

2022 Projecte Orenetes

Introduction

Common house martin (*Delichon urbicum*) (Pic. 1.) is a migratory passerine from the swallow family which breeds across Euroasia. This species prefers open country with low vegetation but in areas with great air quality they can be found in elevations, especially in town centers. House Martin builds its clay nests at the junction of a vertical surface and an overhang, such as on the house eaves with a small opening. They tend to breed colonially therefore it's common to find multiple nests alongside. The species arrives in Catalonia from second half of March and starts to leave at the end of August and it's found in 92% of the territory of Catalonia with estimated 137 129 - 204 510 couples.

Projecte Orenetes is a citizen science project started in 2007 to study birds and the urban environment in the towns and cities of Catalonia, the Balearic Islands and Valencian Country. Project's goals include educating and encouraging citizens to observe and appreciate nature, helping people to bond and respect the species, finding out the current state of the population for determining protection measures of the species.



Pic. 1. View of the Common House Martin's nest with chick being fed.

Methodology

The censuses were done in ten different villages (Sant Celoni, Breda, Campins, Vallgorguina, Cardedeu, Arbúcies, La Batllòria, Santa Maria de Palautordera, Viladrau, Seva) which were divided into

200 meter squares, they included going through each street and group of buildings to examine the quantity of nests using binoculars. Specific protocol was implemented after determining a nest:

- writing all required data: street, building number, type of elevation, number of nests in good condition or under construction.
- waiting at least one minute to ascertain how many of the nests were active - meaning that Common House Martin was seen coming/leaving or chicks were seen in the nest.

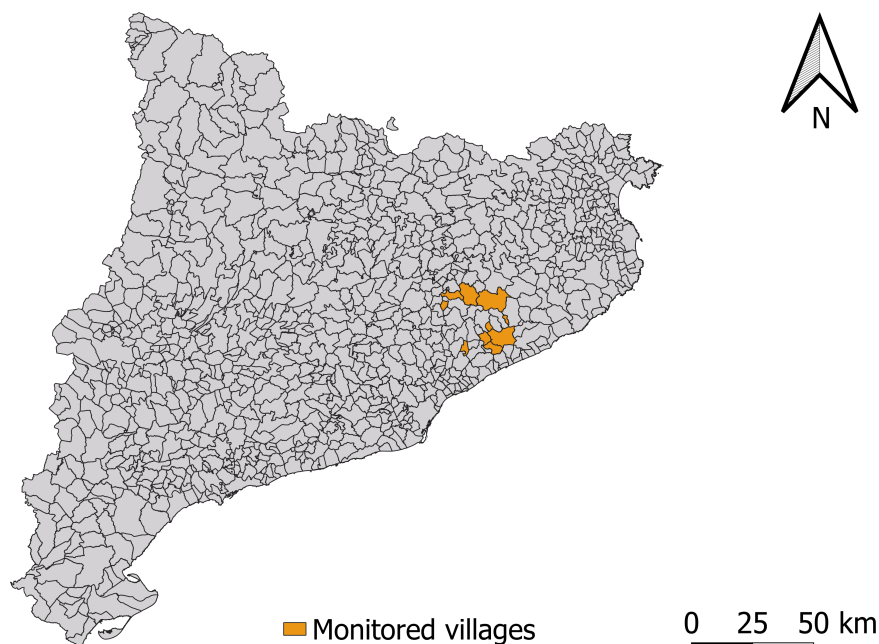
Really important matter is to differentiate nests in good condition from the broken ones (Pic. 2.).



