PROJECTE ORENETES 2024

Introduction

The Orenetes Project was launched in 2007 by the Catalan Institute of Ornithology to census the House Martin population in Catalonia, Balearic Islands and Valencian cities ².

It is a citizen science project, which means that anyone can join the project and carry out the census in the area they prefer.

The volunteers of the Montseny Biological Station have been participating in this project since 2022 with the aim of covering all the towns associated with the Montseny Natural Park over a period of 3 years.

- House Martin biology

The House Martin (*Delichon urbicum*) is a Passerine species of the *Hirundidae* family. It can be recognized by its pure white rump, which contrasts strongly with the upper parts, which are black, with tips, mantle and scapulars of a bright blue; the under parts are white. The tail is slightly forked, short and black³.

The nest is typically located under eaves of houses or outbuildings and under bridges. Both sexes collect mud and grass and plaster it into a deeper cup than the swallows, which they line with straw and feathers. The cup is stuck to the wall and has a small entrance towards the top on one side⁴. It is a colonial species that nests in groups of several to several hundred pairs⁵.

It is a widespread summer visitor throughout Catalonia¹, it arrives from mid-march and it starts migrating to Africa at the end of August, with the last individuals seen by the end of october².

Methodology

The volunteers conducted the count between May 24 and July 31.

The census were scheduled for every Friday and most were completed the same day. The calendar can be seen on the tab.1

Date	Municipality
24th of May	Sant Esteve de Palautordera
31st of May	Montseny
7th of June	Cànoves i Samalús
14th of June	Gualba
21st of June	Riells i Viabrea
28th of June	Sant Pere de Vilamajor
5th of July	Fogars de Montclús and Sant Feliu de Buixalleu
12th of July	Sant Celoni
19th of July	Aiguafreda and Tagamanent
26th of July	La Garriga

Calendar of the censuses

The first two counts gave the volunteers the opportunity to get to know the methodology of the project and how to best conduct the census.

After these two censuses the volunteers began to advertise on Eb Montseny social medias where and when they would be conducting the counts, hoping to get people in the area involved.

The promotion consisted of: a story on Instagram, a post on Twitter and an event on Facebook (which was then shared in two facebook groups: "Ocells a Catalunya" and "Amics del Montseny"). All three posts mentioned the city, time and location of the meeting. The Instagram account "Voluntariat a Catalunya" often reposted our advertising, this helped to have more visibility.

In the week before each census, the volunteers prepared as follows:

1) Selection of census units: this step consists of accessing the orenetes.cat website and selecting the area eligible for the census in the chosen municipality.

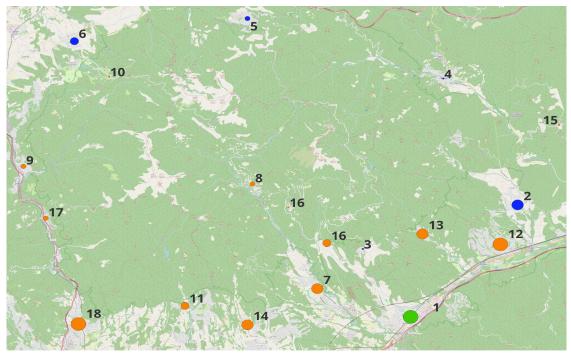
The volunteers selected the squares where buildings were located for each municipality (excluding industrial buildings), not just in the main town.

- 2) Print out the squares and divide them by the number of volunteers.
- 3) They decided where they wanted to meet people and created ads for social media.
- 4) Prepare the following material for each volunteer: 2 field sheets, 1 pencil, a map of their squares, 3 flyers from Projecte Orenetes.

On the day of the count, each volunteer conducted the count in their assigned square. If they finished before the others, they went to help.

Results

Between 2002 and 2024, all municipalities connected to the Montseny Natural Park have been censused (pic. 1). Most of them were done only by EB Montseny volunteers, with two exception in 2024: Aiguafreda, where part of the census was carried out by another person, and Figaró - Montmany, which was completely done by someone else .



Pic. 1: In blue: municipalities censused in 2022; in orange municipalites censused in 2024 and in green Sant Celoni (that is not a town connected to the park but relevant to the Bird Station). The size of the circles is proportional to the number of nests in good condition.

1. Sant Celoni; 2. Breda; 3. Campins; 4. Arbúcies; 5. Viladrau; 6. Seva; 7. Sant Esteve de Palautrodera; 8. Montseny; 9. Aiguafreda; 10. El Brull; 11. Cànoves i Samalús; 12. Riells i Viabrea; 13. Gualba; 14. Sant Pere de Villamajor; 15. Sant Feliu de Buixalleu; 16. Fogars de Montclús; 17. Tagamanent; 18. La Garriga.

All the results do not include nests under construction, as the counts were mostly carried out at the end of the nesting period and therefore do not provide any relevant information.

Sant Celoni

During the Nature Week in 2022 and 2023, Carles Durà gave a presentation about the Orenetes project in the town hall of Sant Celoni. Following the presentation, the participants assisted the Eb montseny volunteers in carrying out the census. Because not enough people registered for the event of 2024, the event was cancelled, and the Eb Montseny volunteers conducted the census on their own.

Every year the number of square censused varied:

2022: 14 squares; 2023: 100 squares; 2024: 50 squares.

