REPORT OF THE MIGRATION MONITORING AT LEUCATE 2019





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"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

Following the relaunch of the site in 2018, 2019 saw many monitoring days, although fewer than the previous year due to the availability of observers.

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 31 days of presence on the site for 170 hours of monitoring. Less than 2018.

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
FEBRUARY	2	6
MARCH	15	75
APRIL	8	49
MAY	6	40
TOTAL	31	170

COUNTS

FRINGILLIDAE

The diversity and the number of fringillidae passing through this site is important with a flagship species for the site: the european serin. With a total season of 18 191 and a daily count of 3210 on the 15 of march 2019. Less than 2018 where there was 28 000 individuals. Lower number of chaffinches also with 76855 individuals in 2019 against 116 000 in 2018.

Concerning the linnet and the goldfinch, counts are higher than in 2018 with 3061 linnets and 1948 goldfinches.

SPECIES	TOTAL SEASON	TOP DAY
CHAFFINCH	76855	10344

EUROPEAN SERIN	18191	8563
EUROPEAN LINET	3061	620
GOLDFINCH	1948	462
GREENFINCH	309	73
REED BUNTING	182	67
BRAMBLING	300	144
EURASIAN SISKIN	93	26
SKYLARK	76	24
WOODLARK	14	7
CORN BUNTING	2	3
CIRL BUNTING	3	-
COMMON CROSSBILL	2	-
ROCK BUNTING	1	-

OTHERS PASSERINES AND TRANSSAHARIANS BIRDS

Leucate is known as a flagship site for swallows and swifts. This year, there are nearly 4 times fewer barn swallows (about 12 000 individuals). For the house martin 8156 birds counted compared to 11 708 in 2018. For the black swift, the opposite trend, 70 724 birds in 2019 compared to 59 000 in 2018. These differences are probably due to the heterogeneous presence of observers on the site. Still, note a day with 15 red-rumped swallows. Which is probably a daily record for the site.

Concerning the wagtails, unlike in 2018 where the yellow wagtail was the most present, in 2019 there were 3893 white wagtails and 3679 yellow wagtails. The grey wagtail reaches a total of 47 individuals.

Concerning pipits, an excellent year for the meadow pipit with 6187 individuals counted compared to only 965 in 2018. The trend seems to have been similar at other European sites this spring, which also experienced high counts of meadow pipits. Concerning the tree pipit, 70 individuals this year compared to 42 in 2018. For the tawny pipit 18 individuals compared to 13 in 2018.

Another bad year for turdidae with only 135 mistle thrushes, 106 song thrushes and only one redwing.

For the European bee-eater another not so bad season given the partial presence of observers, with 4708 birds.

In terms of diversity, we had the opportunity to observe during active migration the pied flycatcher, the collared flycatcher, the norther wheatear and the blackcap for birds that are rather unusual during daytime migration.

SPECIES	TOTAL SEASON	TOP DAY
COMMON SWIFT	70724	16403
PALLID SWIFT	24	14
ALPINE SWIFT	513	162
BARN SWALLOW	12028	3256
HOUSE MARTIN	8156	3107
CRAG MARTIN	951	266
SAND MARTIN	672	304

