



Universidad de
Castilla~La Mancha



esparvel



Common Swift (*Apus apus*) rescue campaigns in Toledo (central Spain): a successful citizen science initiative

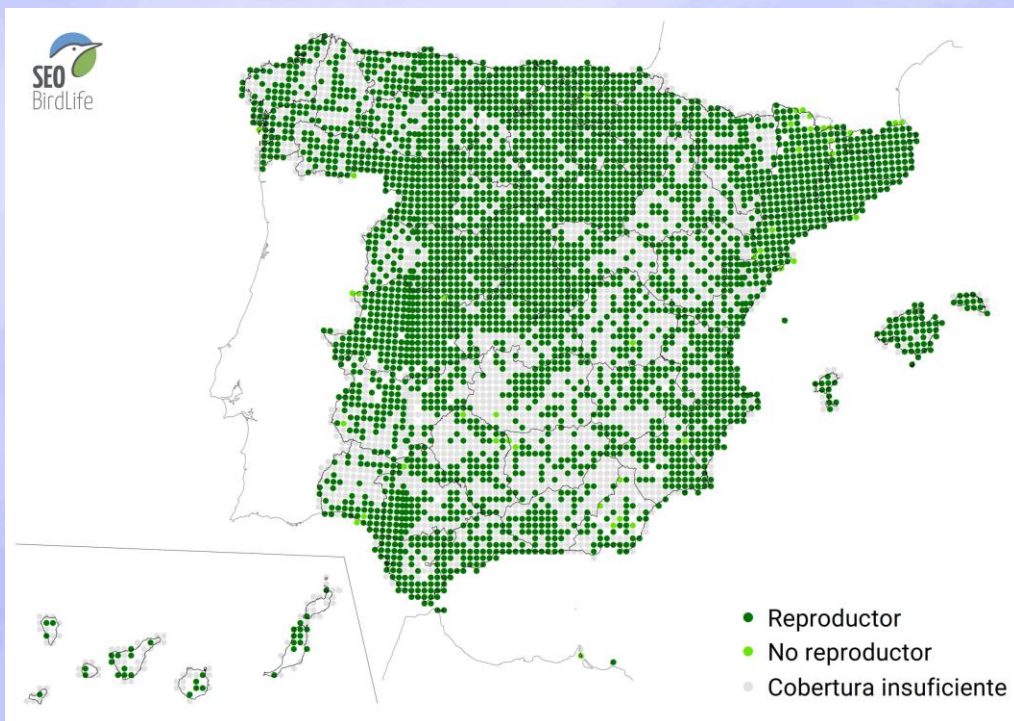
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#SwiftSegovia2022

1.1. Distribution and threats

1. Introduction



Molina & Casaux (2022)

Spain
32.753.055



(Carrascal & Palomino, 2008)

1.2. Reproduction

Jan. - Feb.

Mr. - Apr.

May - Jun.

Jul. - Aug.

Sep. - Oct.