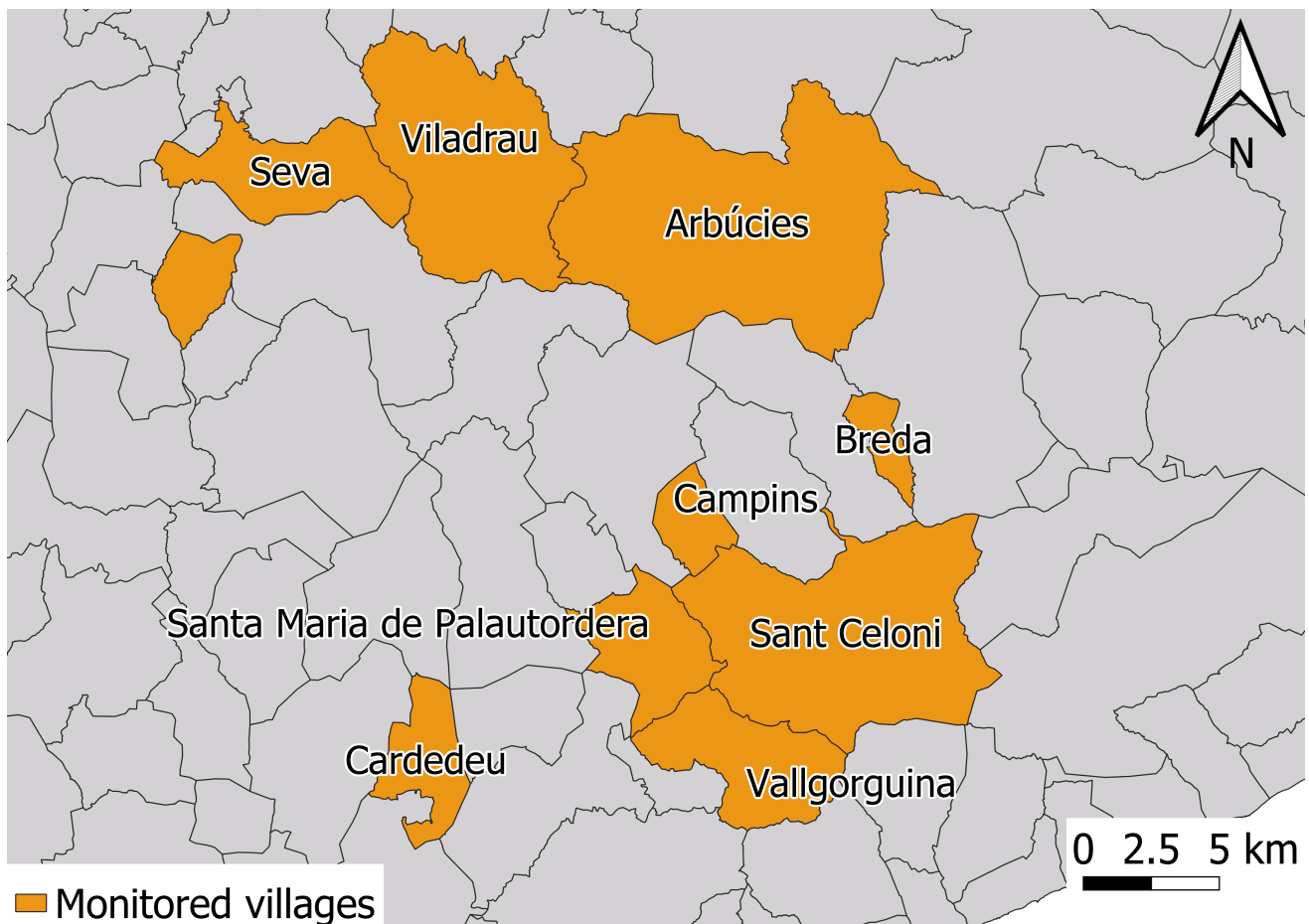
Pic. 2. Difference between broken nest (left) and nests in good conditions (right).

Results

Area that was covered included ten different villages located in two provinces: Barcelona and Girona (Map 1.).

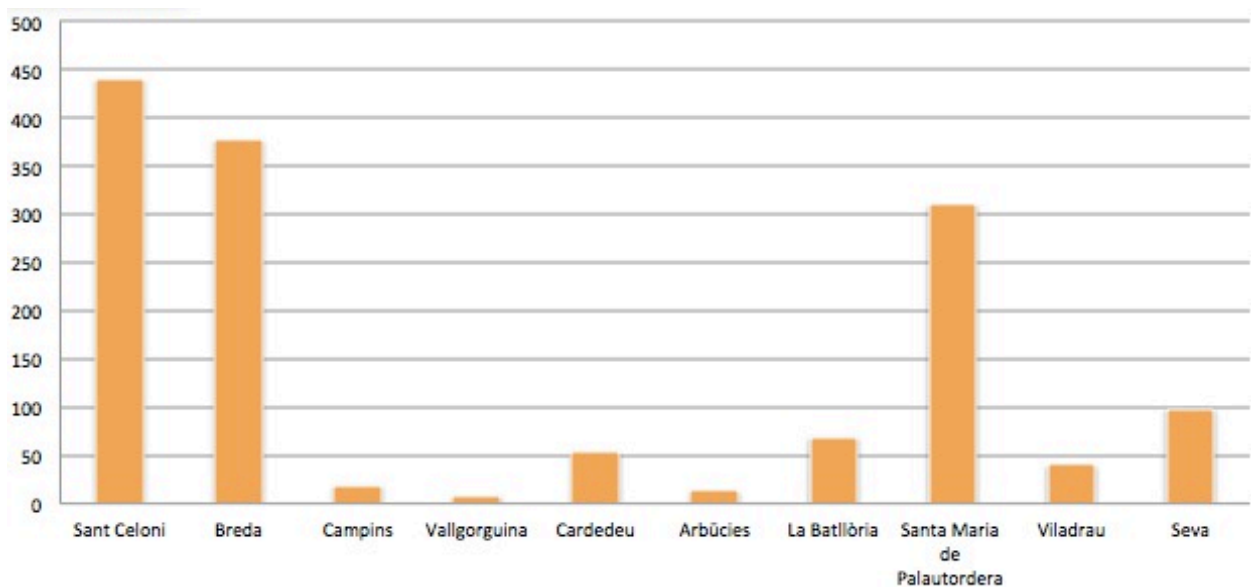


Map 1. Monitored villages of Catalonia.