YELLOW WAGTAIL 3679 868 WHITE WAGTAIL 3893 1433 GREY WAGTAIL 47 10 MEADOW PIPIT 6187 3073 TREE PIPIT 70 37 TAWNY PIPIT 18 7 RED-THROATED PIPIT 7 4 MISTLE THRUSH 135 70 SONG THRUSH 106 42 COMMON STARLING 8818 3840 BLUE TIT 2 - CHIFFCHAFF 8 3 BONELLI'S WARBLER 1 - EUROPEAN BEE-EATER 4708 1814 GOLDEN ORIOLE 4 - EUROPEAN PIED FLYCATCHER 15 13 EUROPEAN PIED FLYCATCHER 5 2 COLLARED ELYCATCHER 1 -	RED-RUMPED SWALLOW	31	15
GREY WAGTAIL4710MEADOW PIPIT61873073TREE PIPIT7037TAWNY PIPIT187RED-THROATED PIPIT74MISTLE THRUSH13570SONG THRUSH10642COMMON STARLING88183840BLUE TIT2-CHIFFCHAFF83BONELLI'S WARBLER1-EUROPEAN BEE-EATER47081814GOLDEN ORIOLE4-EURASIAN HOOPOE73NORTHERN WHEATEAR1513EUROPEAN PIED FLYCATCHER52	YELLOW WAGTAIL	3679	868
MEADOW PIPIT 6187 3073 TREE PIPIT 70 37 TAWNY PIPIT 18 7 RED-THROATED PIPIT 7 4 MISTLE THRUSH 135 70 SONG THRUSH 106 42 COMMON STARLING 8818 3840 BLUE TIT 2 - CHIFFCHAFF 8 3 BONELLI'S WARBLER 11 - EUROPEAN BEE-EATER 4708 1814 GOLDEN ORIOLE 4 - EURASIAN HOOPOE 7 3 NORTHERN WHEATEAR 15 13 EUROPEAN PIED FLYCATCHER 5 2	WHITE WAGTAIL	3893	1433
TREE PIPIT7037TAWNY PIPIT187RED-THROATED PIPIT74MISTLE THRUSH13570SONG THRUSH10642COMMON STARLING88183840BLUE TIT2-CHIFFCHAFF83BONELLI'S WARBLER1-EUROPEAN BEE-EATER47081814GOLDEN ORIOLE4-EURASIAN HOOPOE73NORTHERN WHEATEAR1513EUROPEAN PIED FLYCATCHER52	GREY WAGTAIL	47	10
TAWNY PIPIT187RED-THROATED PIPIT74MISTLE THRUSH13570SONG THRUSH10642COMMON STARLING88183840BLUE TIT2-CHIFFCHAFF883BONELLI'S WARBLER1-EUROPEAN BEE-EATER447081814GOLDEN ORIOLE4-EURASIAN HOOPOE73NORTHERN WHEATEAR1513EUROPEAN PIED FLYCATCHER52	MEADOW PIPIT	6187	3073
RED-THROATED PIPIT74MISTLE THRUSH13570SONG THRUSH10642COMMON STARLING88183840BLUE TIT2-CHIFFCHAFF883BONELLI'S WARBLER1-EUROPEAN BEE-EATER47081814GOLDEN ORIOLE4-EURASIAN HOOPOE73NORTHERN WHEATEAR1513EUROPEAN PIED FLYCATCHER52	TREE PIPIT	70	37
MISTLE THRUSH13570SONG THRUSH10642COMMON STARLING88183840BLUE TIT2-CHIFFCHAFF83BONELLI'S WARBLER1-EUROPEAN BEE-EATER47081814GOLDEN ORIOLE4-EURASIAN HOOPOE73NORTHERN WHEATEAR1513EUROPEAN PIED FLYCATCHER52	TAWNY PIPIT	18	7
SONG THRUSH10642COMMON STARLING88183840BLUE TIT2-CHIFFCHAFF883BONELLI'S WARBLER1-EUROPEAN BEE-EATER47081814GOLDEN ORIOLE4-EURASIAN HOOPOE73NORTHERN WHEATEAR1513EUROPEAN PIED FLYCATCHER52	RED-THROATED PIPIT	7	4
COMMON STARLING88183840BLUE TIT2-CHIFFCHAFF883BONELLI'S WARBLER1-EUROPEAN BEE-EATER47081814GOLDEN ORIOLE4-EURASIAN HOOPOE73NORTHERN WHEATEAR1513EUROPEAN PIED FLYCATCHER52	MISTLE THRUSH	135	70
BLUE TIT2-CHIFFCHAFF83BONELLI'S WARBLER1-EUROPEAN BEE-EATER47081814GOLDEN ORIOLE4-EURASIAN HOOPOE73NORTHERN WHEATEAR1513EUROPEAN PIED FLYCATCHER52	SONG THRUSH	106	42
CHIFFCHAFF83BONELLI'S WARBLER1-EUROPEAN BEE-EATER47081814GOLDEN ORIOLE4-EURASIAN HOOPOE73NORTHERN WHEATEAR1513EUROPEAN PIED FLYCATCHER52	COMMON STARLING	8818	3840
BONELLI'S WARBLER1EUROPEAN BEE-EATER4708GOLDEN ORIOLE4EURASIAN HOOPOE7NORTHERN WHEATEAR15EUROPEAN PIED FLYCATCHER5	BLUE TIT	2	-
EUROPEAN BEE-EATER47081814GOLDEN ORIOLE4-EURASIAN HOOPOE73NORTHERN WHEATEAR1513EUROPEAN PIED FLYCATCHER52	CHIFFCHAFF	8	3
GOLDEN ORIOLE4-EURASIAN HOOPOE73NORTHERN WHEATEAR1513EUROPEAN PIED FLYCATCHER52	BONELLI'S WARBLER	1	-
EURASIAN HOOPOE73NORTHERN WHEATEAR1513EUROPEAN PIED FLYCATCHER52	EUROPEAN BEE-EATER	4708	1814
NORTHERN WHEATEAR 15 13 EUROPEAN PIED FLYCATCHER 5 2	GOLDEN ORIOLE	4	-
EUROPEAN PIED FLYCATCHER 5 2	EURASIAN HOOPOE	7	3
	NORTHERN WHEATEAR	15	13
	EUROPEAN PIED FLYCATCHER	5	2
	COLLARED FLYCATCHER	1	-
BLACK REDSTART 29 5	BLACK REDSTART	29	5
DUNNOCK 3 -	DUNNOCK	3	-

