firecrest has only two foreign records:
- a bird ringed on 29 September 2009 in the Netherlands was controlled 13 days later in the region;
- a bird ringed 27 October 2009 in Belgium, was recovered in December 2009 in the region.

Only seven controls have been carried out on the Goldcrest:
- among these controls, there is that of a bird ringed 2 October 2007 in Sweden and controlled 18 days later in the region, which gives a journey of 988 kms. in 12 days (an average of 82 kms. per day);
- also a bird ringed on 17 October 2011 in Great Britain and controlled 3 days later in the region, which gives a journey of 278 kms. (an average of 92 kms. per day).

The small number of controls is not enough to deduce the migratory pattern of the species. Nevertheless, they reflect the Scandinavian origins of Goldcrest influxes (in particular via Great Britain) and continental origins of Firecrest influxes.

The longevity record for both species controlled in the region is only 3 years

Males of both species have orange crown feathers while the females are yellow.
Simon Dutilleul

Flycatchers

Two flycatchers are regularly noted in migration in the region: the Spotted Flycatcher and the Pied Flycatcher. Both species are often observed skilfully chasing insects on the wing from isolated branches to which they return to perch.

Spotted Flycatcher (*Muscicapa striata*)

Gobemouche gris / Grauwe Vliegenvanger

Spotted Flycatcher. Frédéric Caloin

Pied Flycatcher (*Ficedula hypoleuca*)

Gobemouche noir / Bonte Vliegenvanger

Pied Flycatcher. Guy Flohart

Spotted Flycatcher												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
10-20						N	N	N	N			

Pied Flycatcher												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
10-20												

Spotted Flycatcher	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Common breeder
National status	Common
Regional status	Regular migrant

Pied Flycatcher	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Non-breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

The Spotted Flycatcher is commonly found nesting in France. This is not the case for the Pied Flycatcher, which only breeds in large old forests in the east of France. Both species are widespread throughout Europe as far as North Africa. They appreciate woodland but the Pied Flycatcher only nests in old-growth woodlands while the Spotted Flycatcher may well be content in riparian woods even in an urban context. This preference for woodland is not as marked in the migration period.

WINTERING AND SPRING MIGRATION

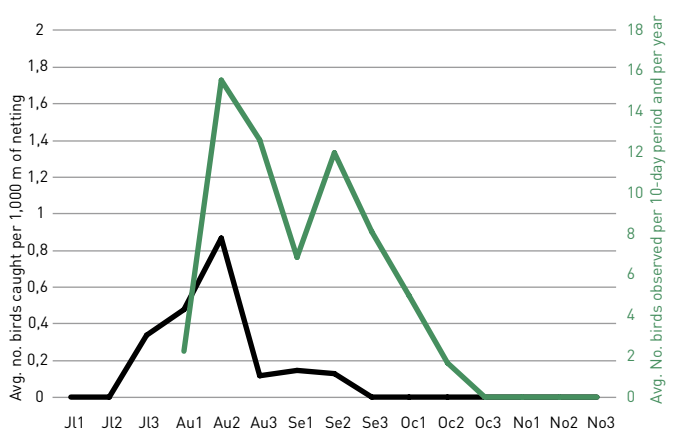
The Spotted Flycatcher winters principally in Sub-Saharan Africa mostly south of the equator, while the Pied Flycatcher winters mainly in West Africa. The spring migration of the Pied Flycatcher is minimal in the region as the species passes mainly via the east of France. As a result, there are only two records of ringing in the region, the earliest being 26 April.

For the Spotted Flycatcher, the first returning birds are recorded in the second 10-day period of May (the earliest record being 14 May) but the peak is in the second 10-day period of June. The species is then present throughout the nesting season.

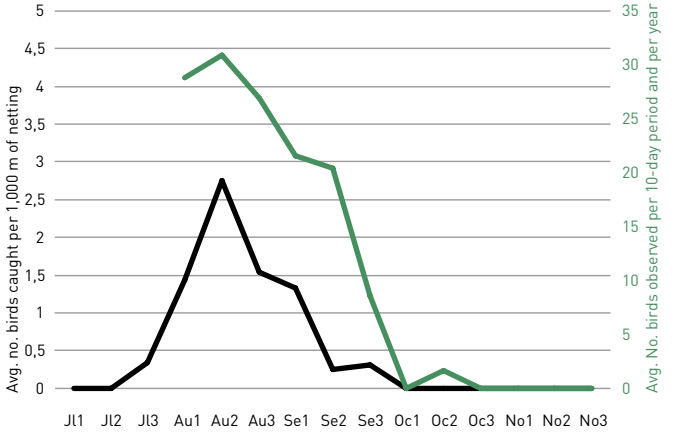
AUTUMN MIGRATION

Only 10-20 birds of each species are ringed in the autumn period each year. The birds are very agile in flight and not easily caught. Moreover, they are not attracted by playback systems of their song. Field observations are much more extensive and therefore better reflects the real behaviourial pattern of the species. Passage for both species occurs between the third 10-day period of July and the third 10-day period of September with maximum passage during the second 10-day period of August. A second peak is recorded in the second 10-day period of September for the Spotted Flycatcher. This might be due to a different geographical area of departure but no controls are available to confirm this.

The latest ever dates recorded are 12 October for the Spotted Flycatcher and 13 October for the Pied Flycatcher.



Spotted Flycatcher - post-breeding migration (autumn)



Pied Flycatcher - post-breeding migration (autumn)

Juvenile Spotted Flycatcher (left) showing pale tips to coverts which are absent in adult (right). Savina Bracquart

Same difference showing on under tail feathers of juvenile (above) and adult (below). Savina Bracquart

Pied Flycatcher showing white notches. Simon Dutilleul

ADDITIONAL ANALYSIS

No controls have been carried out on the Pied Flycatcher. The only record is for a nestling ringed in Great Britain in June and recovered in the region in August of the same year, at a distance of 140 km from its place of hatching. For the Spotted Flycatcher, all controls recorded in the databases were made the same year as ringing and at the same nesting sites. The number of controls is therefore almost zero for both species. An effort could be made to ring Spotted Flycatcher that regularly breed in gardens.

It should be noted however that this species is undergoing a dramatic decline on a national scale (55% decrease since 1989) as is the case in other Western European countries (Great Britain, the Netherlands, Germany etc.).

Possible causes are a decrease in the quantity of insects and that the species has not been able to adapt its breeding season to global warming.

Tits

Seven species of tits are regularly observed in the region in the migration period. Among them, three species show a more marked migratory behaviour: the Great Tit and the Blue Tit, which both commonly breed in the region, and the Coal Tit, which breeds in localised areas. The other species belonging to this group display a more sedentary behaviour and are not covered in this publication. They are the Willow Tit, Marsh Tit and Crested Tit. Also,Long-tailed Tit is not treated here despite its regular invasive behaviour.

Blue Tit (*Cyanistes caeruleus*)

Mésange bleue / Pimpelmees

Male Blue Tit. Armelle Guillo

Blue Tit												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
600-2200				N N N	N N N	N N N	N N N	N				

Blue Tit	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Very common breeder
National status	Very common
Regional status	Regular migrant

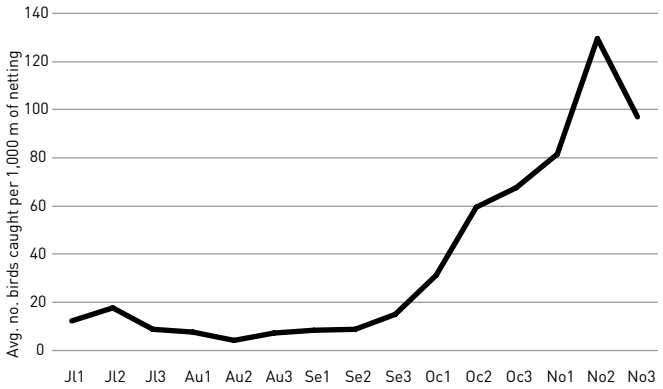
GENERAL COMMENTS

Present throughout Europe, except in the north of Scandinavia and in Iceland, the Blue Tit can be seen in all types of habitat. The species seems to prefer high hedgerow type habitats, contrary to the Great Tit that shows a stronger affinity for tree-covered areas. It is a partial migrant: the Western European populations are rather sedentary while the Nordic populations are able to travel great distances.

In fact, a high species reproduction rate that coincides with low flowering/fruiting of Scandinavian birches in the same year can lead to a higher number of movements of the species. The Blue Tit migrates in the daytime, sometimes in large groups (several hundred birds) and often in the company of other tit species. The species changes from an insectivore diet in summer to a granivorous one in winter which makes it a frequent visitor at bird tables.

WINTERING AND SPRING MIGRATION

The species is present in large numbers throughout winter. The recent setting up of a ringing programme at bird tables has shown the species' tend to return to and to feed with other birds at the same feeding site (50-100 different Blue Tits visiting the same garden in Tingry between 2008-2012). Numbers present do however remain variable according to the year and season.



Blue Tit - post-breeding migration (autumn)

The number of birds increases sharply if the weather becomes colder in fact. In spring, the birds quickly rejoin their nesting sites and the number of catches drops significantly from the third 10-day period of February. Almost all the birds are settled in by the beginning of April. Controls for winter show that birds inhabiting the region in this period are, in part, birds bred in the region, in Belgium, the Netherlands or Germany, and in part, birds from more northerly countries (Poland, Lithuania) in years when there is an influx. A bird ringed in January 2008 in the region was controlled the following October in Lithuania. Another bird ringed in the winter of 2008-2009 was controlled in the winter of 2010 in the Czech Republic.

AUTUMN MIGRATION

As mentioned earlier, the number of Blue Tits ringed in the region varies enormously from one year to the next. In 2006 only 661 birds were ringed in Nord– Pas-de-Calais, while in 2007 the number rose to 2262. The same phenomenon was observed in 1997 with several thousand individuals observed in active migration on 4 and 5 November at Cap Gris-Nez. This variability is due to northern influxes. These invasions are generally visible in the region from the beginning of October but the peak is most often reached between the third 10-day period of October and mid-November. In this period, it is not unusual to ring fifty or so Blue Tits per day (the record catch is 99 birds at Slack Dunes).

ADDITIONAL ANALYSIS

Being easy to catch this species helps to establish the origin of migrants in transit in the region. Two-thirds of birds controlled were ringed in Belgium (it should be noted that there is an important number of birds changing sites from one side of the border to the other due to the proximity of ringing sites). The remaining third comes from North-East Europe with a majority of birds coming from or passing through the Netherlands and Lithuania. Only one bird came from the Scandinavian Peninsula, which gives the impression that the majority of influxes passing through the region come from North-East Europe rather than North-West Europe.

Only nine controls have been carried out more than 1,000 kms. away:
- seven birds ringed in Lithuania and controlled in the region had travelled the greatest distances (between 1300 -1411 kms.);
- a bird ringed in Poland had travelled 1279 kms. before being controlled;
- a Swedish bird had also travelled more than 1000 kms.

The fastest movement is held by a bird ringed in Belgium in November 2007 and controlled in the region 3 days later. It had covered 178 kms. at an average of 60 kms. per day.

