

COLOUR RINGING OF YELLOW-LEGGED GULLS IN THE AZORES

What have we learnt so far?

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INTRODUCTION

In the Azores, subtropical north-eastern Atlantic, the Yellow-legged Gull (YLG; *Larus michahellis atlantis*) is the only year-round resident seabird and potentially an endemic species. Despite its year-round occurrence in the archipelago, the Azorean YLG is a taxon whose ecology and biology are little known. Azorean YLG have no direct competitors; their numbers increased dramatically between 1984 and 2004, mainly due to high refuse availability. Over the last five years, however, the paradigm of refuse management changed in the Azores and refuse availability has considerably decreased. YLG is changing to a more marine diet and in some colonies there is some indication that numbers may be reducing. Currently, trends, demography and population dynamics are unknown. The University of the Azores, in collaboration with the Spanish Foundation Aranzadi, has been developing a project to colour-ring YLG chicks on different islands of the Azores since 2017 to discover some aspects of the biology of this species that remain unknown.

OBJECTIVES

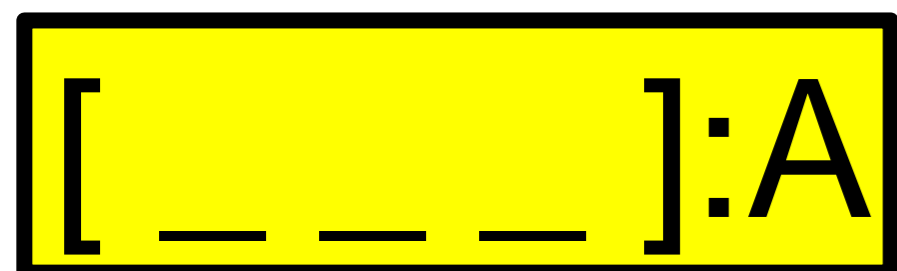
The main aims of this study are (1) determining the distribution of the gulls within the archipelago and the distance to which they move from their colonies (including if they can disperse out of the Azores), and (2) determining immature survival and gull maximum longevity.

CONCLUSIONS

Dispersal between islands is observed but more sightings are required to better define the movements. An increasing effort to read rings is needed in order to obtain more robust estimates.

METHODS

Fieldwork is being carried out at four accessible YLG colonies on three islands of the **Azores archipelago** (Faial and Pico in the central group; São Miguel in the eastern group) during the chick-rearing period. The fieldwork is carried out in close collaboration with the Natural Parks (PNI) and volunteers.



Yellow Darvic rings with an alphanumeric code of four characters (two numbers and two letters) and metal rings are used. A systematic monitoring is carried out throughout the year, by observing birds and compiling records and pictures of resightings done by volunteers, birdwatchers and team members.

Figure 1. Yellow-legged gull chick ringed with a yellow Darvic ring (right tarsus) and a metal ring (left tarsus) on Faial island. Credit: Gabriel Martin.