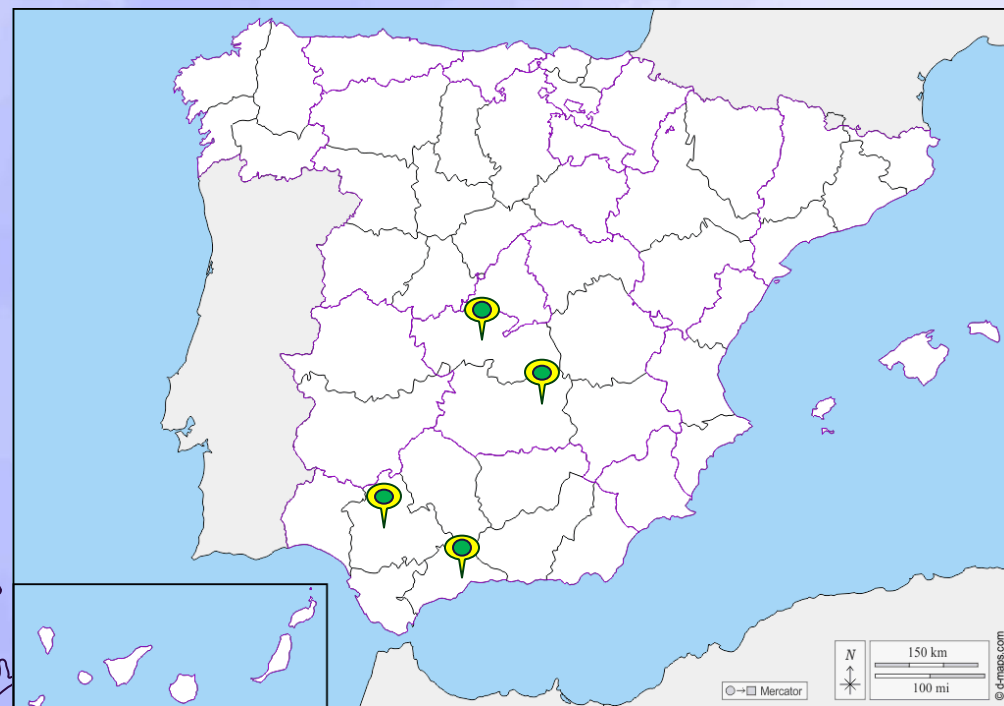
Nesting



1.3. Rescue of grounded swift chicks



1.4. Volunteer networks



1.5. Toledo swift network



Castilla-La Mancha:

- ✓ 6.920.000 swifts (21%)
- ✓ Species of special interest





2. Objectives

1. To analyse the data on the evolution of the swifts collected in the **rescue campaigns of 2019, 2020 and 2021**.
 2. To study the **evolution of the weight** of the rescued swifts
 3. To analyse the **meteorological conditions** recorded in Toledo to assess their **relationship with the massive fall of swift chicks** from their nests.
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3.1. Citizen network

Chick



**Emergencies
Environmental
officer**



Vet advice

**CERI
(species recovery
center)**

3. Materials and Methods

**Education
Outreach**



**Training
Hand-rearing**



Release



Scientific data



3.2. Volunteers



Year	Total number of volunteers	Average number of swifts per volunteer
2019	35	3.8
2020	30	4.2
2021	41	3.0