Juvenile Blue Tit showing different colouration of wing feathers between primaries and secondaries. Simon Dutilleul

Many birds are older than 4 years, but the oldest bird ever was controlled for five consecutive years at the same site.

Concerning recoveries with a known cause of death, 31% are due to birds flying into glass barriers and 27% to predators (mainly domestic cats).

Great Tit (*Parus major*)

Mésange charbonnière / Koolmees

Male Great Tit. Armelle Guillo

Great Tit												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
700-3 000				N	N	N	N	N	N	N	N	N	N	N	N	N

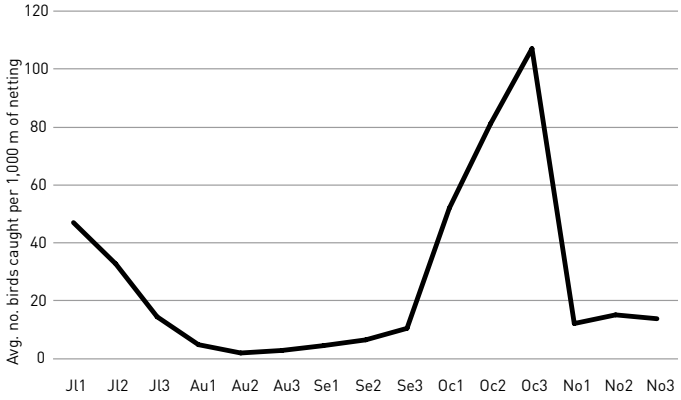
Great Tit	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Very common
National status	Very common
Regional status	Regular migrant

GENERAL COMMENTS

The distribution area of the Great Tit is very extensive: the species is present from Western Europe to South-East Asia. This common breeding bird of France and the region has a preference for woodland or at least tree-covered habitats, even in the migration period although it is also found in bushland habitats at this time. Like the Blue Tit, the species is rather sedentary in France but influxes from North or East Europe increase local population size in some years. Rather territorial in the nesting period, the Great Tit becomes gregarious during migration movements, forming large groups which are very often joined by other species of the tit family. When there is a cold spell, 'armies' of tits are often seen moving through the vegetation looking for food. The species changes from an insectivore diet in spring to a granivorous one in winter, which makes it a regular guest at bird tables.

WINTERING AND SPRING MIGRATION

The recent setting up of a scientific monitoring programme at bird tables has made it possible to gather not only much data on the origins of wintering birds in the region but also on the density of bird populations. For example, ringing has shown that 50-90 different birds may be found at the same feeding site each winter (in Tingry from 2008-2012). Nearly all controls carried out in winter are on birds ringed in the region or Belgium. There is just one control in April in Poland on a bird ringed in January of the same year in the region during an influx, which suggests the presence of northern birds among wintering birds in the region. In spring, the birds discretely rejoin their nesting sites and the number of catches at bird tables drops



Great Tit - post-breeding migration (autumn)

significantly from the third 10-day period of February. Almost all the birds are settled in by the beginning of April.

AUTUMN MIGRATION

As with most species of an invasive character, the number of Great Tits ringed in the region varies greatly from one year to the next. For example, only 769 birds were ringed in Nord– Pas-de-Calais in 2006 compared to 2179 birds in 2008, which is three times as many! Numbers caught are high compared to the Blue Tit. However, during active migration, invasions are often far less spectacular (330 birds counted on 2 October 1996 at Cap Gris-Nez). The small number of controls of foreign birds also suggests that influxes from northern countries are less important than might be supposed. Movements of Great Tits seem to occur earlier than for the Blue Tit. They start from the beginning of October but reach their maximum later in the month (November in the case of the Blue Tit). The year 2012 was an exception as the number of birds caught was particularly high (more than 3000 birds) with catching numbers exceeding 200 birds for a single session and a number of controls not only on foreign birds but on birds changing sites. The record for a single day was at the ringing station at Fort Vert, Marck (62) with 260 birds caught on 22 October 2012.

ADDITIONAL ANALYSIS

Birds passing through the region in autumn come mainly from Belgium or have at least passed through that country (74% of controls). Some birds controlled in Nord– Pas-de-Calais come from more northerly countries (Germany, the Netherlands, Lithuania, Russia, Poland). The year 2012 (which does not feature in the control/recovery data) provided some rather interesting new data for the species: birds ringed in Russia, Poland and Lithuania confirmed the continental origins of this invasion.

Before 2012, there were only two records in the database for controls carried out at a distance of more than 1200 kms.:

- a bird ringed in December 2008 in the region was controlled in March 2011 in Russia at a distance of almost 1300 kms.;
- a bird ringed in September 2003 in Lithuania and recovered 33 days later in the region at a distance of nearly 1350 kms.

The fastest distance record is held by a bird ringed in October 2008 in Belgium and controlled at Slack Dunes three days later. It had covered 181 kms. at an average of 60 kms. per day.

The oldest bird controlled in the region was a regular visitor to the same bird table for six years. But most birds do not seem to exceed 4 years of age. Among identified causes of death for recovered birds, 19% of birds are victims of a collision with a glass barrier of some kind and 28% fall victim to a predator (including pet cats).

Male Great Tit showing black belly patch extending between legs. Simon Dutilleul

Coal Tit (*Periparus ater*)

Mésange noire / Zwarte Mees

Coal Tit showing characteristic white neck. Frédéric Caloin

Coal Tit												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
0-1 000												

Coal Tit	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Rare breeder
National status	Common
Regional status	Irregular migrant

GENERAL COMMENTS

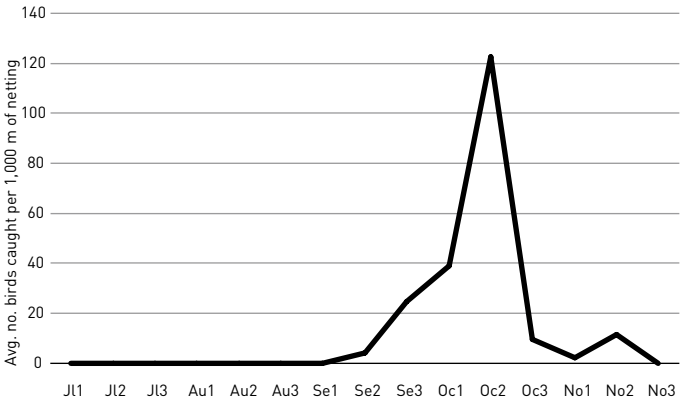
The Coal Tit breeds in Eurasia from the Atlantic coastline to Mongolia and Manchuria. It has localised, scattered nesting areas in Nord–Pas-de-Calais mainly in coniferous forests in the south-eastern part of the region and along the coastline (Picardy coastal plains, Avesnois, Scarpe-Escaut). Breeding pairs along the coastline are often seen after invasions. Some years, movements of northern individuals are noted throughout Europe and some birds may settle for an entire winter. These autumn movements can often be likened to an invasion as was the case in 1985 and 1993 and more recently in 2008. Outside the breeding period and particularly during an invasion, the Coal Tit can be observed in all types of habitat with trees, shrubs or hedgerow with a clear preference for conifers where the densest numbers are found. The species, like its cousins, visits garden bird tables which offer food in winter.

WINTERING AND SPRING MIGRATION

The species is present throughout winter but numbers caught are relatively low even at feeding sites (maximum of thirty or so birds caught each winter in the entire region). The few controls carried out in spring on individuals ringed in autumn suggest that some of the birds have not moved in winter, especially those inhabiting coastal pine woods and probably elsewhere in the region. There is no really identifiable movement in spring in the available data due to few returning birds being seen (from the end of March to mid-May).

Among the data:

- a bird ringed at Mont Saint-Frieux Dunes (Dannes) in October 2008 and recovered in April 2009 in Loire-Atlantique (440 kms.);



Coal Tit - post-breeding migration (autumn)

• a bird ringed at Mont Saint-Frieux Dunes (Dannes) in October 2010 and controlled in March 2012 in Belgium (309 kms.).

No birds have ever been ringed in the nesting season in the Nord–Pas-de-Calais region.

AUTUMN MIGRATION

Nearly all catches are made during the autumn migration period, between September and November (98% of birds ringed). There is a very marked peak mid-October, which conforms to the migration pattern of this species in the region. Our pattern of catches, is strongly influenced by the very noticeable invasion in 2008 (nearly three-quarters of data), and is in accordance with observations made during the 1985 influx and which has been described as on a national scale. Invasions are very variable from one year to the next (from a few hundred birds ringed in autumn 2010 to more than a thousand in 2008). Some years, the species is completely absent as was the case during autumn-winter of 2006-2007 or 2009-2010 when not a single bird was caught in the region. The same conclusions have been arrived at from visual observations that note very variable intrusions of a few hundred to several thousand birds, mostly made in coastal areas (in autumn 2008, more than 10,900 birds were counted at the Picardy Banc de l'Ilette, Somme estuary site).

The record was set 11 October 2008 with more than 506 individuals caught at Slack Dunes. The second peak observed in November can be correlated with the species wintering at the Mont Saint-Frieux Dunes site. It seems that these invasive movements are driven by poor fruiting of spruce in Europe, the seeds of which are the principal source of food. Such movements concern birds in their first year for the most part (97-99%).

ADDITIONAL ANALYSIS

There are few controls or recoveries records for this species, but 11 bird controls carried out in the region confirm a general pattern vis à vis the arrival and origin of birds observed in the autumn: the birds had first crossed Belgium, the Netherlands or Denmark where they were ringed during their passage.

The two most remarkable controls concerned:

• a bird ringed 5 Sept. 2008 in Denmark and controlled 12 Oct. 2008 in Dannes (700 kms. in 37 days);
• a bird ringed 6 Oct. 2008 in the Netherlands and controlled 28 Oct. 2008 in a garden in Santes (59) (310 kms. in 22 days);
• one control showed the origin of a bird ringed as a nestling 14 Jun. 2008 in Germany and caught 23 Oct. 2008 in La Neuville (59).

The majority of birds ringed in the region during their autumn migration movements are recovered in Belgium but above all in France on a south-west axis path (Manche, Finistère, Loire-Atlantique departments).

There was also the case of a bird controlled in December in the Tarn (786 kms. in 70 days).

As for travelling over distances, a number of controls show an ability to move between 30–60 kms. per day:

• a bird ringed in Belgium and controlled 4 days later in the region had travelled 238 kms.;
• a bird ringed in Belgium and controlled 3 days later in the region, over 120 kms.

No bird has been controlled in the region more than one year after its ringing date.

A bird ringed in its first year in October 2010 at Dannes and controlled in March 2012 in Belgium was therefore 3 years old.