RESULTS & DISCUSSION

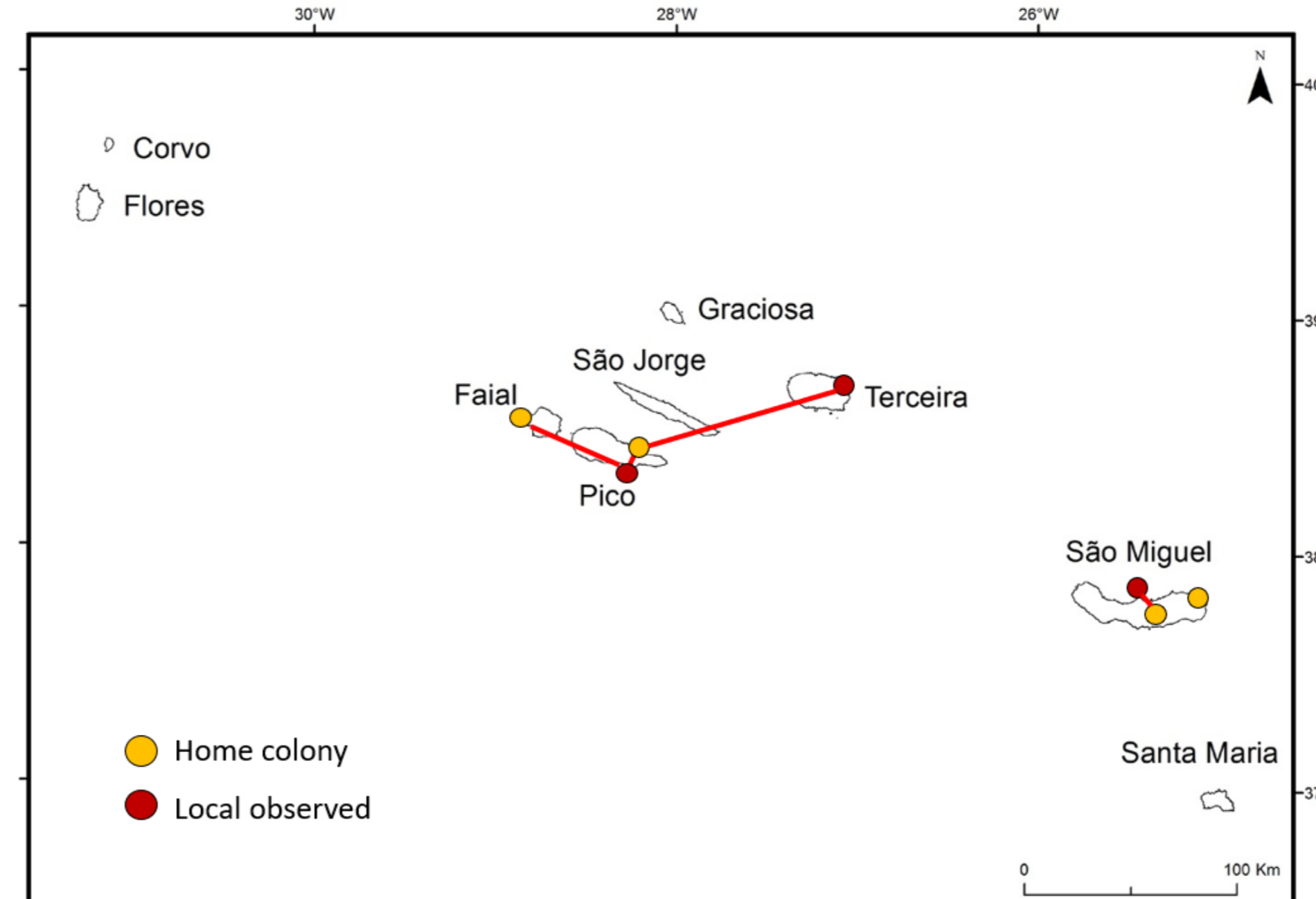
A total of **313 chicks** have been ringed with colour rings since 2017. So far only **23 birds were observed**, out of which two were found dead. Most sightings are from first year birds, a few are of second-year individuals; no third-year birds have been observed for the moment. Some birds ringed on Faial and Pico were observed on other islands of the central group (Terceira), more than 100 km from their birth colony. The birds ringed on São Miguel did not seem to disperse to other islands of the archipelago.



Figure 2. Yellow-legged gull ringed with a yellow Darvic ring in Ribeira Grande (São Miguel). Credit: Heiner Gotz.

So far, no record was obtained outside the Azores. The few data available suggest that **some dispersal occurs between nearby islands**. Data concerning age are inconclusive.

Figure 3. Yellow-legged gull movements between the different islands of the Azores archipelago 2017 to 2019. Credit: Ricardo Medeiros.



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- Colouring portal (<http://www.colouring.eus/en/home/>)

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