3.2. Feeding

Food and vitamins



Tenebrio molitor

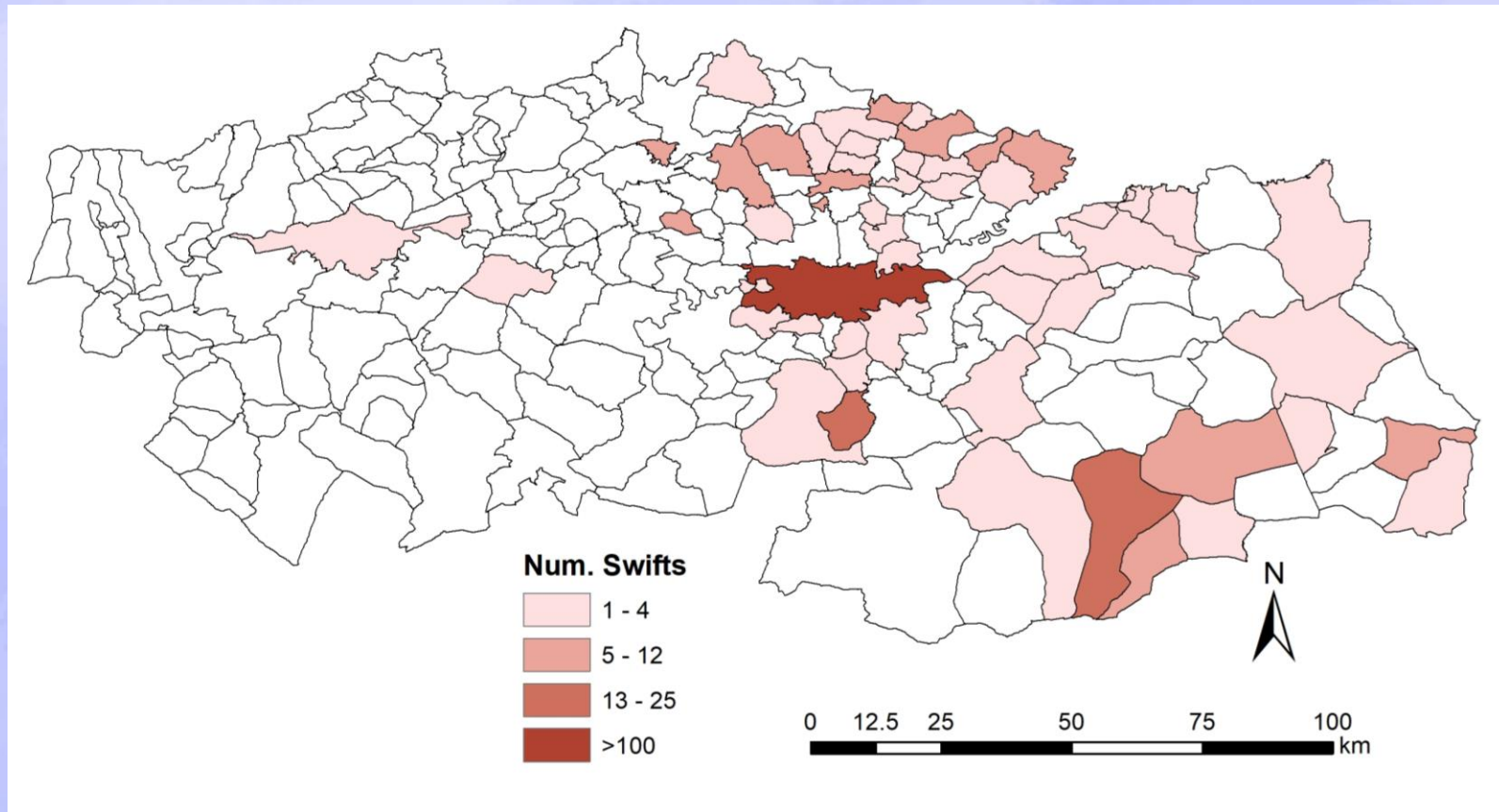
Cricket

4. Results

4.1. Results of the rescue campaigns