The Common Starling

Common Starling (*Sturnus vulgaris*)

Étourneau sansonnet / Spreeuw

Adult male Starling showing typical bluish base to beak in breeding season. Guy Flohart

Common Starling												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
100-300				N N N N N N N N N N N N N N								

Common Starling	
Bird Directive	Annexe II
Protected species	Hunting allowed
Nesting status in Nord–Pas-de-Calais	Very common breeder
National status	Very common
Regional status	Regular migrant

GENERAL COMMENTS

The Common Starling nests from North-East Spain to Spitzbergen and Western Russia. A cavity-dwelling species, the species nests in woodland (from woodlands to solitary trees on farmland), gardens and all types of man made habitats. Individuals from Western Europe are mostly sedentary, but those from Eastern Europe migrate south-west in autumn. When migrating, the species visits all types of habitat. The Common Starling is mainly insectivorus in spring and summer and feeds on berries and seeds in autumn and winter. Normally gregarious, flocks of starlings are often observed feeding on the ground not only in grasslands but even in man-made environments (rubbish tips, ploughed land). Migrants and wintering birds may form roosting parties, sometimes comprising several thousand individuals (up to a million), confirming its gregarious nature. The roosts are often located in reed beds or tall trees, even in an urban environment. Being a diurnal migrant, impressive flocks of Common Starlings can be seen.

But the species has been known to change location at night even though it has poor night vision. It is not unusual to catch individuals during night ringing sessions.

WINTERING AND SPRING MIGRATION

The species is present throughout winter. In France during this period, the Common Starling population comprises, in part, individuals from populations around the Baltic that breed in the eastern part of East Germany, Poland, Norway, Estonia, Finland and in particular, Lithuania. The remainder comprises sedentary French birds. Winter

Juvenile Starling showing pale circle in iris. François Cavalier

Starlings in flight. Frédéric Caloin

movements of birds can be observed fleeing the effect of prolonged periods of frost and snow cover.
Spring movements are not very noticeable. Local breeding pairs have settled in at their nesting site and started building from March. There is little ringing data for the breeding period but what there is confirms the sedentariness of the species (about a dozen records in the nesting period for ringing recoveries at a distance of less than 25 km from the ringing site). There is however a contradictory record of a bird ringed as an adult during the winter period in Charente-Maritime and recovered a year later during the breeding period in the Nord– Pas-de-Calais region.

AUTUMN MIGRATION

Very few birds are ringed each year in the region (160 on average), compared to the hundreds of thousands of birds migrating along the regional coastline (for example up to 26000 in 5.5 hrs. on 7 November 2010 at Cap Gris-Nez. It seems however that the number of birds flying along the coastline have dropped considerably in the last ten years. Today, bird counts of migration movements rarely exceed 30000 birds in a day whereas they would regularly reach 100000 birds in the 1990s. Birds crossing the Strait towards the English coast are regularly observed. The first flocks of birds which are dispersing from their breeding sites are seen as soon as nesting is over (July-August). For example, a nestling ringed in May in Belgium was recovered in August 150 kms. further west at Calais. Migration really starts at the end of September and intensifies between the end of October and mid-November. The catching record was set on 30 October 2012 in Fort-Vert Dunes (Marck) with just under 100 birds. From the second 10-day period of November, numbers fall before migration comes to a halt at the beginning of December. The species remains present all winter.

ADDITIONAL ANALYSIS

The number of birds ringed is insufficient to give a good idea of the migratory pattern of French populations. On the other hand, the numerous recoveries due to hunting during migration and of wintering birds (82% of recoveries in known circumstances) help to define reliably the origins of birds present in Nord– Pas-de-Calais in these periods. In August-September, the majority of birds present in the region are local birds (Nord– Pas-de-Calais, Belgium) but the first migrants from further afield have already been recorded (the Netherlands, Lithuania). The first birds from Germany, Denmark, Estonia, Finland and Russia arrive in the region in October. The first data concerning Swedish birds is recorded during November.

Only two controls have been made from more than 1800 kms. away:
- a nestling ringed in May 1991 in Finland and recovered at Belle-et-Houllefort in November of the same year (2000 kms.);
- a bird ringed in June 2003 in Finland and recovered in October of the same year at Outreau (1800 kms.).

The fastest movement recorded is held by a bird ringed in Belgium and recovered the next day in Nord– Pas-de-Calais. It had travelled 180 kms. in a single day.

The two oldest birds recovered in the region were aged 16 and 18; they had been ringed in Belgium. A nestling ringed in Norway was recovered nine years later in wintertime in Ambleteuse

Sparrows

The House Sparrow and Tree Sparrow are the only two sparrow species that inhabit the region. Although both species are not considered to be long-distance migrants, it seems important to produce a report for the House Sparrow, which has already been the subject of a study in the region, and for the Tree Sparrow, whose decline is of great concern.

House Sparrow (*Passer domesticus*)

Moineau domestique / Huismus

Male House Sparrow. Christophe Luczak

Tree Sparrow (*Passer montanus*)

Moineau friquet / Ringmus

Male Tree Sparrow. Daniel Haubreux (Biélorussie)

House Sparrow												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
220-860				N N N	N N N	N N N	N N N	N				
Tree Sparrow												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
20-50				N N N	N N N	N N N	N N N	N N N				

House Sparrow	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Very common breeder
National status migrateur	Very common but rare migrant
Regional status	Occasionnal migrant

Tree Sparrow	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Rare
National status	Rare
Regional status	Regular migrant in small numbers

GENERAL COMMENTS

The House Sparrow is a nearly cosmopolitan bird. Living close to man, it is mainly found in three types of habitat throughout Europe: urban zones where it uses constructions, semi-urban zones where it finds refuge in parks and gardens, and rural zones which still provide its principal natural habitat. It is present over almost all of France, except in the high mountains, and figures among the ten most common bird species in France. The species is considered sedentary. The Tree Sparrow is less attracted to man, even if often found in villages and on farms. The species also visits open woods and high hedgerows as long as they offer cavities in which the species can nest. The Tree Sparrow also uses nesting boxes where made available. The Tree Sparrow is a more migratory species than the House Sparrow, at least in the northern part of its distribution area. Both species are primarily granivore but also feed on insects in the summertime. The House Sparrow is the subject of serious study in the region and France, helped by colour-coded marking programmes.

WINTER MOVEMENTS AND SPRING MIGRATION

House Sparrows are very rarely caught in natural habitats (less than ten catches per year). The majority of birds are ringed in the winter period during a special colour-coded marking programme for the House Sparrow carried out around dwellings or farms where large numbers of the species gather. The House Sparrow was closely monitored between 2004-2009 in high hedgerows habitats in inland areas of the Boulonnais (Seninghem - La Raiderie). During the study, 1900 individuals were ringed on a single site, with1300 controls carried out and 3100 visual readings of coloured rings taken. The preliminary results show that the majority (41% of controls) of birds in their first year stay at their place of hatching in autumn and winter before dispersal to surrounding sites the following spring. Only 20% of adults ringed in the migration periods were later controlled on the site, which confirms a migratory tendency, or at least an erratic one, for the species. For the Tree Sparrow, controls/recoveries made show that the region welcomes in winter birds that nest in Belgium (three controls of which two at a distance of less than 30 kms.). Many birds ringed in nest boxes in the region also reveal the strong sedentary

Colour ringed House Sparrow. François Cavalier

Tree Sparrows – both sexes are alike. Daniel Haubreux (Biélorussie)

nature of nesting birds (100% of controls/recoveries are made within a radius of less than 10 kms. from the ringing site).

AUTUMN MIGRATION AND ADDITIONAL ANALYSIS

For the House Sparrow, the study carried out in the region shows that the species' movements are more tied to dispersal movements or to a certain erraticness rather than to true migration. There is confirmed evidence of birds changing sites between Nord, Pas-de-Calais, the Somme and Oise.

The great majority of controls do not exceed a distance of 15 km. Among these controls:

- four birds ringed in 2004 in Oise during the breeding period were controlled the following autumn in Seninghem (Pas-de-Calais), 130 kms. to the north;
- a bird ringed in winter in Nord was controlled the following August 110 kms. away in the Somme;
- a bird ringed in spring in Pas-de-Calais was controlled the following winter in Neufchatel-Hardelot (more than 60 kms.).

All this data shows that the species is without doubt less sedentary than believed!

The oldest House Sparrow found in the region was a bird recovered 10 years after being ringed.

Regarding the Tree Sparrow, available data is not sufficient to define the migratory pattern of the species. The majority of autumn movements are observed in October. Observations show that the number of birds in transit in the region is less since the 1990s. In the 1960-70s, important movements were noted at Cap Gris-Nez (more than 21000 birds between 9-14 October 1967). By the 1990's, bird counts were lower for example, 1600 birds at Cap Gris-Nez on 16 October 1996. At the present time, a maximum of 10 birds per year is observed in the Audinghen sector. This drop in numbers is just as clearly illustrated by ringing data. In fact, between 1957-1987, the Tree Sparrow figured among the top ten species ringed with an average of 580 birds per year compared to 20-40 birds per year between 2000-2010. The causes behind this decline, noted throughout Europe, remains a mystery even if the use of insecticides and herbicides is suspected.

The oldest Tree Sparrow controlled in the region was aged 4.

Finches

Finches are a group comprising small, diverse, strong-billed passerines. They are granivorous for the most part (at least in the migration and winter periods) and normally live and move around in groups. Due to their diet, they often visit gardens, tempted by bird tables with seeds. It is at this period that most birds belonging to the two species are ringed.

Common Chaffinch (*Fringilla coelebs*)

Pinson des arbres / Vink

Male Common Chaffinch. Armelle Guillo

Brambling (*Fringilla montifringilla*)

Pinson du Nord / Keep

Male Brambling. Armelle Guillo

Common Chaffinch												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
250-450				N	N	N	N	N	N	N	N	N	N	N	N	N						
Brambling												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
10-250												

Common Chaffinch	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Very common breeder
National status	Very common
Regional status	Regular migrant

Brambling	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Non-breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

The Common Chaffinch is commonly found nesting in Europe and the Nord– Pas-de-Calais region, a few trees for singing and nesting being necessary. The Brambling is only present in the non-breeding season in the region. Its nesting area covers the northern part of Europe, from Scandinavia to Siberia with the exception of tundra zones. The whole population more or less winters in Europe, to the south of a line drawn from the North Sea to Southern Sweden. Autumn migration of the species is easily observable, in particular on the coastline where population density is highest (sometimes several tens of thousands of Common Chaffinches seen in a day). Movements of Bramblings are more variable (from a few hundred to several thousand per day in a good year). In the migration period and when wintering, both species particularly appreciate stubble, ploughed or sown fields where they can be found in large numbers. They only migrate by day, sometimes in large groups.

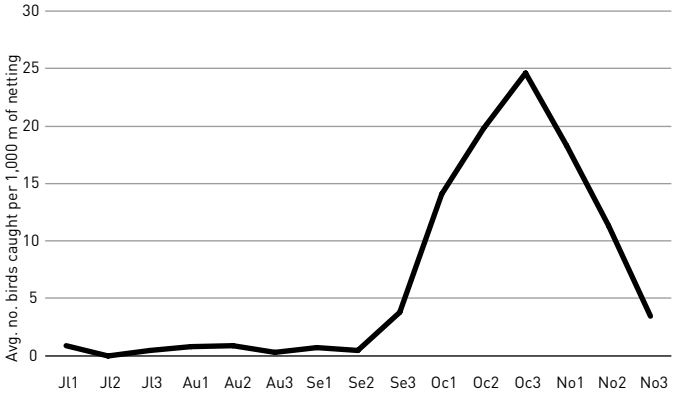
WINTER MOVEMENTS AND SPRING MIGRATION

Both species winter in the region, the Common Chaffinch in large numbers and the Brambling in small localised groups of a few tens of birds. The latter is however known to gather in very large numbers in winter. Finches are regular visitors to bird tables in gardens, above all when there is snow cover. They readily mix with other species at such times. It is also at bird tables that they are most often caught.

