
REPORT OF THE MIGRATION MONITORING AT LEUCATE 2018



Writer of the report: Sébastien Roques

“Leucate is an awesome site, which deserves to be reborn from its ashes.” The text above is taken from the book *La France à tire-d'aile* (2005) from Philippe J. Dubois & Elise Rousseau, Delachaux et Niestlé.

INTRODUCTION

In 2018, with the creation of a new association called Med Migration, an attempt was made to re-establish, initially on a voluntary basis, the migration monitoring on the Leucate cliff.

For those not familiar with the site, the Leucate cliff monitoring site is located at the seaside at the end of a limestone headland. The monitoring site offers a great panoramic view with the Corbières to the west, the Albères massif and the Spanish border to the south. Nearer, the lagoon of Salses-Leucate and the beach see hundreds of thousands of birds passing through. To the east is the Mediterranean Sea (see photo below).



The monitoring of this site was set up in the 1980s to fight against local poaching of the honey buzzard during the month of May. However, it has proved to be one of the major sites for spring migration monitoring in France. Birds that have crossed the Spanish border to the south regularly face a northwesterly wind called Tramontane in spring, which pushes them back towards the coast and forces them to fly at lower altitudes. For other species, including many passerines, even without wind, the beach represents their traditional migration path. Thus, even when there is no north-westerly wind, this site can capture a significant flow of passerines. Raptors tend to fly more inland when the wind is absent or coming from the east.

PROTOCOL AND DATA INPUT

Concerning the observation and counting protocol, birds were counted one after the other (no flow estimates). Regarding the detection and counting protocol for small passerines (fringillidae, wagtails, swallows and others), the birds had to be visible to the naked eye and then identified using binoculars. Thus during the days of intense migration, many groups were visible migrating over the lagoon using binoculars or scopes but were not counted. For raptors and other medium to large birds, there is no special detection protocol.

The data input was carried out directly in the field using the Trektellen app. The observations were synchronized every evening directly on the trektellen.nl site thanks to the app.

Concerning the weather, the site of Leucate has the chance to be very close to a weather station with hourly data, it is therefore not necessary to proceed to this during the observation.

MONITORING EFFORT

The availability of observers being only partial, the site could not be monitored daily, nor every day theoretically favourable (Wind from northwest). Thus there were 35 days of presence on the site for 196 hours of monitoring.

Due to a purely voluntary monitoring and capricious weather, the monitoring days were unevenly distributed throughout the season (see table below) and not all potentially favourable days could be monitored.

MONTH	NUMBER OF DAYS	NUMBER OF HOURS
JANUARY	3	3
FEBRUARY	6	30
MARCH	14	72
APRIL	3	19
MAY	9	72
TOTAL	35	196

COUNTS

FRINGILLIDAE

The diversity and the number of fringillidae passing through this site is important with notably a flagship species for the site: the european serin. With a total season of 24986 and a daily record of 8563 on the 31 of March 2018. The latter is probably a daily European or even world record for the species in migration. The chaffinch also brings nice numbers with a total season of 116865 birds and a top day of 32746 birds on the 27 of March 2018. The other fringillidae counted in large numbers were the common linnet and the goldfinch with 1841 and 1699 birds respectively as seasonal total. Low numbers for the skylark with only 164 birds. Some interesting totals also for the reed bunting and the siskin. All of this is summarized in the table below.

SPECIES	TOTAL SEASON	TOP DAY
CHAFFINCH	116865	32746
EUROPEAN SERIN	24986	8563
EUROPEAN LINET	1841	391
GOLDFINCH	1699	380
REED BUNTING	508	93
BRAMBLING	300	144
EURASIAN SISKIN	243	112
SKYLARK	164	95
EUROPEAN GREENFINCH	145	40
WOODLARK	22	12
HAWFINCH	16	8
CORN BUNTING	4	3
CIRL BUNTING	2	-
CITRIL FINCH	2	-
ROCK BUNTING	1	-
EURASIAN BULLFINCH	1	-
ORTOLAN BUNTING	1	-

OTHERS PASSERINES AND TRANSSAHARIANS BIRDS

Concerning the other passerines the results are very heterogeneous depending on the species. The Leucate site is reputed to be a flagship site for the common swift and swallows, and even if these species arrived late and in numbers, the numbers were not up to our expectations. We could thus count 59563 common swifts with a top day at 15289. Concerning the house martin 11708 birds with a top day at 5070 on the 16 of May 2018 (very late). For the crag and the sand martin, 1111 and 368 birds respectively. Concerning the red-rumped swallow a total of 28 birds. We finish finally with the barn swallow, which even if it did not bring more important numbers, gratified us with an awesome day with 27412 birds in less than 2h on May 11 for a total season of 40595 birds.

Concerning wagtails, it is the yellow one which was the most present with 4517 birds against 3377 for the white wagtail. The grey wagtail is as usual much more rare in migration with 69 birds during the season.

