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Little Egret *Egretta garzetta* (Linnaeus, 1766) (Pelecaniformes Ardeidae) and Eurasian crag martin *Ptyonoprogne rupestris* (Scopoli, 1769) (Passeriformes Hirundinidae), two new breeding species for the Egadi Islands (W-Sicily, Italy)

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ABSTRACT For the first time, the nesting of Eurasian crag martin *Ptyonoprogne rupestris* (Scopoli, 1769) (Passeriformes Hirundinidae) and Little **e**gret *Egretta garzetta* (Linnaeus, 1766) (Pelecaniformes Ardeidae) in the Aegadian Islands (W-Sicily, Italy) is reported. Of particular interest is the nesting of the Little **e**gret on the island of Maraone resulting in the first report for Sicily of a heronry on a marine island. Although this nesting environment has already been established in Sardinia, it should be emphasized that until now the establishment of a heronry has never been detected on an islet so far from the mainland.

KEY WORDS Little egret, Eurasian crag martin, unusual breeding for location, marine islet, nesting.

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INTRODUCTION

The Aegadian Archipelago (Trapani, W-Sicily, Italy) boasts a long ornithological tradition since it has been the subject of numerous publications since 1957 (Krampitz, 1957; Suchantke, 1960; Krapp, 1970, Massa & Cangialosi, 1970; Massa, 1973; Sorci et al 1973; Moltoni, 1976), that then continued thanks to targeted studies on the colony of storm birds in Marettimo starting from 1980 (Massa & Catalisano, 1986; Lo Valvo & Massa, 2000; Sanz-Aguilar et al., 2009, 2010) and of birds of prey in migration (Agostini & Logozzo, 1998; Agostini et al., 2000; Agostini, 2001; Premuda & Mellone, 2008). Recent ornithological excursions are providing new data on the nesting birds of the Aegadian islands (Lo Valvo & Pieri, 2021).

The Protected Marine Area of the Aegadian Islands, that extends on this territory too, was established by Ministerial Decree of December 27, 1991, and covers 53,992 hectares divided into four areas with different levels of protection and with different access options and limitations. The islet of Maraone is part of Zone A, or the Integral Reserve.

The aim of this study is to increase available data for nesting bird species for these islands and neighboring areas.

MATERIAL AND METHODS

Following an agreement between the SAAF Department and the AMP Aegadian Islands Reserve, an excursion to Favignana and the islet of Maraone was carried out on 1.VI.2021 with particular regard to the study of invertebrate fauna whose findings will be the subject of a forthcoming publication. All the observations were made using Leica 8x42 binoculars and a camera with a 150–600 mm telephoto lens and have been geotagged and inserted, in protected mode, in the Ornitho.it portal.

RESULTS

Ptyonoprogne rupestris (Scopoli, 1769) - Eurasian crag martin (Passeriformes Hirundinidae)

Sorci et al. (1973) consider the Eurasian crag martin *Ptyonoprogne rupestris* to have a regular passage, rarely in winter, scarce in the Aegadian Islands; the data refers to the island of Favignana. Massa et al. (2015) report the following unpublished observation: 15.V.2014: 2 specimens (D'Amico & Surdo). The Eurasian crag martin was observed in the same wall where it was observed in 2014. The walls are located in the southern part of the island of Favignana near the tunnel on the road. Unlike 2014, when only two individuals were observed, in 2021 it was possible to estimate 3–5 breeding pairs and observe the repeated arrival and exit from a precise point of the rock wall (Ornitho code 14 or certain nesting). In the circumsicilian islands, the Eurasian crag martin is reported as a certain nesting only in Salina and Panarea and as a doubtful nesting on the island of Vulcano.

Certainly, this species is increasing sharply in Sicily, in fact, in the province of Trapani the number of occupied quadrants has gone from 1 (AA.VV., 2008) to 8 in 2019 (Surdo, 2019).

Egretta garzetta (Linnaeus, 1766) - Little Egret (Pelecaniformes Ardeidae)

The Little egret is an increasing species in Sicily too and has begun to colonize the province of