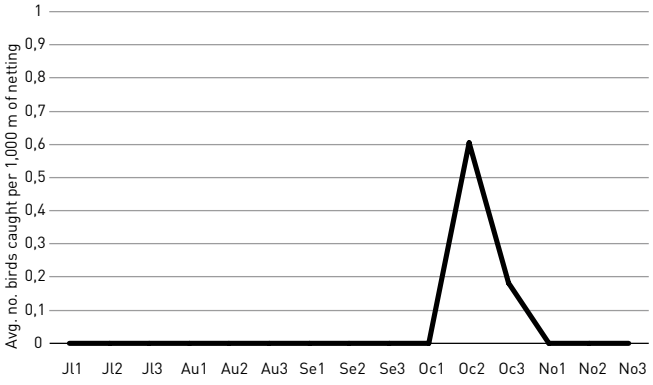
Spring migration movements are detected from mid-March to the beginning of May, but they are small (just a few tens of birds per day for the Common Chaffinch and a few individuals per day for the Brambling). Finches are known to follow a more continental migration path that avoids the coastline in spring.

AUTUMN MIGRATION

The autumn passage of the Common Chaffinch starts in mid-September and towards the end of the month for the Brambling. The most important movements for the Common Chaffinch are recorded between 1-20 October. They can be as high as several thousand individuals in a single day (50000 on 1 November 1998 at Cap Gris-Nez).



Common Chaffinch - post-breeding migration (autumn)



Brambling - post-breeding migration (autumn)

Numbers remain high until mid-November. The migratory pattern of the Brambling is almost identical but its numbers are more variable from one year to the next from just a few individuals to several thousand (9000 birds on 15 October 1993). In poor meteorological conditions, important 'falls' are recorded at both Cap Blanc-Nez and Cap Gris-Nez (for example, 100000 Common Chaffinches arrived on 9 November 1993 and 5000 Bramblings 13 October 1997). During the whole of this period, catching numbers are very low and far from representative of the actual passage observed. The low catches for the Brambling are insufficient to depict the migratory pattern of the species but it seems to be identical to that of the Common Chaffinch. The two species are often seen together at migration time.

ADDITIONAL ANALYSIS

The number of Bramblings caught is rather low (50-250 per year for the entire Nord– Pas-de-Calais region). Although higher for the Common Chaffinch (250-450 per year for all of the Nord– Pas-de-Calais region), this remains very low in relation to the number of birds passing through the region. The small number of controls is not enough to determine accurately the origin of birds passing through the region. It does seem however that migration routes taken vary from one year to the next for the Brambling. Two controls have been carried out to the east of the region:

- a bird ringed 23 Jan. 2009 in the region and controlled 25 Oct. 2009, in Slovenia, 970 kms. from the ringing site;
- a bird ringed in the winter of 1963 in the Bas-Rhin and controlled in the winter of 1969 in the region.

Three controls have been made in Western Europe and Scandinavia:

- a bird ringed 30 Dec. 2010 in the region and controlled 9 Apr. 2011 in Germany (at a distance of 580 kms. from the ringing site), most certainly on its way to its nesting area;
- and two recent controls in Norway (2011-2012) that do not figure on the map.

For the Common Chaffinch, birds come from Northern Europe (Scandinavian countries and probably even further: Russia and Siberia).

Only three recoveries exceed 1000 kms.:

- a bird ringed in September 1988 in Lithuania was recovered in February 1991 in the region;
- a bird ringed in Russia in October 1994 and recovered in November 1994 in the region, 1300 kms. from the ringing site;
- a bird ringed in April 2003 in Norway was recovered in January 2009 in the region.

The longevity record for both species controlled in the region is at least 8 years.

Greenfinch (*Carduelis chloris*)

Verdier d'Europe / Groenling

Male Greenfinch. Armelle Guillo

Greenfinch												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
600-1 000				N	N	N	N	N	N	N	N	N	N	N	N	N						

Greenfinch	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Very common breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

The Greenfinch is found throughout Europe as far east as the Urals, with the exception of Northern Scandinavia. It commonly nests in the region. The Greenfinch lives on the edges of woods, in orchards with high hedgerows as well as in gardens and urban parks. The species is considered a partial migrant in the major part of its distribution area. Only the most southerly populations seem to be sedentary. The species is a common visitor at bird tables in winter, in particular in gardens where there are a few trees. In the migration period, the species is found mainly in woodland habitats but rarely in habitats where catching operations are performed in this period (dune shrubland, marshland). This species is strictly granivorous and a diurnal migrant. Most data therefore comes from winter ringing carried out around feeding points.

WINTERING AND SPRING MIGRATION

In winter some of the birds caught are local birds that gather around bird tables. To these may be added birds that come from Belgium, the Netherlands, Germany and Great Britain. One record concerns a Norwegian bird. Numbers may be high at this time of year (200-300 birds ringed on one site in a single winter). Data obtained shows that this passerine makes use of an extensive winter territory in which birds may move around from one feeding site to the next a few kilometres away. A small number of nesting birds in the region appear to head to more southerly areas of France (a bird ringed in June in the region was recovered the following winter in the Pyrenees). Spring migration is perceptible from March to mid-April. In this period, an

Female (left) and male (right) Greenfinch. Armelle Guillo

Greenfinches – male on left, juvenile on right. Iris Prudhomme

increase in the number of birds ringed and a decrease in the numbers of birds controlled indicates that migration has started.

AUTUMN MIGRATION

Between 600-1000 individuals are ringed each year in the region of which the vast majority are in the winter period (end of October to end of March). The species has always figured among the most caught species in the region (more than 33000 birds having been ringed, an average of 1200 birds per year between 1957-1987). Autumn migration seems to start from the end of September but the major passage is noted from mid-November. The data should nevertheless be interpreted with care. During this period, there are of course cold spells that encourage the birds to visit bird tables where they are then caught and ringed.

ADDITIONAL ANALYSIS

Birds passing through the region come from Belgium, the Netherlands and even on occasion Germany, Denmark and Norway. Some of the birds continue their route southwards (Somme, Seine-et-Marne, Loiret, Sarthe and Morbihan). The fact that birds constantly move from one winter ringing site to another in the region or, to or from nearby sites in Belgium suggests it has certain erratic tendencies in winter.

Six records exceed a distance of 500 kms. including:

- a Norwegian bird recovered in the region 5 Jan. 2000 (942 kms.);
- a bird ringed 25 Dec. 1996 in the region and recovered 27 Mar. 1998 in Denmark (860 kms.);
- a bird ringed 2 Feb. 2008 in the region and controlled 25 Mar. 2008 in Germany (783 kms.);
- a bird ringed 14 Jun. 2007 in the region and recovered 29 Jan. 2008 in Pyrénées-Atlantiques (861 kms.).

The control/recovery data does not give any real idea of the migratory ability of the species.

The number one cause of mortality is collisions with glass barriers which account for 38% of recoveries with known cause of death.

The oldest bird controlled in the region was aged 8.

Goldfinch (*Carduelis carduelis*)

Chardonneret élégant / Putter

Male Goldfinch. Armelle Guillo

Goldfinch												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
50-350					N	N	N	N	N	N	N	N	N	N		

Goldfinch	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Common breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

The Goldfinch has a Palaearctic distribution area stretching from Portugal to Western Asia, and from the south of Fenno-Scandinavia to North Africa. It is a partial migrant: only the Mediterranean populations being considered sedentary. The species may winter wherever it breeds with the exception of high altitude regions but the largest wintering populations are found around the Mediterranean. The Goldfinch is basically granivorous: it eats small seeds of the Asteraceae family, which it removes directly from the flower head. The Goldfinch prefers habitats where species of this plant family thrive, such as natural grasslands, wasteland, gardens etc. The species is typically gregarious outside the breeding period. In winter it is seen around bird tables and in roosting parties in trees at night. The Goldfinch is a diurnal migrant that migrates in flocks. It often joins other finch species.

WINTERING AND SPRING MIGRATION

The species is present throughout the winter period. It is one of the ten most ringed species in the region at this season. Ringing results from bird tables have revealed that wintering birds in the region come mostly from Great Britain. A number of birds ringed on the other side of the English Channel have been controlled in winter in the region and vice versa (more than 50% of controls). Only a small percentage of birds, perhaps local ones, seem to be faithful to their wintering zones from one year to the next. In spring, migration movements northwards are visible from March with an intensification from mid-April to the beginning of May. It is in this period that migration monitoring yields most results showing that the species is a regular

A very young Goldfinch does not show red on the head before its first moult. Simon Dutilleul

migrant in the region. The Cap Gris-Nez and Sangatte monitoring sites regularly count 300-400 birds. Local breeding pairs settle in at their nesting site around mid-April. The Goldfinch seems faithful to its nesting area: a bird ringed in June was controlled two years later at the same time of year at a distance of 11 kms. from its place of ringing.

AUTUMN MIGRATION

Very few Goldfinches are ringed in the Nord– Pas-de-Calais region in the autumn migration period (less than 10 birds per year). The species is in fact targeted more during wintertime around bird tables where it gathers. Visual monitoring of migration confirms the same trend as the species is almost absent from autumn bird counts in comparison to spring migration. This lack of data may be explained by the fact that migration takes place over an extended period (August-December) which probably is prolonged into winter, perhaps in the case of snow cover in the British Isles. Controls carried out on English birds extend from October to March with the vast majority in February–March (more than 60% of controls). Very occasional changes of sites have been recorded in winter, the majority of birds remaining at the same site throughout winter. These changes of site are more common in February and March and are probably related to the beginning of the spring migration. Some birds ringed between August and October have been controlled or recovered in Belgium the following winter. These changes are between local cross-border sites (10-20 kms.) and probably correspond to a certain winter erraticism.

ADDITIONAL ANALYSIS

The number of birds ringed in the region only makes it possible to identify the origin of wintering birds in Nord– Pas-de-Calais. An individual ringed in Nord– Pas-de-Calais region in the nesting period (May) was recovered in Malaga, Spain, in autumn. Another bird was recovered in Charente in winter. These are the only two records that suggest a possible migration movement of local nesting birds towards the south of France or the Iberian Peninsula.

Only two controls exceed a distance of 800 kms.:

- a bird ringed Mar. 2009 in the region was recovered in May 2010 in the North of England (840 kms.);
- a bird ringed in May 1965 in the region and recovered in November of the same year in Malaga, Spain (1650 kms.).

The fastest movement recorded is held by a bird ringed at the beginning of March in Tingry (62) and controlled 50 days later in the North of England. The bird had covered 660 kms.

The oldest bird ringed in the region was aged 8.