RAPTORS AND SOARING BIRDS

The Leucate site is also known for its diversity of raptor species. The 2019 season was no exception to this rule, however, as mentioned in the previous year's report, the number of birds of prey is probably very dependent on the weather on this site. As a result, there is a high degree of variability between years.

In 2018, a very low passage of ringtail harriers was observed. One of the hypotheses was a very bad weather during the crossing of the Sahara which would have forced many birds to bypass the sandstorm by going further east. Eastern sites such as Messina or the Dunes de Prunete had recorded record numbers of montagu's harriers. In 2019, we expected smaller numbers of birds at these eastern sites, but larger numbers at the sites in the western Mediterranean. Only one of the two phenomena occurred with fewer birds on the eastern sites. About 40% less montagu's harrier at the Dunes de Prunete site and about -80% at the Strait of Messina. However, the total of the Leucate site is only 4 individuals. Unfavourable weather, low observer presence during the theoretical period of passage, high mortality of birds using the western route? The first two factors largely explain this small number.

For the honey buzzard we did not attend a memorable day like last year, however a day with 4938 individuals counted occured. Unfortunately, the counts stopped after May 9, which largely explains why the total season is three times lower than in 2018.

Most raptor numbers are fewer than in 2018, but this is probably due once again to the lower presence of observers in 2019.

SPECIES	TOTAL SEASON	TOP DAY
HONEY BUZZARD	5198	4938
BLACK KITE	651	313
RED KITE	5	3
OSPREY	17	5
COMMON BUZZARD	2	-
SHORT-TOED SNAKE EAGLE	2	-
SPARROWHAWK	225	103
MARSH HARRIER	366	140
MONTAGU'S HARRIER	4	2
RINGTAIL HARRIER	2	-
PALLID HARRIER	2	-
COMMON KESTREL	658	124
LESSER KESTREL	8	4
EURASIAN HOBBY	15	4
RED-FOOTED FALCON	4	2
PEREGRINE FALCON	3	1
MERLIN	5	1
ELEONORA'S FALCON	1	-
WHITE STORK	1875	634
BLACK STORK	7	2