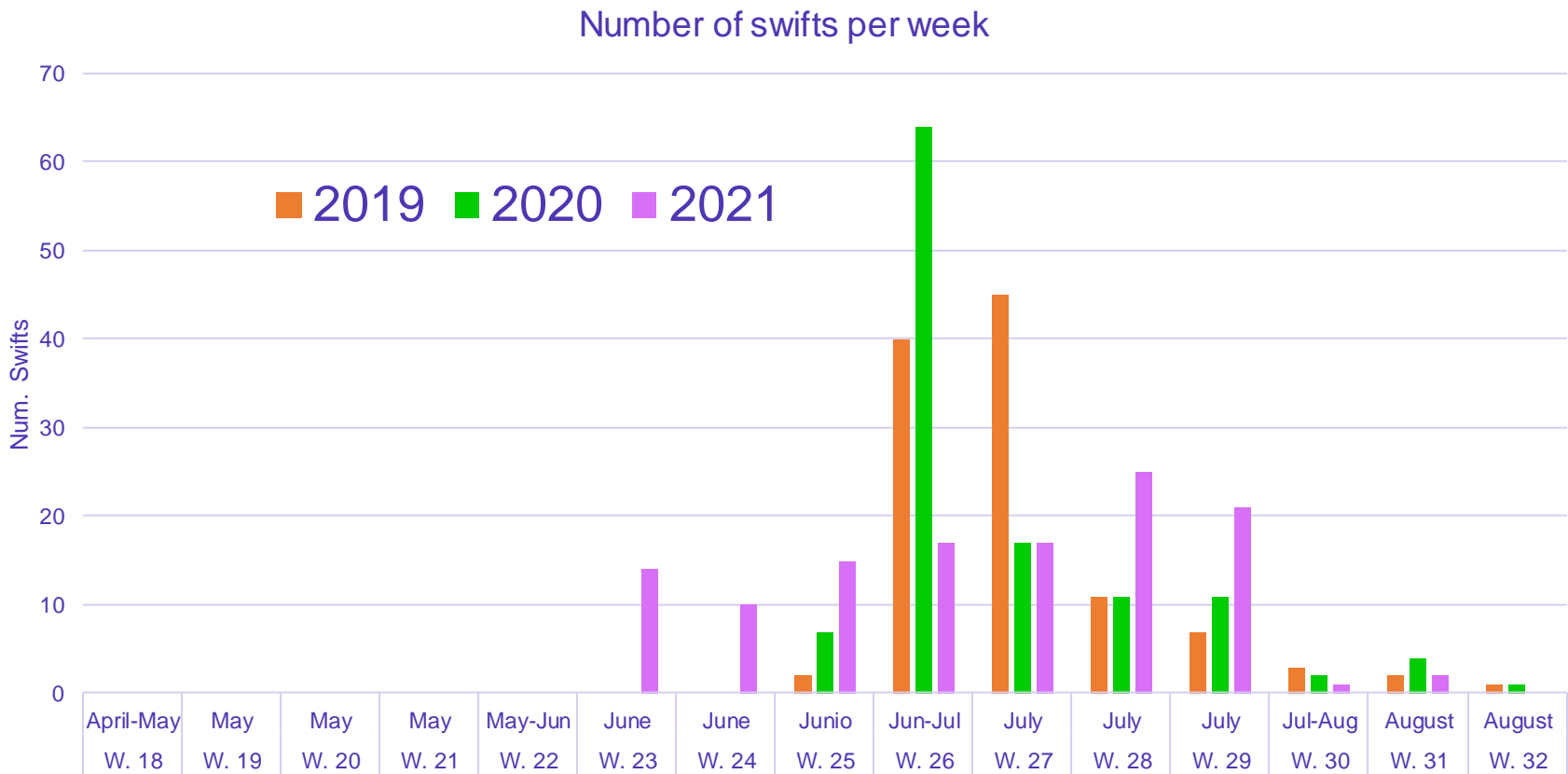
	2019	2020	2021
Num Total Swifts	111	117	124
Survivors	83%	82%	75%
Time in captivity (mean \pm SD)	12 \pm 7 days	12,7 \pm 7 days	18 \pm 9 days