Common Redpoll (*Carduelis flammea*)

Sizerin flammé / Grote Barmsijs

Male redpoll. Stephan Peten (Belgique)

Common Redpoll												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
10-370												

Common Redpoll	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Localised breeder
National status	Uncommon
Regional status	Irregular migrant

GENERAL COMMENTS

The Common Redpoll is divided into two distinct populations, the Lesser Redpoll (cabaret) and the Mealy Redpoll (flammea) and both species have their own particular breeding grounds. The Lesser Redpoll has a more southerly distribution area as it breeds in the Alps, in Great Britain and the Benelux countries and as far north as Denmark. The Mealy Redpoll has a truly northern distribution area and inhabits the entire boreal region of Scandinavia. It a partial migrant and it is the Lesser Redpoll sub-species that is encountered in the region. British and Benelux populations are observed in winter.

Invasions of the Mealy Redpoll may occur in some years, and then may be more numerous than the Lesser Redpoll. During migration, the species prefers to frequent shrubland and woodland habitats but also appreciates tall grasses such as epilobium and thistles. A diurnal migrant, the species is often observed on active autumn passage but less so at migratory stopovers. The Common Redpoll is more gregarious in winter and visits large woodlands, often with a preponderance of birch and alders.

WINTERING AND SPRING MIGRATION

The species is present in the region throughout winter. There is no detectable passage showing in the spring data available, even though the species has been caught until March. It is likely that the birds progressively rejoin their nesting areas from the middle of winter onwards.

The male often shows traces of red on the breast. Simon Dutilleul

Comparison of Mealy Redpoll (left) and Lesser Redpoll (right). Frédéric Caloin

AUTUMN MIGRATION

Numbers ringed in the Nord– Pas-de-Calais region vary from one year to another: 6 caught in 2007 compared to 370 in 2008. Redpolls normally appears at the end of autumn, generally during November. The birds are still very much on the move, as shown by several foreign controls carried out in Belgium soon after their ringing. 13 birds ringed in the region were controlled in Belgium, on average only 5 days after their date of ringing and after having travelled an average distance of 65 kms. Numbers caught then drop in December and concern wintering birds for the most part.

ADDITIONAL ANALYSIS

Given that the species move around in the canopy of large woodlands, it may well be that the present catching methods (nets of limited height) do not give a fair representation of the species' abundance in the region. Nevertheless, an analysis of the catching/recatching data indicates that there is a considerable interchange of birds between France and Belgium. Only one control exceeds a distance of 800 kms.: a bird ringed in October 2010 in Scotland and controlled in November of the same year in the region. Between 2008-2010, 97% of Redpolls ringed were identified as belonging to the Lesser Redpoll sub-species and 3% to the Mealy Redpoll sub-species (nevertheless only 23% of Redpolls underwent sub-species identification). The small number of controls is insufficient to give an idea of the species' longevity or its ability change location.

Common Linnet (*Carduelis cannabina*)

Linotte mélodieuse / Kneu

Male Common Linnet. Armelle Guillo

Common Linnet												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
20-230					N N N N N N N N N N N N							

Common Linnet	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Common breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

The Linnet breeds throughout Europe, in Russia and Western Siberia as well as around the Mediterranean basin. The distribution of the species is irregular due to its particular ecological needs. The species' preferred biotope is steppe or bushy moor and heathland. Pairs settle down in loose colonies in semi-open habitats. It is a partial migrant: while some of the birds go to the coastline in search of a mild oceanic climate, others head for the Mediterranean basin or even Spain. Linnets nesting in open country are seemingly sedentary or erratic, wandering from place to place depending on the availability of food in these terrains. They flee heavy snowfalls however, which can cause winter movements. The species is essentially granivorous and very occasionally insectivore. The species explores more diversified habitats in the migration and winter periods. Flocks of Linnets roam, above all, farmland, open spaces, fallow land, wild grasslands, grassy woodland clearings and even backshores in search of seeds. It is a diurnal migrant.

WINTERING AND SPRING MIGRATION

As the species prefers semi-open to open habitats, it is difficult to catch by conventional means (vertical nets) and specialised catching devices (ground traps), little used in the region, must be employed. Birds that have wintered in the region are seen leaving Cap Gris-Nez from March to April and often in flocks of over one hundred birds. Nevertheless, it is difficult to distinguish them from local breeding pairs that are beginning to settle down in this period. In the region, a great number of Linnets are caught inland during the first two 10-day periods of April (more than 75% of catches) during their return

Common Linnet in moult showing new feathers. Simon Dutilleul

Females and juveniles do not show red on forehead or breast. Savina Bracquart

journey to their nesting sites. Birds ringed at this time in the region are not subsequently controlled before autumn (often in Belgium).

It may therefore be thought that they travel to more northerly regions and that they are caught in the region while making a brief migratory stopover (subsequent controls on the same bird between two ringing stations are almost zero).

AUTUMN MIGRATION

Linnets become very gregarious from the end of July and can then form flocks of several hundred birds. In autumn, passage starts during the last few days of August into mid-September, culminating in October and ending in mid-November. Linnets are rarely caught in dune shrubland habitats and do not visit bird tables. Linnets ringed in autumn in the region are regularly controlled in Belgium during winter or the following spring, which suggests a wintering zone further north or erratic behaviour for this member of the finch family. Other Linnets ringed at this time of year in the region migrate further southward towards the Iberian Peninsula and Morocco. The same observations have been made concerning English birds.

ADDITIONAL ANALYSIS

The small number of birds ringed in the region is sufficient to compile a migratory pattern for the Linnet. During the years 1957-1974 many more birds were ringed than now with (1150 birds ringed per year in the region). Today, this figure has fallen to less than 200 birds per year, probably due not only to a drop in bird numbers (breeding populations of the species have seen a decline of 68% on a national scale since 1989) but also due to a change in ringing practices. The habitats that it visits (wasteland, beaches) are no longer especially targeted except by the Cinq Tailles station in Thumeries (59). More than 80% of controls on birds are carried out in Belgium.

However,three suggest that birds winter on the Iberian peninsula:

- a bird ringed in October 1965 in the region was recovered 13 days later in the extreme south-west of Spain, which gives an average distance travelled of 124 kms. per day;
- a bird ringed August 1998 in the region was controlled in March 1999 in Central Spain;
- a bird ringed in spring 1965 in the region was controlled three years later in winter in Morocco.

This bird also holds the distance record of 1993 kms. between the ringing and recovery site. The oldest bird recorded was ringed 8 Aug. 1971 in the region and recovered on 28 Jan. 1982 at less than 20 kms. from its ringing site ten and a half years later!

Siskin (*Carduelis spinus*)

Tarin des aulnes / Sijs

Male Siskin. Édouard Dansette

Siskin												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
50-100												

Siskin	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Occasionnal breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

The Siskin has a discontinuous breeding range throughout Europe, with a permanent stronghold in Northern and Central Europe. It is a very occasional to rare nesting bird in the region, with only a few sites found in coniferous coastal woods. The Siskin is principally a migrant and wintering bird in Nord– Pas-de-Calais. It therefore inhabits a number of different environments: agricultural wasteland, parks, hedgerows, gardens and even bird tables. Nevertheless it has a strong preference for riparian forest, alder marshland and coniferious woodlands. Autumn and wintering movements often take the form of invasions, which may be followed by possible attempts to nest, mainly in favourable habitats (coniferous). But the few individuals observed are most often only summer visitors that do not breed or late migrants.

WINTERING AND SPRING MIGRATION

Wintering populations are of a fluctuating nature, with influxes recorded in certain years, as was the case in 1965-66 and 1985-86. The species is present throughout the winter period. In this period, the small number of controls carried out seems to suggest a certain nomadism for the species (some controls at a distance of 15-20 kms. from the ringing site). The species seems to favour feeding sites provided by man at the end of winter and in spring, probably in order to build up the necessary reserves for migration. At this time, the species can easily increase body weight from between 17-25% in the space of a few days. In spring, there is little detectable movement in ringing data for the species which migrates from the end of February-beginning of March to the beginning of May with a peak in

Juvenile male showing partly developed coverts. François Cavalier

Male and female Siskins. Frédéric Caloin

the first-10 day period of April. No bird has ever been ringed in the nesting season in the Nord– Pas-de-Calais region.

AUTUMN MIGRATION

The species is very difficult to catch except at feeding sites. In fact, the Siskin is often found in the canopy of tree-covered habitats and does not react to playback systems with its call. Only 50-100 birds are ringed each year in the Nord– Pas-de-Calais region, of which the majority (more than 80%) in winter. The first migrants are noted from the third 10-day period of September with the maximum number of catches in November. Catches between December and February concern wintering birds. Historical data (1970s-1980s), which has not been entered in the databases (still in paper form) shows that migrants and wintering birds in our region come from Scandinavia, Northern Germany and Russia and that some migrants may continue their migration as far as Spain or even Italy. There are no recent controls (post 1990) to confirm that these movements are still the case today.

ADDITIONAL ANALYSIS

Control/recovery data for this species is fragmentary, with only two foreign birds controlled in the region and twelve records of individuals ringed in the Nord– Pas-de-Calais region. The two most remarkable data entries concern:

- a bird ringed 10 Nov. 2010 in Neuville (59) and controlled 25 Feb. 2012 in the Czech Republic (820 kms.);
- a bird ringed 21 Feb. 1991 in Great Britain and controlled 1 Apr. 1991 in Pont-à-Vendin (62), 310 kms. away, during spring migration.

Recently (the data does not figure on the map), two birds ringed in the region in November 2012 were controlled in spring 2013: one in Germany (286 kms.) in March and the other one at the beginning of May in Norway (894 kms.).

The oldest data shows that the species can easily change migration route or wintering area from one year to the next, probably in response to available food resources.

Therefore, birds ringed in the region have been subsequently controlled the following winter in the north of Spain, Western Italy or more surprisingly, in Russian provinces to the east of the Black Sea.

The oldest bird controlled in the region was only aged 3.

Buntings

The Nord– Pas-de-Calais coastline is a regular home to five species of Buntings: the Snow Bunting and Lapland Longspur, which are inhabitual migrants and winter visitors, and the Yellowhammer, Corn Bunting and Reed Bunting, which are very common breeding birds in the region. Only the last species mentioned has been the subject of a ringing programme during migration in the region.

Reed Bunting (*Emberiza schoeniclus*)

Bruant des roseaux / Rietgors

Male Reed Bunting in breeding plumage. Frédéric Caloin

Reed Bunting												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
500-1 000				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N

Reed Bunting	
Bird Directive	-
Protected species	Yes
Nesting status in Nord–Pas-de-Calais	Fairly common breeder
National status	Common
Regional status	Regular migrant

GENERAL COMMENTS

Two sub-species of the Reed Bunting nest in France. The sub-species schoeniclus is the most common and has a large distribution area from Great Britain to the Urals. The second one, witherbyie, is established in the Western Mediterranean. As its name indicates, the Reed Bunting is above all a species found in humid zones (reed beds in particular), even if it tends to colonise other drier habitats (cultivated farmland for example). The bird, seen all the whole year round in Nord– Pas-de-Calais, is a partial migrant. The more southern populations being more sedentary. During migration and wintertime, this bunting visits diverse habitats such as dunes, farmland, bushes and reed beds. It forms roosting parties in flooded reed beds at the end of the day (dried out old reed beds are often abandoned). The species feeds on seed from water grasses as well as insects, small crustaceans and arthropods.