Regarding pipits, we reach almost 1000 meadow pipits with a total of 965 birds. The tree pipit was also rather elusive with only 42 birds. Finally, 13 tawny pipits and 3 red-throated pipits were counted.

Average year for turdidae with only 480 mistle thrushes, 270 song thrushes and 3 fieldfares. We were nevertheless surprised to observe two ring ouzels in migration.

For the European bee-eater a season not so bad given the partial presence of observers, with 5587 birds and a top day at 2422 birds on the 16 May 2018.

In terms of diversity, we were lucky to observe in migration the pied flycatcher, the common redstart and the northern wheatear for the rather unusual birds in diurnal migration. In addition, some rather

surprising things with a zitting cisticola possibly in migration or dispersal on May 16 and a black woodpecker in migration on March 26, 2018.

SPECIES	TOTAL SEASON	TOP DAY
COMMON SWIFT	59563	15289
PALLID SWIFT	31	14
ALPINE SWIFT	138	32
BARN SWALLOW	40595	27412
HOUSE MARTIN	11708	5070
CRAG MARTIN	1111	451
SAND MARTIN	368	113
RED-RUMPED SWALLOW	28	8
YELLOW WAGTAIL	4517	1231
WHITE WAGTAIL	3377	1050
GREY WAGTAIL	69	25
MEADOW PIPIT	965	361
TREE PIPIT	42	16
TAWNY PIPIT	13	3
RED-THROATED PIPIT	3	2
MISTLE THRUSH	480	212
SONG THRUSH	270	177
FIELDFARE	3	-
RING OUZEL	2	2
COMMON STARLING	12369	6608
BLUE TIT	223	111
GREAT TIT	5	5
COAL TIT	11	7
COMME FIRECREST	3	2
CHIFFCHAFF	1	-
WILLOW WARBLER	1	-
EUROPEAN BEE-EATER	5587	2422
GOLDEN ORIOLE	15	5
EUROPEAN ROLLER	1	-
EURASIAN HOOPOE	6	2
BLACK WOODPECKER	1	-
COMMON CUCKOO	1	-
GREAT SPOTTED CUCKOO	1	-
NORTHERN WHEATEAR	3	-
EUROPEAN PIED FLYCATCHER	7	4
BLACK REDSTART	25	11
COMMON REDSTART	1	-
DUNNOCK	23	22
ZITTING CISTICOLA	1	-

RAPTORS AND SOARING BIRDS

Concerning the raptors, it is a very contrasted season which took place. Seasonal numbers of raptors are very variable for sites such as Leucate, where birds are only seen on the coast when the northwest wind is strong enough. The month of April having cruelly lacked north-westerly wind, some numbers of

raptors are thus very low. However Leucate lived up to its reputation with an incredible day for the honey buzzard with a total of 11232 birds on the 16 May 2018 for a total season of 15326 birds. This day is probably a daily record in France for the species unless higher daily numbers were observed in Leucate in the 1980s and 1990s. For the black kite, a mixed year with a beautiful day with more than 645 birds but a low season total of 1438 individuals. Its cousin the red kite, is much rarer very close to the sea with only 4 birds counted. Concerning the osprey, 25 birds passed through the site, most of them harassed by the many local gulls. About harriers, given the lack of wind in April, a not so bad year for the marsh harrier with 785 birds and a really nice day with 366 individuals on March 27, 2018. About the montagu's harrier it is rather catastrophic, only 7 birds counted. Several hypotheses to this, first of all a high mortality in North Africa due to severe weather blockages (sandstorm) for apparently almost 3 weeks in some areas. It appears that many marked birds in western Europe have been found dead or have even turned around in the face of these weather conditions. It is also possible that many birds have passed further east this year to circumvent these poor conditions, some sites such as the Strait of Messina have recorded more than 30% more montagu's harriers than last spring and important numbers have also been observed in Corsica along the eastern coast on the site of Prunete (Caucal & Rogeau 2018). For the pallid harrier, we had the chance to observe 3 on the site this year including 2 adult males.

For falcons, as usual a nice diversity with 7 species of which the most common is the common kestrel with 527 birds (rather low total to be compared once again with the lack of northwest wind in April). Other falcon species are detailed in the table below.

As for the little surprises, a griffon vulture sits at the bottom of the spot on the chimney of a house and an large eagle (most probably a spotted one) passed far inland.

For storks, only 1866 white storks and 11 black storks during the season. The low number of white storks is largely explained by the fact that the presence of observers was very low before the 1 of March, when one or more flocks of white storks pass almost daily.