4.2. Place of birth



4. Results

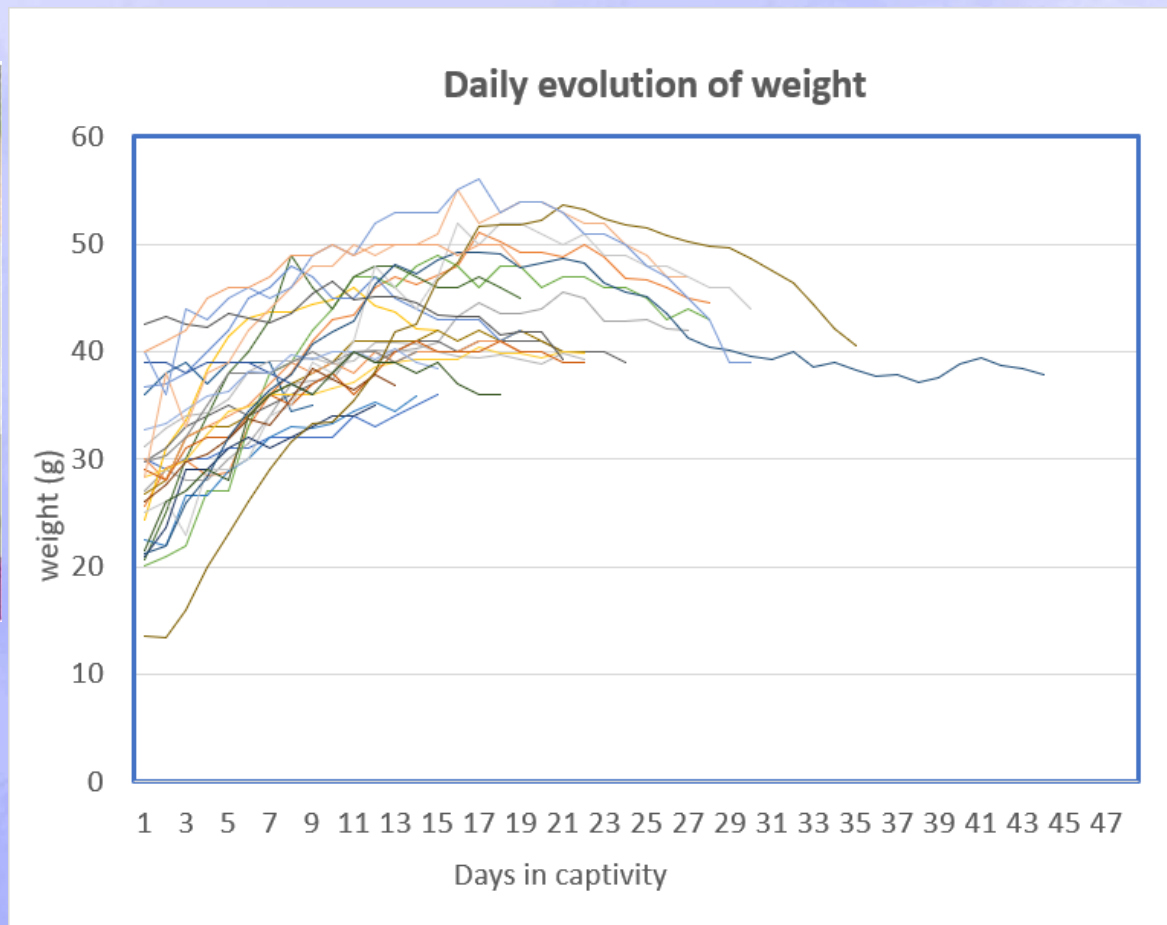
4.3. Number of swifts grounded per week



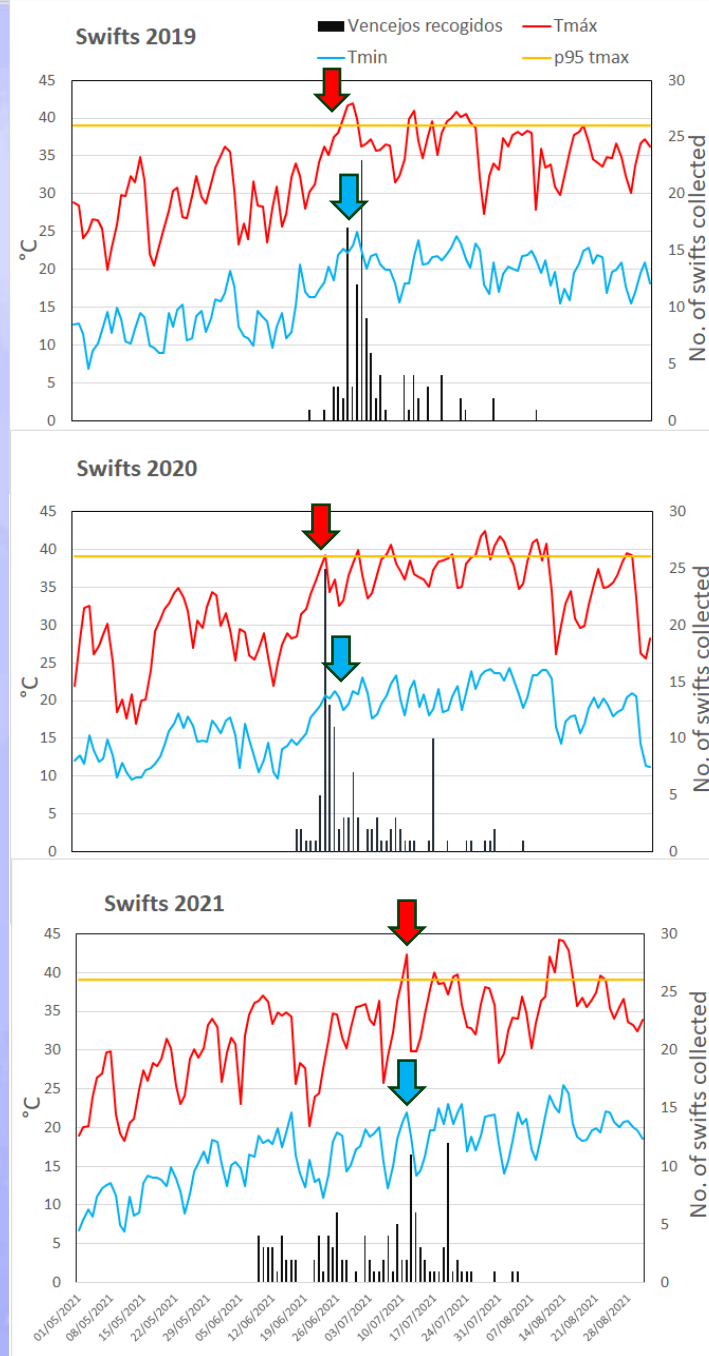
4.4. Evolution of weight in captivity



Carrero Gálvez (2018)



4.5. Incidence of Temperature on grounded swifts



5. Conclusions

- ✓ The **swift network of Toledo** has been consolidated with an average of 35 volunteers raising 4-5 swifts per campaign.
- ✓ The **survival rate** of the rescued swifts has been successful (c.a. 80%).
- ✓ A **common pattern in the evolution of swift weight** (increase and then loss) was confirmed, with great variability between individuals (males vs females?).
- ✓ There is evidence of a **relationship between temperature peaks** (max and min) and the timing of **grounded swifts**.
- ✓ **Citizen volunteer networks** help to the **conservation** of swifts and contribute to **environmental education**

Gracias Thank you



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