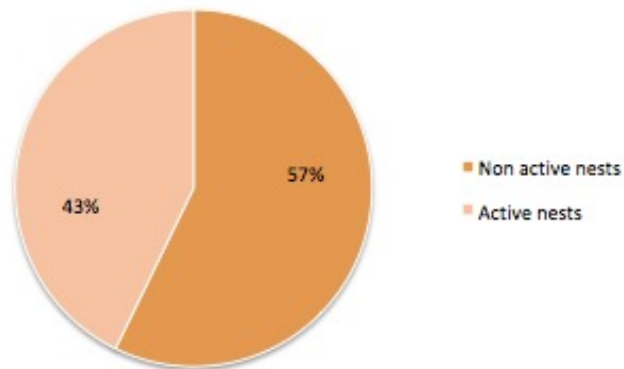
Map 1. Monitored villages covered by the project.

The total number of House Martin's nests found was 1428 and majority of them were in three villages: Sant Celoni (440), Breda (377) and Santa Maria de Palautordera (310). Number of House Martin nests in good condition found in each city is projected on the Graph 1. The total amount of time spent nests observations (to determine if they were active or not) was 585 minutes (9 hours and 45 minutes).



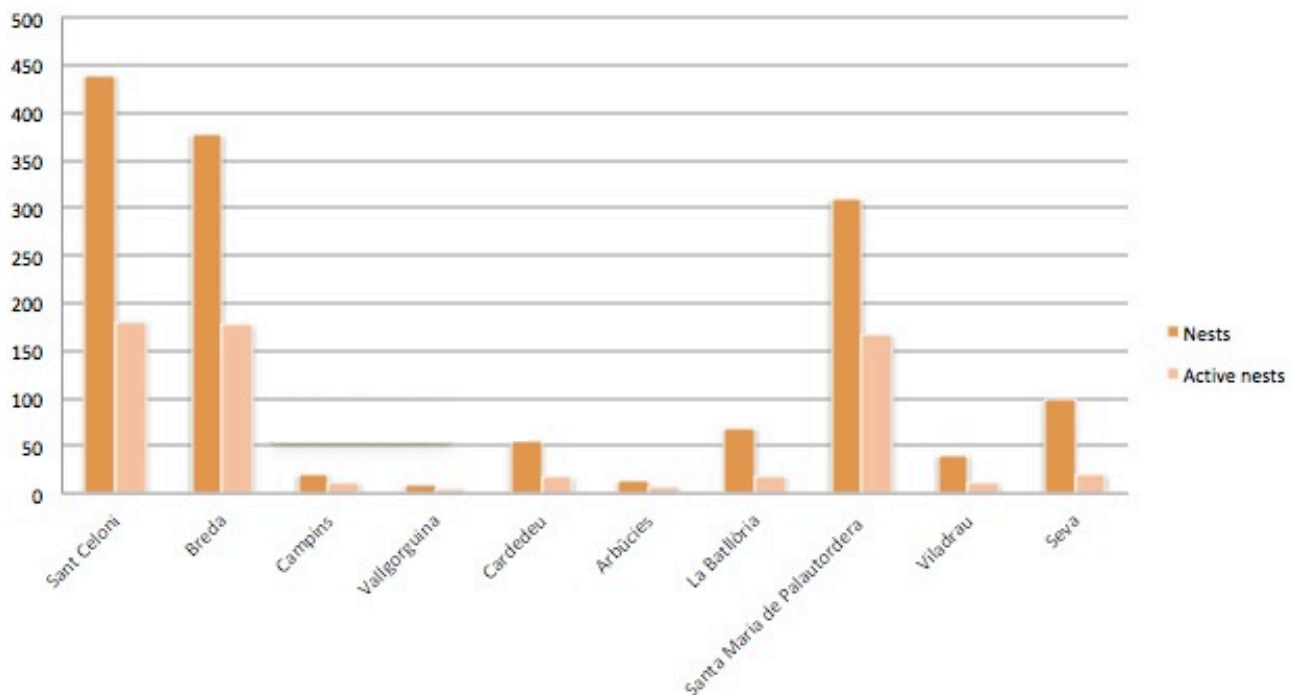
Graph 1. Number of House Martin nests in good condition found in each village.

The nests were divided into two groups: active and inactive. The active nests, meaning that Common House Martin was seen coming or leaving or chicks were seen in the nest, were confirmed in 43% of all found nests (Graph 2.).



Graph 2. Proportion of House Martin active and inactive nests.

In each village proportion were different and they are presented on Graph 3.



Graph 3. Comparison of active nests to total number of nests in each village.