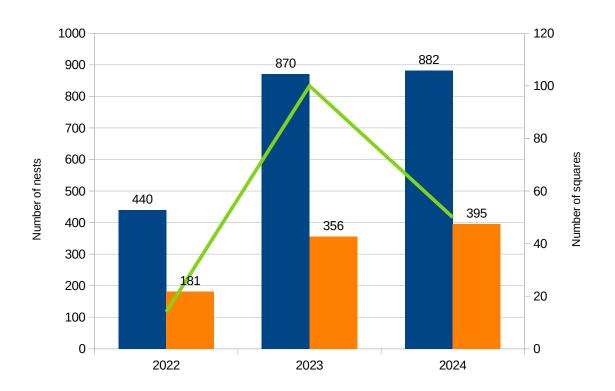
Since this year's census is the most representative of the squares that are suitable for the house martin to nest, it should be used as a guide for the upcoming years.

In 2022 the census was carried out in June, instead in 2023 and 2024 it was carried out in July so the number of active nests could be compared but the time of observation is not high enough to be sure that all the active nests were detected.

In 2024 Sant Celoni has been the town with the highest number of nests in good state counted in all Catalonia.

	Nests in good state	Active nests	Time of observation
2022	440	181	153
2023	870	356	351
2024	882	395	533

Results in Sant Celoni

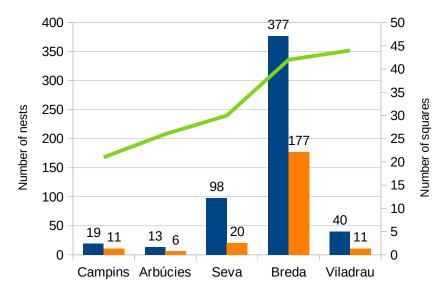


Number of nests in Sant Celoni correlated to the number of squares censused in Sant Celoni. Blue: number of nests in good state; orange number of active nests; in green: number of squares.

2022In 2022 the project was carried out in 5 municipalities connected to the Park: Breda; Campins; Arbúcies; Viladrau; Seva.

Municipalities	Nests in good state	Active nests	Squares
Breda	377	177	42
Campins	19	11	21
Arbúcies	13	6	26
Viladrau	40	11	44
Seva	98	20	30

Results in 2022



In blu: number of nests in good state; in orange: number of active nests; in green: number of squares.

2023

In 2023 the project was carried out in 1 municipality connected to the Park: Seva. It was possible to do the census only in this town because of the amount of field work related to other projects.

Municipalities	Nests in good state	Active nests	Squares
Seva	82	37	30

Nests in 2023

This census was carried out in the same squares as 2022 and in the same day so it is possible to compare the data.

Year	Nests in good state	Active nests	Time of observation
2022	98	20	94
2023	82	37	47

Results in Seva in 2022 and 2023.

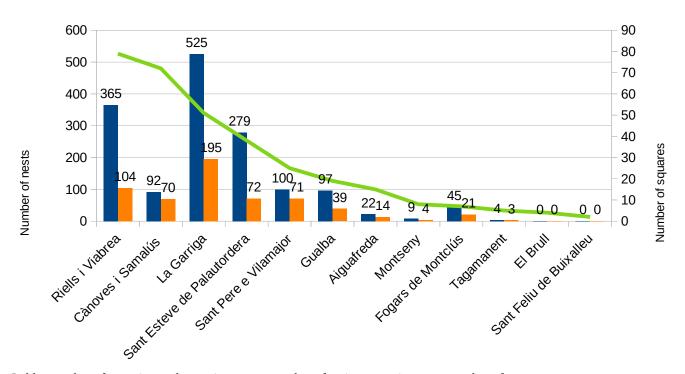
Since the average of observation for every nest is less than 1 minute the active nests are not comparable between years: there is a high chance that less nest were counted than the one that were really active.

2024

In 2024 the project was carried out in 12 municipalities connected to the Park: Sant Esteve de Palautordera; Montseny; Aiguafreda; El Brull; Cànoves i Samalús; Riells i Viabrea; Gualba; Sant Pere de Vilamajor; Sant Feliu de Buixalleu; Fogars de Montclús; Tagamanent; La Garriga.

Municipalities	Nests in good state	Active nests	Squares
Sant Esteve de Palautordera	279	72	38
Montseny	9	4	8
El Brull	0	0	4
Cànoves i Samalús	92	70	72
Riells i Viabrea	365	104	79
Gualba	97	39	19
Sant Pere de Vilamajor	100	71	25
Sant Feliu de Buixalleu	0	0	2
Fogars de Montclús	45	21	7
Tagamanent	4	3	5
La Garriga	525	195	51
Aiguafreda	22	14	15

Results of 2024



In blu: number of nests in good state; in orange: number of active nests; in green: number of squares.

Conclusion and future improvements.

For the censuses, based on this year experience the volunteers should:

- Keep Sant Celoni with the same number of squares for future years so that the data is comparable;
- if possible, divide the number of municipalities into a more equal number between years if this is compatible with the other projects.
- Before selecting the units for the census, check which squares are good potential habitat for house martins and look at the location of nests in previous years. In Riells i Viabrea (2024), for example, at least 30 of the 79 squares selected are not suitable habitat for the house martin so they can be avoided next time.
- To attract more people to the project, it is better to do at least a couple of squares in the city centre with more than 2 people, so that people become more curious and ask more questions.
- In larger cities, the chance of reaching people who want to participate is higher, so the volunteers should intensify advertising in these cities.
- Prepare a short and coincise way of explaining the methodology to people that may join, maybe try it out with Carles so the volunteers can try better to interact in Catalan.

Bibliography

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