WINTERING AND SPRING MIGRATION

The species winters in most reed beds in the region. The fact that the species gathers in roosting parties makes it easy to catch and monitor site changes. Ringing makes it possible to monitor movements from one reed bed to another each year, whether or not the site is coastal or inland. Ringing data seems to indicate that nesting birds in the region move short distances south or westwards to winter (Yvelines, Sarthe, Gironde, Rhône-Alpes). The first migrants

Reed Bunting (probably female). Julien Boulanger

Male Reed Bunting in winter plumage. Simon Dutilleul

Mist nets set in roosting site. Simon Dutilleul

return to their nesting site around mid-March. The migration movement continues until the end of April for the most northerly migrants.

AUTUMN MIGRATION

Autumn migration starts from the end of September. Passage reaches its maximum in the second and third 10-day periods of October. Migration continues to the end of November. Depending on the superficial area, roosting parties of more than 100 birds may be seen at coastal or inland reed bed sites. The region is host to numerous birds in October from breeding populations in Sweden, Norway, Denmark, Germany and the Netherlands. Some birds continue their journey towards Spain or the South of France.

ADDITIONAL ANALYSIS

The greatest distance travelled belongs to a bird checked in the Audomarois marshlands (Romelaëre Pools) but ringed in Sweden more than 1500 kms. away. A bird ringed at Lac de Mison (Hautes-Alpes) in January 1989 flew northwards and was controlled just two days later in Nord– Pas-de-Calais, at a distance of 708 kms. from its ringing site (an average of 354 kms. per day). The oldest bird controlled in the region was over 7 years.

A few rare but regular marine birds

Among the species some are observed annually but in limited numbers making it difficult to discover any set migratory pattern. Others are observed even less frequently.

Great Northern Diver (*Gavia immer*)

Plongeon imbrin / Ijsduiker

Great Northern Diver. Julien Boulanger

The earlier history of the Great Northern Diver in the Strait of Dover is mainly base on unpublished data. Breeding in Canada and further east to Greenland and Iceland it mainly winters off the coasts of Brittany with some in the North Sea. Migrants essentially migrate in the Atlantic with the North Sea constituting a secondary route. There is a perceptible autumn passage but with small numbers in the order of 10-25 birds seen from year to year. Most are seen between the beginning of October and end of November. Wintering birds and spring passage only concern odd birds (1-5). The maximum seen being five on 11 November 2007 at the Clipon Jetty and the same number at Cap Gris-Nez on 27 November 2011.

White-billed Diver (*Gavia adamsii*)

Plongeon à bec blanc / Geelsnavelduiker

A breeding species nesting across the Arctic region from northern Russia eastwards to Alaska it has recently changed its wintering areas westwards thus increasing the number of records for the North Sea. This has resulted in a few individuals being seen on both sides of the Dover Strait in recent years. Since 2005 two have been seen in April at Dungeness in Kent and two at Cap Gris-Nez. In autumn there is only one record of the same bird being seen in November at both Cap Gris-Nez and Clipon Jetty.

Cory's Shearwater (*Caloectris diomedea*)

Puffin cendré / Kuhlspijlstormvogel

There are two sub-species of the Cory's Shearwater, the Mediterranean population (*Caloectris diomedia diomedia*) and the Atlantic population (*C. d. borealis*) which nests in Portugal and the Azores, Canaries and Madeira Islands. In some years a part of these populations moves further north and are seen in important numbers off the Irish coasts. Its presence in the North Sea remains accidental as its movements are only in the Atlantic. Birds seen off the coasts of Northern England, the Netherlands and Scandinavia appear to return northwards and re-enter the Atlantic by the north of Scotland. In consequence any movement through the Strait is limited to one to three birds annually between the end of July and mid-October.

Great Shearwater (*Puffinus gravis*)

Puffin majeur / Grote Pijlstormvogel

The Great Shearwater is a bird of the South Atlantic breeding in the Falkland Islands, Tristan da Cunha and Nightingale Island. As the Sooty Shearwater it migrates north in April and is seen in the North Atlantic from then until the end of October when it returns south to its breeding sites. In the North Atlantic it reaches the north-east coast of the United States, then Canada and Greenland before turning south in the eastern North Atlantic where it can be seen in large numbers off the Irish coasts. It is accidental in the North Sea and like the Cory's Shearwater returns to the Atlantic by the north of Scotland. It is exceptional in the southern North Sea and for the Strait of Dover there are less than ten records between the end of July and beginning of October, all from the Clipon Jetty.

Long-tailed Duck (*Clangula hyemalis*)

Harelde boréale / Ijseend

Long-tailed Duck. Guy Flohart

The Long-tailed Duck is a Holarctic species occurring in the arctic and sub-arctic regions. The Baltic Sea receives the majority of the European birds in winter. It is a species presumed to be in a steep decline as numbers in the Baltic Sea have fallen by 65%. Apart from this area the wintering areas are the North Sea and North Atlantic. Numbers further south are very small. The Strait of Dover only records a few individuals (one to five per season) each year. The migration periods seem to be from the end of March to end of May in spring and mid-October to mid-December in autumn. The maxima recorded on any one day are three birds on 21 March 1976 and 16 November 2008.

Goldeneye (*Bucephala clangula*)
Garrot à œil d'or / Brilduiker

Goldeneyes. Ludovic Scalabre

The Common Goldeneye is an Holarctic species which breeds throughout the woods of the north. It has a wide wintering area throughout Western Europe from inland lakes, reservoirs, etc., but the majority winter around the coasts of the Baltic and North Seas. In the Dover Strait the Goldeneye is very uncommon with 5–10 birds in autumn and 5-20 in spring. In autumn there are a few records for October but the best period is the first 20 days of November, with at best several birds. The highest number recorded in any one day is only 16 birds on 23 November 1983. There are a few more records for the spring with the main concentration between the end of February and mid-March and concern a few more birds. The maximum birds recorded being 28 on 6 March 2011.

Black Guillemot (*Cepphus grylle*)
Guillemot à miroir / Zwarte Zeekoet

The Black Guillemot has a wide range in the Arctic regions together with the coasts of the Baltic Sea, Western Scandinavia and the northern British Isles. It does not perform major migrations and is usually found near to the breeding areas in winter. The species is rare at the two sites with a total of ten single birds being recorded since 1995. All are from the period mid-September to end of December with one outside this time, namely at the end of August.

Atlantic Puffin (*Fratercula arctica*)
Macareux moine / Papegaaiduiker

The Puffin occurs in favourable areas of the North Atlantic from the east coast of North America and then eastwards to the arctic regions of Russia at Novaya Zemlya. To the north it is found in Spitzbergen and then southwards to the British Isles with a small population in Brittany. In winter it is pelagic in that it is found over a vast area of the North Atlantic as far south as Spain and even North Africa. It is also present in some numbers in the Mediterranean Sea. In the Strait of Dover it is seen in very small numbers from early October to early December with annual numbers between one and ten. Also, there are a few records during the winter period when it is likely that it is present in very small numbers.

Other seabird species are considered very exceptional. These are often birds seen a long way from their normal ranges. Most of these records refer to periods of extreme storms. They are birds which are a dream for many seawatchers and which have only been identified once or twice!

Of the birds listed below, those that have been 'claimed' have not been submitted to the French Rare Birds Committee:

Black-browed Albatross.....1 claimed at Cap Gris-Nez and 2 at the Clipon Jetty
Zino's/Fea's Petrel.....2 claimed at Cap Gris-Nez
Maderian Storm Petrel.....1 claimed at Clipon Jetty
Frigatebird sp. .....1 claimed at Clipon Jetty
Macaronesian Shearwater .....2 records at Cap Gris-Nez and 7 records at Clipon Jetty
Ross's Gull.....2 records at Clipon Jetty
Bridled Tern.....2 records at Cap Gris-Nez

A few rare but regular migrant passerines

These species are especially sought by ornithologists. Data on these birds largely depends on observation or catching efforts made in the region. Among the species, three are particularly associated with the Cap Gris-Nez sector that provides most regional data.

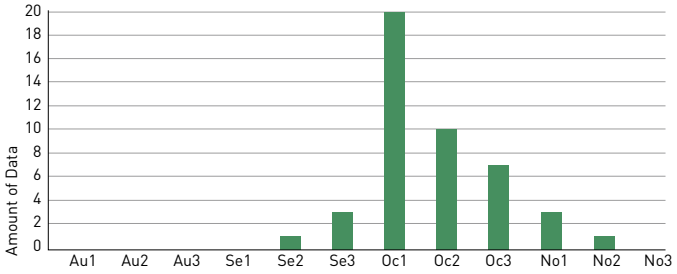
Barred Warbler
(*Sylvia nisoria*)
Fauvette épervière / Sperwergrasmus

Barred Warbler. Adeline Blin

The nearest populations of this large warbler are located in Germany and migrate towards East Africa to pass the winter. The species is regularly observed each autumn in Western Europe. Fifteen were caught between 2003-2010 in the region (maximum of 5 birds in 2006). In that same period, two visual observations were accepted by the National Rare Birds Committee (CHN). The species inhabits shrubland and in particular extended dunes with sea buckthorn, a difficult habitat to monitor. This probably explains why there is little visual data gathered for the species. All observations concern young birds between the second 10-day period of August and the second 10-day period of October. More than 80% of regional data was collected on the coastline between Wissant and Wimereux (62). The sector is probably the second most favourable one in France (after Ushant Island) to observe the species in the migration period.

Yellow-browed Warbler
(*Phylloscopus inornatus*)
Pouillot à grands sourcils / Bladkoninkje

Yellow-browed Warbler. Guy Flohart



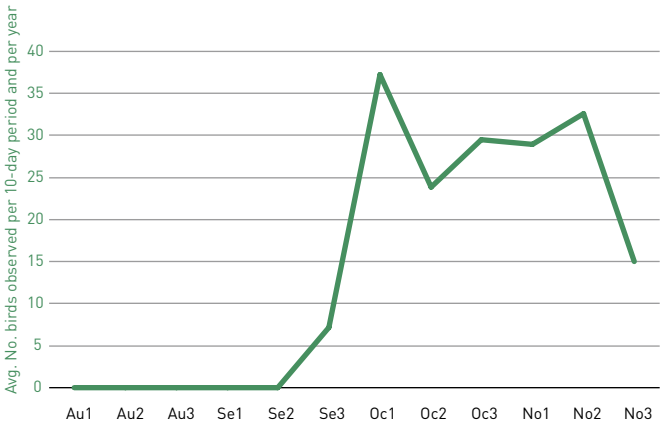
Distribution of sightings of the Yellow-browed Warbler in the Nord– Pas-de-Calais region 2006-2010

This small warbler nests in Siberia and winters in South-East Asia (China, Malaysia...). The species is nevertheless regularly seen in Western Europe as far south as Portugal. The reasons for this westerly migration are not really known. Between 2006-2010, 48 regional sightings were recorded including nine caught. These sightings are centred around two zones: the Dunkirk coastline and Cap Gris-Nez, two sectors particularly well-monitored by regional ornithologists. Nord– Pas-de-Calais is the second largest area for providing records for the species in France (after Ushant Island).