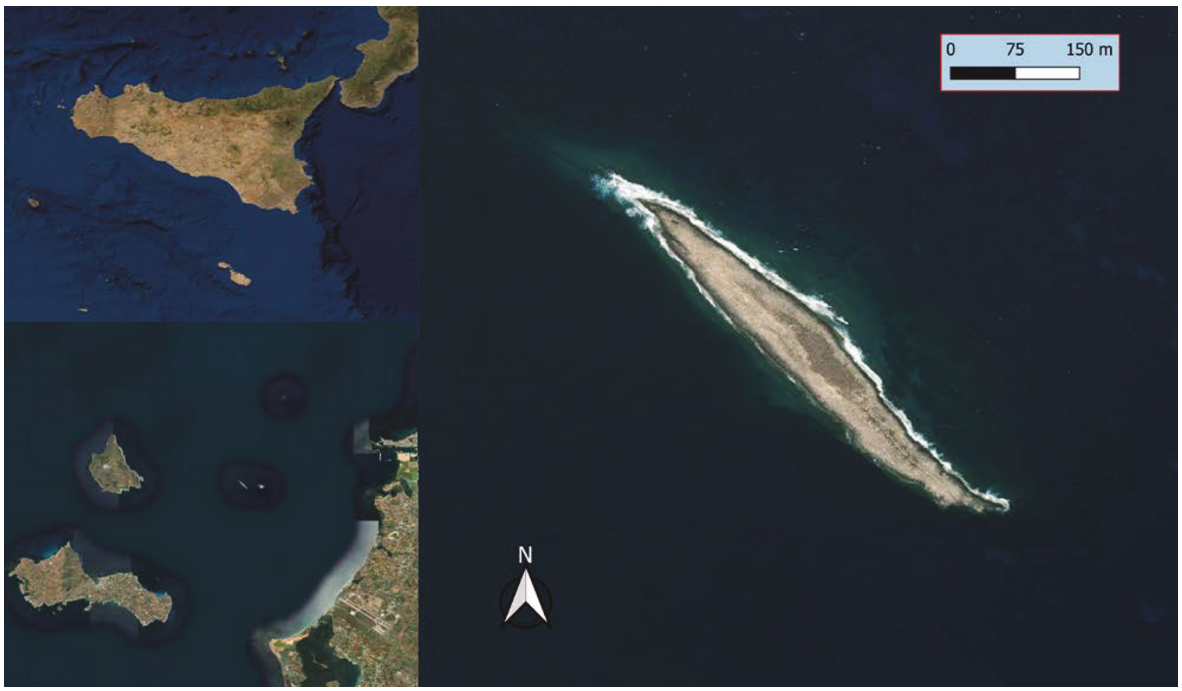

Figure 1. Map of the study area. To the bottom left, part of the Aegadian Islands (Marettimo excluded). To the right, the islet of Maraone, located between Levanzo and the mainland.

Figure 2. View of the islet of Maraone (photo by S. Surdo).

Figure 3. Nest of Litte egret *Egretta garzetta* found in Maraone (Aegadian Islands, Sicily), 1.VI.2021 (photo by A. Dentici).

Trapani since 2010 (Surdo, 2016). The species nests on the islets within the Morana saltworks (Saline di Trapani) on the bushes of *Malva* cf. *arborea* in association with herring gulls *Larus michahellis*, apparently without competition and / or predation. Between 2013 and 2017, 15–50 couples were registered (Surdo, 2018). The small size of the two colonized islets (100 square meters each) have

certainly prompted the species to nest also on artifacts, the first case reported in the literature (Surdo, 2016). The ecological plasticity of the species was also confirmed by the discovery of a heronry (8–10 pairs) on the Scola islet (Stagnone di Marsala) located on *Opuntia ficus-indica* (Surdo et al., 2019). On 1.VI.2021 on the island of Maraone, in the central part of the islet covered by *Malva arborea*, 32 adults of Little Egrets were observed and 29 nests were counted, some with eggs, others with newly discovered chicks and in the various phases of growth there were also a certain number of walking, but still unable to fly, chicks hiding in the thick of the "Malveto". Also in this case, as for the Saline di Trapani, there were pairs of herring gulls in association with the heronry and always in apparent peaceful coexistence. Unfortunately, it is not possible to trace the exact year in which the colonization took place but considering that in 2012 the islet of Maraone had already been visited (Massa B., the Mantia T. and Pasta S, pers. Comm.), the settlement of the Little egret can only have occurred since 2013. The nesting of the Little egret on a marine island represents a novelty for Sicily while it is already known for Sardinia, for a good part of its colonies (12) (Murgia et al., 1994). It should be noted that in the latter island the maximum distance from the mainland of the islets colonized by the Little Egret is 2.5 km (Grussu et al., 2005; Fasola et al., 2007) while Maraone is 7 km from the mainland, 5.5 km from the island of Levanzo and 8.5 from Favignana. On 10.VI.2021 a census of the Egrets nesting in the saltworks of Trapani was carried out leading to 11 nests always divided between the two islets of the Morana saltworks plus three nests on old mills.

During the excursion to Maraone, 6 Egret eggs were collected, obviously not fertile: the measurements in mm obtained are shown in Table 1.

Eggs of Garzetta (6)	Mean	Standard error	Standard deviation
Height	42.55	0.41	1.01
Width	30.633	0.24	0.59

Table 1. Eggs of Litte egret *Egretta garzetta* found in Maraone: measurements in mm.

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