SPECIES	TOTAL SEASON	TOP DAY
HONEY BUZZARD	15326	11232
BLACK KITE	1438	645
RED KITE	4	-
OSPREY	25	9
COMMON BUZZARD	10	4
SHORT-TOED SNAKE EAGLE	2	-
GRIFFON VULTURE	1	-
LARGE EAGLE SP	1	-
SPARROWHAWK	487	236
MARSH HARRIER	785	366
MONTAGU'S HARRIER	7	4
HEN HARRIER	3	2
PALLID HARRIER	3	-
COMMON KESTREL	527	103
LESSER KESTREL	1	-
EURASIAN HOBBY	38	15
RED-FOOTED FALCON	8	5
PEREGRINE FALCON	6	2
MERLIN	5	2
ELEONORA'S FALCON	1	-
SHORT-EARED OWL	1	-

WHITE STORK	1866	411
BLACK STORK	11	3

SHOREBIRDS, SEABIRDS, DUCKS AND HERONS

Due to its coastal situation, the Leucate site also sees a good diversity of water birds. Among gulls, the most represented species is the black-headed gull with 1486 individuals during the season. The mediterranean gull is also quite common with 185 birds counted. This year saw beautiful numbers of lesser black-backed gulls for the site (nothing compared to the Atlantic) with 639 birds, including one day at 504 individuals on the 28 of March 2018. Unfortunately, we did not monitor days with sea winds, which could have given much more significant results.

Concerning the common crane, beautiful flocks observed at sea on the 2 of March 2018 with nearly 1013 birds. For the herons, not big numbers but a good diversity of birds.

SPECIES	TOTAL SEASON	TOP DAY
BLACK-HEADED GULL	1486	589
MEDITERRANEAN GULL	185	101
BLACK-LEGGED KITTIWAKE	2	-
LESSER BLACK-BACKED GULL	639	504
COMMON STERN	2	2
GULL-BILLED TERN	7	6
WHISKERED TERN	6	5
GREY HERON	62	10
PURPLE HERON	4	2
NIGHT HERON	7	7
GREAT EGRET	26	13
LITTLE EGRET	69	23
SPOONBILL	9	4
GLOSSY IBIS	20	11
GREATER FLAMINGO	43	43
NORTHERN SHOVELER	61	59
PIN-TAILED DUCK	10	6
GARGANEY	3	3
BARNACLE GOOSE	4	4
GREAT CORMORANT	2254	737
COMMON CRANE	1247	1013
NORTHERN LAPWING	1013	934
EURASIAN OYSTERCATCHER	4	2
PIED AVOCET	7	7
GOLDEN PLOVER	1	-
COMMON RINGED-PLOVER	1	-
EURASIAN CURLEW	6	5
RUDDY TURNSTONE	9	5
DUNLIN	5	5
COMMON SNIPE	1	-
COMMON SANDPIPER	1	-
GREEN SANDPIPER	5	3
COMMON REDSHANK	2	2
COMMON GREENSHANK	6	4

COLUMBIDAE

We thus conclude these details of the counts with the columbidae. A passage far from being exceptional for the wood pigeon, with 5720 individuals including one day at 2955 on the 28 of March 2018. For the stock dove a total of 86 birds. Concerning the turtle dove, it is really dramatic, only 10 birds observed during migration.

SPECIES	TOTAL SEASON	TOP DAY
WOOD PIGEON	5720	2955
STOCK DOVE	86	47
TURTLE DOVE	10	2
COLLARED DOVE	2	2

CONCLUSION

First of all, a huge thank you to all the volunteer observers who came to help us to try to make the maximum number of days of monitoring, 35 days and 196 hours is a few but thanks to this exceptional site nearly 322 000 birds were counted this season with 123 different species in migration (stopover birds on the site were not counted). For a summary table of all this see :

<http://www.trektellen.nl/site/totals/2035/201>

However, there was a general delay for transsaharian species this year for peak periods (a trend noted elsewhere in Europe).

This season ended with the pride of having highlighted the exceptional potential of the Leucate site for the spring migration and with the disappointment of not having carried out a complete monitoring, which is why **the project for 2019 is to raise enough funds to be able to carry out a complete monitoring.**

List of observers : Antoine Auricoste, Claude Balon, Anthony Chaillou, Xabi Darthayette, Elisa Daviaud, Dimitri, Jean-Michel Dramard, Jérémy Dupuy, Geoffrey Grezes, Hichem, Antoine Leoncini, Maskwa, Patrick Massé, Sébastien Mauvieux, Philippe & Marie-rose Meyer, Odin, Cédric Peignot, Emile Poncet, Jérôme Prunier, Sylvain Reyt, Sébastien Roques, Louis Sallé, Gérard Six, Stéphane Tillo, David Thibault, Melchior Viallet, Théo Vivensang, Stanislas Wroza & 9 autres observateurs. En espérant n'oublier personne.

I let this report ending with some photos captured on the site with sometimes incredible lights. News will be online on the Facebook page of the association (<https://www.facebook.com/MedMigration/>) and on twitter. See you soon and I hope for a complete monitoring.





Photos Sébastien Roques