

DOI: <https://doi.org/10.5281/zenodo.7692611>

## SHORT NOTES / SHORT NOTES

PIETRO LO CASCIO & BRUNO MASSA

### SPATIAL SHIFTS WITHIN THE ELEONORA'S FALCON REPRODUCTIVE SITES OF THE AEOLIAN ISLANDS (TYRRHENIAN SEA)

*Variazioni spaziali nei siti riproduttivi di falco della regina delle Isole Eolie (Mar Tirreno)*

The occurrence of Eleonora's falcon *Falco eleonorae* Gené, 1839 has been recorded for some Aeolian Islands since 1960s (MOLTONI, 1960; MOLTONI & FRUGIS, 1967), but the first detailed data on the size of its populations were given by MASSA (1978), who reported 28 breeding pairs for Alicudi, 30 for Filicudi, 5 for La Canna stack (off Filicudi) and 20 for Salina. At the same time, MOLTONI & PIROVANO (1980) recorded 5-6 pairs for Panarea.

In late 1990s these data were confirmed, except for Panarea where more extensive investigations allow to estimate 29-33 breeding pairs (of which 3-4 on the nearby islet La Nave); irregular nesting has also been recorded for Strombolicchio Islet (off Stromboli) (LO CASCIO, 2000).

Basing from data collected between 1998 and 2010, CORSO & GUSTIN (2009, 2012) have detected remarkable fluctuations, with an apparent numerical decrease observed on Salina, Panarea and Filicudi, while a significant increase was found on Alicudi. Further surveys provided the latest updated estimate for the whole Aeolian population as follows: 56-60 breeding pairs for Alicudi, 30-32 for Filicudi, 4-5 for La Canna, 10-12 for Salina and 15-17 for Panarea (MASSA *et al.*, 2015; LO CASCIO, 2016).

All the following observations and counts were performed from the sea using Kite "Petrel" 10x40 binoculars.

Since 2016, falcons have been regularly seen during summer on the islet of Basiluzzo (off NE coast of Panarea, 4.7 km from the main colony) and the nearby islet of Spinazzola. During a census performed in late August 2022, five nests were counted on the first and three on the latter. Moreover, in the same occasion the occurrence of a nest was discovered also on the top of the islet Dattilo (off E coast of Panarea, 2.8 km from the main colony). In all three sites, nests were located on completely inaccessible cliffs, even if – as happens in Panarea – these islets are generally subject to strong anthropogenic disturbance, especially during the breeding season of the species, due to the massive boat traffic.

In the same period (August-September 2022), two nesting pairs were also detected on the northern cliff of the islet Scoglio Faraglione, which lies in the middle of the Pollara bay, 600 m far from the Salina colony. Falcons usually attend on this islet as a roost, mostly in the months following hatching (DELAUGERRE *et al.*, 2012), but nesting has never been ascertained. In this latter case, it should be noted that also Pollara bay is very busy in summer, but the boat crowding and the related anthropogenic disturbance around this islet is greater than that affecting the surroundings of the main colony.

It is difficult hence to draw conclusions about the causes that may have determined these spatial shifts. In fact, the occupation of microinsular sites more or less close to the main colonies does not seem to have resulted in any advantage in terms of disturbance reduction.

However, these movements significantly expand the nesting range of the species within the archipelago, especially concerning Panarea where until now it was limited to the north-western sector, while in the light of the new data it includes the group of satellite islets off the East and North-East coast of the island. Altogether, the population of Eleonora's Falcon living on Aeolian islands fluctuated from 1970' to the present day, but it did not decline, even though the anthropogenic disturbance increased very much. We could hypothesize that, considering the peculiar biology and diurnal activities of this falcon, the human disturbance along the island coasts very likely is limited and inoffensive for it.

#### REFERENCES

- CORSO A. & GUSTIN M., 2009. Status e migrazione pre-riproduttiva del falco della regina *Falco eleonora* in Sicilia. *Alula*, 16: 205-207.
- CORSO A. & GUSTIN M., 2012. Second-calendar-year Eleonora's falcons attending breeding colonies in Sicily. *British Birds*, 105: 738-742.
- DELAUGERRE M., GRITA F., LO CASCIO P. & OUNI R., 2012. Lizards and Eleonora's falcon (*Falco eleonora* Gené, 1839), a Mediterranean micro-insular commensalism. *Biodiv. J.*, 3 (1): 3-12.
- LO CASCIO P., 2000. Note sul falco della regina, *Falco eleonora*, nell'arcipelago eoliano (Sicilia). *Riv. ital. Orn.*, 69: 187-194.
- LO CASCIO P., 2016. Marine birds of the Aeolian Islands, South Tyrrhenian Sea: present status and conservation. Pp. 96-99 in: Yésou P., Sultana J., Walmsley J. & Azafzaf I. (eds.), Conservation of marine and coastal birds in the Mediterranean. *Regional Activity Centre Special Protected Areas-Association "Les amis des oiseaux"-BirdLife Tunisia-Medmaravis, Tunis*.
- MASSA B., 1978. Observations on Eleonora's Falcon *Falco eleonora* in Sicily and surrounding islets. *Ibis*, 120: 531-534.
- MASSA B., LO CASCIO P., IENTILE R., CANALE E.D. & LA MANTIA T., 2015. Gli uccelli delle isole circumsiciliane. *Naturalista sicil.*, 39 (2): 105-373.
- MOLTONI E., 1960. Uccelli rinvenuti durante una gita ornitologica a Stromboli (Isole Eolie) dal 21 al 29 agosto 1959. *Riv. ital. Orn.*, 30: 78-87.
- MOLTONI E. & FRUGIS S., 1967. Gli uccelli delle Isole Eolie (Messina, Sicilia). *Riv. ital. Orn.*, 37: 91-234.
- MOLTONI E. & PIROVANO S., 1980. Osservazioni ornitologiche autunnali a Panarea ed uccelli ad oggi noti per l'isola (Eolie). *Riv. ital. Orn.*, 50: 3-18.

*Authors' address* — P. LO CASCIO, Associazione Nesos, via Vittorio Emanuele, 24 – 98055 Lipari (Messina, I); e-mail: plocascio@nesos.org; B. MASSA, Department of Agriculture, Food and Forest Sciences, Viale delle Scienze, 13 – 90128 Palermo (I); e-mail: bruno.massa@unipa.it