Lapland Longspur
(Calcarius lapponicus)

Bruant lapon / Ijsgors

Lapland Longspur. Frédéric Caloin



Lapland Longspur - post-breeding migration (autumn)

This northern Bunting nests from Scandinavia to Siberia. A part of the Scandinavian populations arrives in France to winter from the Nord– Pas-de-Calais to the Brittany coast. It visits, with other nordic passerines (Snow Bunting, Shore Lark), open coastal areas. But it is above all stubble fields that play host to the densest flocks, often in the company of the Skylark. The best site in the region is around Cap Gris-Nez. During autumn 2007, more than 300 birds were observed there but most of the time, the figure is between 10–50 birds per year. The first arrivals are noted in the third 10-day period of September and the maximum is reached between the first 10-day period of October and the second 10-day period of November. Numbers then fall in the third 10-day period of November, which may mean that some of the birds fly south or to Great Britain as suggested by the recovery of a bird in December in Wales (Great Britain), which had been ringed in October of the same year in Santes, a suburb of Lille (59). In spring, the last birds are noted at the beginning of April.

The Nord– Pas-de-Calais region is geographically well-located to receive these rare migrants. The number of records submitted to the National Rare Bird Committee of sightings of these birds in France is ample proof. Between 2006-2010, 99 records were accepted by the CHN, an average of 20 per year.

In the last ten years, an increase in ringing and observation efforts along the coastline has made it possible to collect and confirm the first regional records for a number of species of passerine (Paddyfield Warbler, Sykes's Warbler, Red-eyed Vireo, Blyth's Reed Warbler, Radde's Warbler).

Bar Charts of Migrants on the coast of the Pas-de-Calais

Red-throated Diver

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
2000-5000/1000-4000	ST											ST

Black-throated Diver

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
400-1100/200-800												

Great crested Grebe

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
300-1400/150-600												

Red-necked Grebe

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
5-20/20-80												

Black-necked Grebe

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
5-25/2-15												

Slavonian Grebe

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
5-20/10-20												

Manx Shearwater

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
5-40/100-1200												

Balearic Shearwater

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
0-2/100-700												

Sooty Shearwater

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
0/200-2800												

Leach's Storm Petrel

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
0/0-50												

European Storm Petrel

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
0-70/0-2												

Northern Fulmar

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
NC/200-2000												

Northern Gannet

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
10000-30000/30000-90000												

Great Cormorant

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
NC												

Shag

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
NC												

Brent Goose

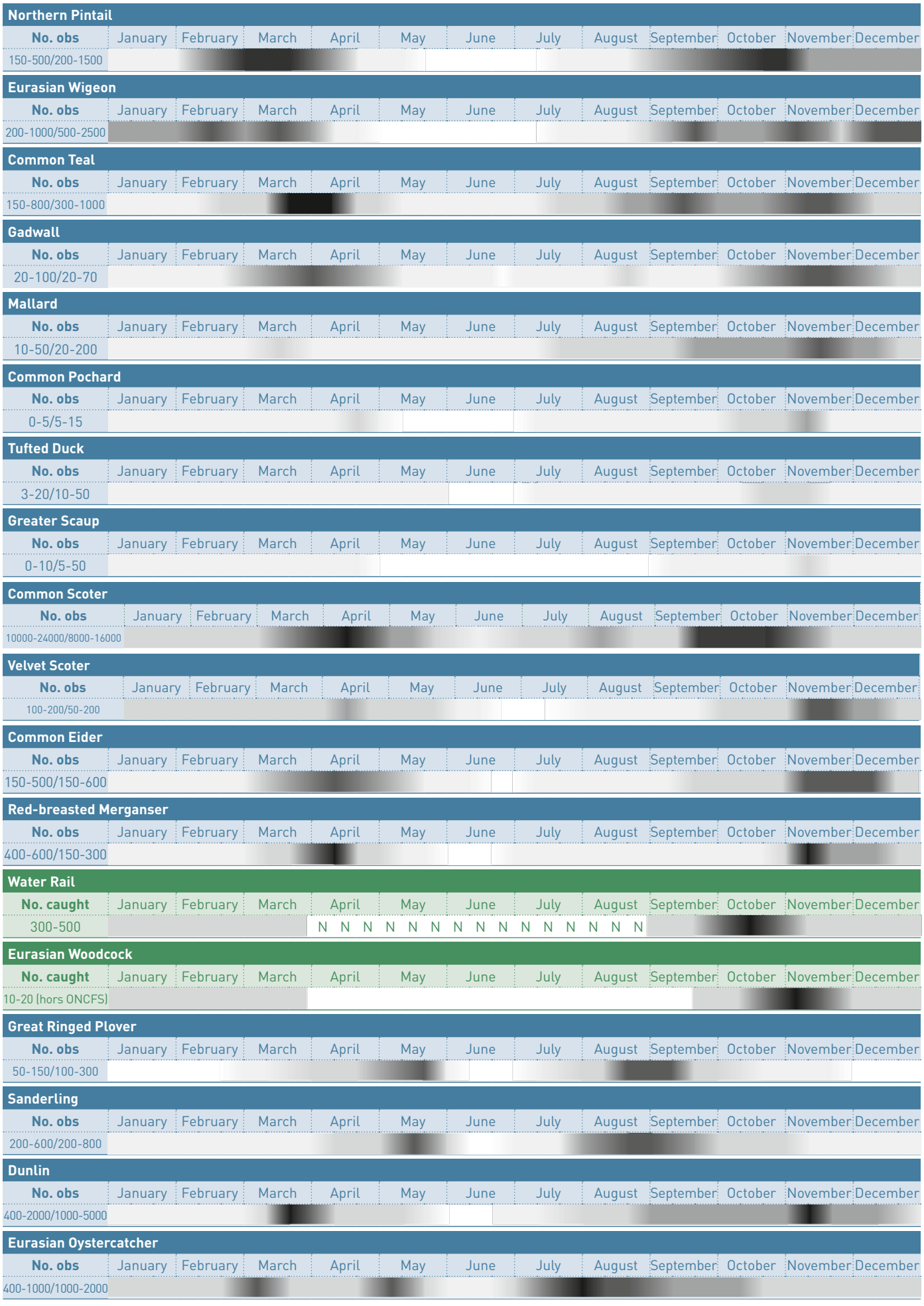
No. obs	January	February	March	April	May	June	July	August	September	October	November	December
4000-15000/5000-20000												

Shelduck

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
NC/400-1400												

Northern Shoveler

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
250-1000/150-700												


Northern Pintail
No. obs
January February March April May June July August September October November December
150-500/200-1500
Eurasian Wigeon
No. obs
January February March April May June July August September October November December
200-1000/500-2500
Common Teal
No. obs
January February March April May June July August September October November December
150-800/300-1000
Gadwall
No. obs
January February March April May June July August September October November December
20-100/20-70
Mallard
No. obs
January February March April May June July August September October November December
10-50/20-200
Common Pochard
No. obs
January February March April May June July August September October November December
0-5/5-15
Tufted Duck
No. obs
January February March April May June July August September October November December
3-20/10-50
Greater Scaup
No. obs
January February March April May June July August September October November December
0-10/5-50
Common Scoter
No. obs
January February March April May June July August September October November December
10000-24000/8000-16000
Velvet Scoter
No. obs
January February March April May June July August September October November December
100-200/50-200
Common Eider
No. obs
January February March April May June July August September October November December
150-500/150-600
Red-breasted Merganser
No. obs
January February March April May June July August September October November December
400-600/150-300
Water Rail
No. caught
January February March April May June July August September October November December
300-500
N N N N N N N N N N N N N N N
Eurasian Woodcock
No. caught
January February March April May June July August September October November December
10-20 (hors ONCFS)
Great Ringed Plover
No. obs
January February March April May June July August September October November December
50-150/100-300
Sanderling
No. obs
January February March April May June July August September October November December
200-600/200-800
Dunlin
No. obs
January February March April May June July August September October November December
400-2000/1000-5000
Eurasian Oystercatcher
No. obs
January February March April May June July August September October November December
400-1000/1000-2000

Eurasian Curlew

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
100-250/100-400												

Bar-tailed Godwit

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
1500-4000/1000-6000												

Whimbrel

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
300-900/400-1500												

Grey Plover

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
300-1500/200-1000												

Red Knot

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
500-2000/300-1500												

Common Redshank

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
10-60/200-1400												

Common Greenshank

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
0-5/10-150												

Grey Phalarope

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
0-1/5-20												

Arctic Skua

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
100-300/800-2000												

Pomarine Skua

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
5-20/100-1000												

Long-tailed Skua

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
–/30-150												

Great Skua

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
80-300/100-2800												

Kittiwake

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
NC/10000-40000												

Little Gull

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
5000-15000/6000-10000												

Sabine's Gull

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
–/10-40												

Lesser Black-backed Gull

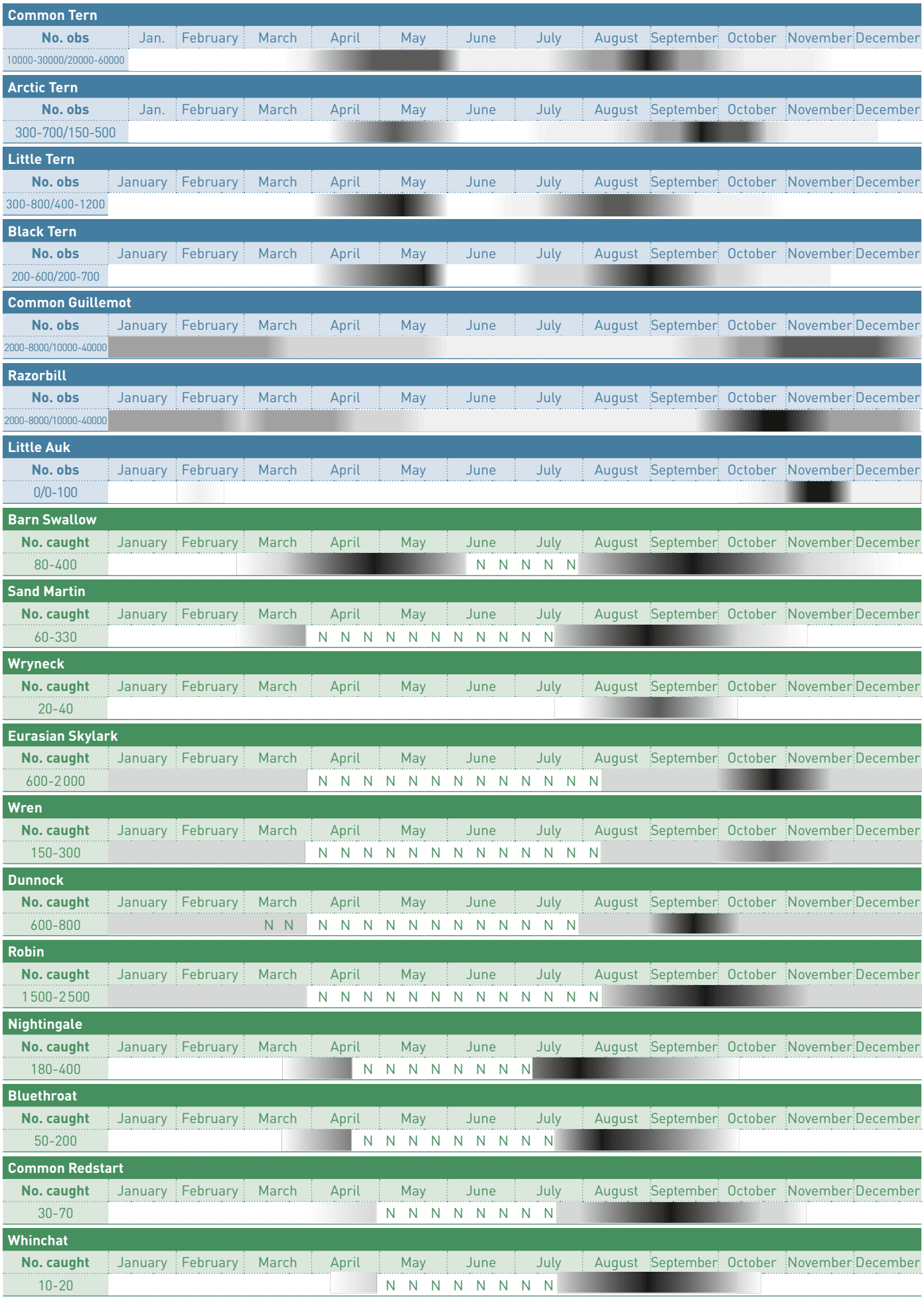
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
50-350				N	N	N	N	N	N	N	N	N