SHOREBIRDS, SEABIRDS, DUCKS AND HERONS

Due to its coastal location, the Leucate site also has a good diversity of waterbirds. Among gulls, the most represented species is the black-headed gull with 766 individuals over the season. The mediterranean gull is also regular with 105 birds counted. This year the numbers of lesser black-backed gulls are well down with 257 compared to 639 individuals in 2018. Unfortunately, we did not monitor on days with sea breezes, which could have given much more significant results.

A good year for the herons with more than 180 grey herons counted on the site. Concerning the common crane, very few birds were observed this year with only 203 individuals

SPECIES	TOTAL SEASON	TOP DAY
BLACK-HEADED GULL	766	329
MEDITERRANEAN GULL	185	101
BLACK-LEGGED KITTIWAKE	1	-
LITTLE GULL	47	47
LESSER BLACK-BACKED GULL	257	96
COMMON STERN	1	-
GULL-BILLED TERN	3	3
WHISKERED TERN	15	14
GREY HERON	180	33
PURPLE HERON	10	6
GREAT EGRET	28	7
LITTLE EGRET	34	7
SPOONBILL	4	2
GLOSSY IBIS	7	7
GREATER FLAMINGO	15	12

NORTHERN SHOVELER	3	3
PIN-TAILED DUCK	24	23
GARGANEY	19	13
GREAT CORMORANT	1359	424
COMMON CRANE	203	81
NORTHERN LAPWING	1	-
PIED AVOCET	5	5
COMMON RINGED-PLOVER	2	-
LITTLE RINGED-PLOVER	2	-
EURASIAN CURLEW	5	4
WHIMBREL	2	2
RUDY TURNSTONE	4	4
RUFF	1	-
COMMON SNIPE	7	5
GREEN SANDPIPER	4	-
COMMON REDSHANK	3	-
COMMON GREENSHANK	1	-

COLUMBIDAE

We thus conclude these details of numbers with the columbidae. A far from exceptional passage for the wood pigeon, with 4873 individuals. For the stock dove a total of only 9 birds. Concerning the turtle-dove, the situation is still dramatic, with only 56 birds observed during migration.

SPECIES	TOTAL SEASON	TOP DAY
WOOD PIGEON	4873	1635
STOCK DOVE	9	3
TURTLE DOVE	56	30

CONCLUSION

First of all, once again a huge thank you to all the volunteer observers who came to help one more year to try to do the maximum number of days of monitoring, 31 days and 170 hours is not a lot but nearly 248 000 birds have been counted this season with 118 different species in active migration (birds stopping over at the site were not counted).

For a summary table of all this see https://www.trektellen.nl/site/totals/2035/2019

And for a comparison 2018-2019 see https://www.trektellen.nl/site/yeartotals/2035/2019

However, a surprising passage for the vagrant emperor with 118 individuals on March 23, 2019 should be noted.

This season ended with fewer hours of monitoring and fewer birds counted but still as many beautiful moments on this site. The project is still to carry out a complete monitoring in 2020 and **it is quite possible that good news about it will come in the coming months !**

A special thank you to Philippe and Marie-Rose Meyer who provided a large number of counting days this year!

List of counters : Patrick et Annette Albert, Antoine Auricoste, Serge et Annette Broqua, Anthony Chaillou,Pierre Chalard, Jean-Michel Dramard, Guy Flohart, Frédéric Letourneux, Philippe & Marie-rose Meyer, Thierry Ory, Martinet et François Poumarat, Maud Quéroué, Sylvain Reyt, Sébastien Roques, Gilbert Terrasse, David Thibault, Denis Tirmarche, Melchior Viallet, Arnaud Van Wettere. Hope to not forget anyone.

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





Photos Sébastien Roques