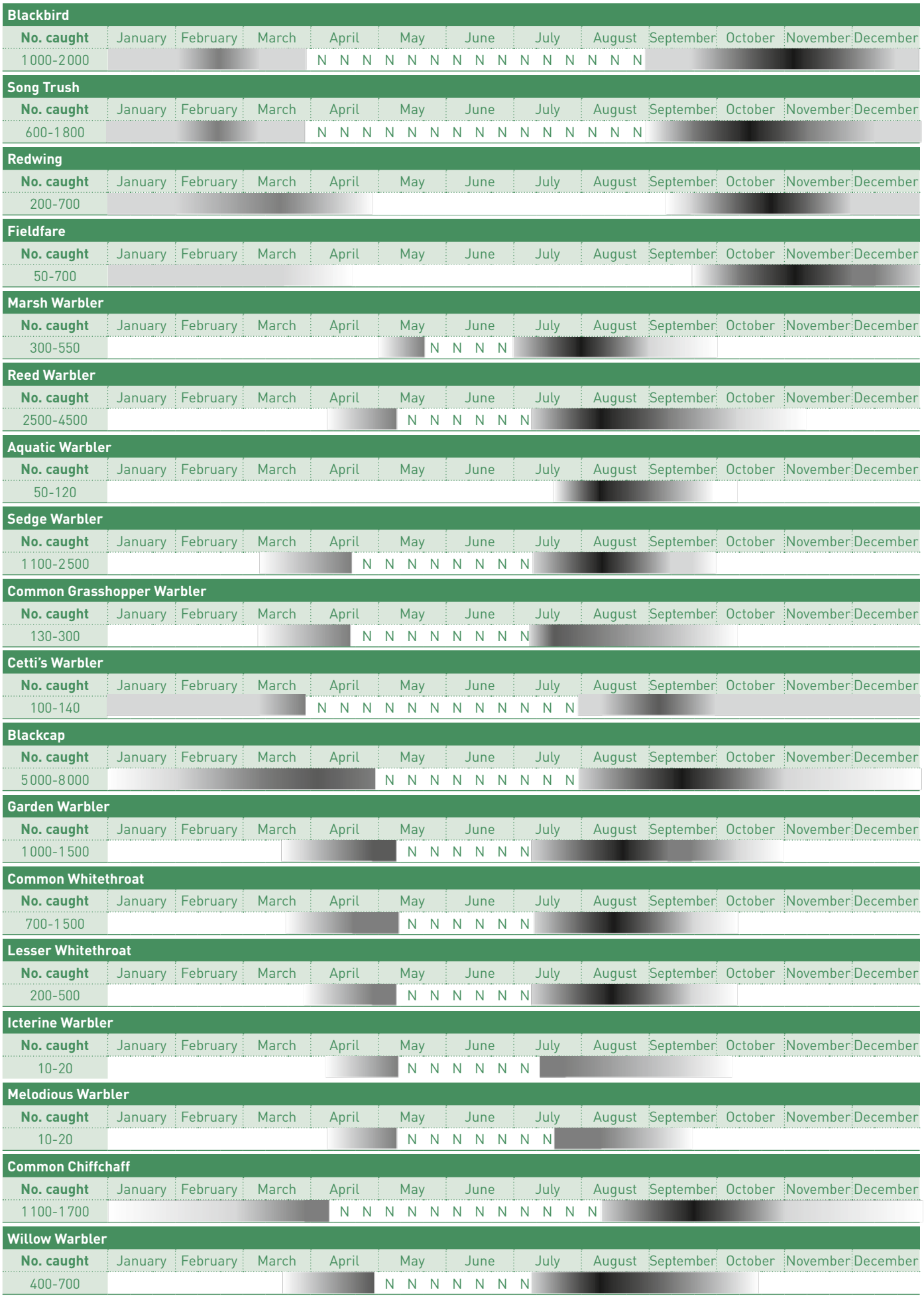
Mediterranean Gull

No. caught	January	February	March	April	May	June	July	August	September	October	November	December
300-700					N	N	N	N	N	N	N	N

Sandwich Tern

No. obs	January	February	March	April	May	June	July	August	September	October	November	December
5000-14000/13000-20000												


Common Tern
No. obs
Jan. February March April May June July August September October November December
10000-30000/20000-60000
Arctic Tern
No. obs
Jan. February March April May June July August September October November December
300-700/150-500
Little Tern
No. obs
January February March April May June July August September October November December
300-800/400-1200
Black Tern
No. obs
January February March April May June July August September October November December
200-600/200-700
Common Guillemot
No. obs
January February March April May June July August September October November December
2000-8000/10000-40000
Razorbill
No. obs
January February March April May June July August September October November December
2000-8000/10000-40000
Little Auk
No. obs
January February March April May June July August September October November December
0/0-100
Barn Swallow
No. caught
January February March April May June July August September October November December
80-400
N N N N N
Sand Martin
No. caught
January February March April May June July August September October November December
60-330
N N N N N N N N N N N
Wryneck
No. caught
January February March April May June July August September October November December
20-40
Eurasian Skylark
No. caught
January February March April May June July August September October November December
600-2000
N N N N N N N N N N N N N
Wren
No. caught
January February March April May June July August September October November December
150-300
N N N N N N N N N N N N N
Dunnock
No. caught
January February March April May June July August September October November December
600-800
N N N N N N N N N N N N N N
Robin
No. caught
January February March April May June July August September October November December
1500-2500
N N N N N N N N N N N N N
Nightingale
No. caught
January February March April May June July August September October November December
180-400
N N N N N N N N
Bluethroat
No. caught
January February March April May June July August September October November December
50-200
N N N N N N N N N
Common Redstart
No. caught
January February March April May June July August September October November December
30-70
N N N N N N N N
Whinchat
No. caught
January February March April May June July August September October November December
10-20
N N N N N N N N


Blackbird
No. caught
January February March April May June July August September October November December
1 000-2 000
N N N N N N N N N N N N N N
Song Trush
No. caught
January February March April May June July August September October November December
600-1 800
N N N N N N N N N N N N N N
Redwing
No. caught
January February March April May June July August September October November December
200-700
Fieldfare
No. caught
January February March April May June July August September October November December
50-700
Marsh Warbler
No. caught
January February March April May June July August September October November December
300-550
N N N N
Reed Warbler
No. caught
January February March April May June July August September October November December
2500-4500
N N N N N N
Aquatic Warbler
No. caught
January February March April May June July August September October November December
50-120
Sedge Warbler
No. caught
January February March April May June July August September October November December
1 100-2 500
N N N N N N N N
Common Grasshopper Warbler
No. caught
January February March April May June July August September October November December
130-300
N N N N N N N N
Cetti's Warbler
No. caught
January February March April May June July August September October November December
100-140
N N N N N N N N N N N N
Blackcap
No. caught
January February March April May June July August September October November December
5 000-8 000
N N N N N N N N N
Garden Warbler
No. caught
January February March April May June July August September October November December
1 000-1 500
N N N N N N
Common Whitethroat
No. caught
January February March April May June July August September October November December
700-1 500
N N N N N N
Lesser Whitethroat
No. caught
January February March April May June July August September October November December
200-500
N N N N N N
Icterine Warbler
No. caught
January February March April May June July August September October November December
10-20
N N N N N N
Melodious Warbler
No. caught
January February March April May June July August September October November December
10-20
N N N N N N N
Common Chiffchaff
No. caught
January February March April May June July August September October November December
1 100-1 700
N N N N N N N N N N N N
Willow Warbler
No. caught
January February March April May June July August September October November December
400-700
N N N N N N N

Common Firecrest												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
100-160												

Goldcrest												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
80-500				N	N	N	N	N	N	N	N	

Spotted Flycatcher												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
10-20						N	N	N	N			

Pied Flycatcher												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
10-20												

Blue Tit												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
600-2200				N	N	N	N	N	N	N	N	

Great Tit												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
700-2 100				N	N	N	N	N	N	N	N	

Coal Tit												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
0-1 000												

Commun Starling												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
100-300				N	N	N	N	N	N	N	N	

House Sparrow												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
220-860				N	N	N	N	N	N	N	N	

Tree Sparrow												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
20-50				N	N	N	N	N	N	N	N	

Common Chaffinch												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
240-500				N	N	N	N	N	N	N	N	

Brambling												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
10-250												

Greenfinch												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
500-1 000				N	N	N	N	N	N	N	N	

Goldfinch												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
50-350					N	N	N	N	N	N	N	

Common Redpoll												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
20-370												

Common Linnet												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
20-230					N	N	N	N	N	N	N	

Siskin												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
20-80												

Reed Bunting												
No. caught	January	February	March	April	May	June	July	August	September	October	November	December
500-1 000				N	N	N	N	N	N	N	N	

Pomarine Skua and Kittiwake with the background of the White Cliffs of Dover. Frédéric Caloin

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An understanding of bio-diversity is essential to the better preservation of the environment. The regional naturalistic groups have been working for several decades in a study of the bio-diversity and since the beginning of the 1990s have been assisted by the public authorities.

Studying birds is a subject which not only requires special knowledge but for a study of migration a deep passion. This book aims at studying the subject by compiling and analyzing the records collected by the members of the regional groups, little having been published before. The aim has been to bring together all the records of sea-watching, ringing and land-bird migration for many of the species which migrate through the Strait of Dover, especially in the area of the Parc Régional and the wider area of the region Nord – Pas-de-Calais.

The wish of all the contributors of this first book is that it will help to spread their knowledge to a larger public, whether they have ornithological or other interests, and who wish to know more of this exciting annual phenomenon.

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