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THE FIRST BREEDING RECORDS OF THE LITTLE EGRET *Egretta garzetta* ON ADRIATIC ISLANDS

*Prvi nalazi gniježđenja male bijele čaplje Egretta garzetta
na jadranskim otocima*

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The Little Egret is a breeding bird of Europe, Africa, Asia, and Australia, where it inhabits a wide range of wetlands, from freshwater to brackish and saltwater marshes (BIRDLIFE INTERNATIONAL 2024). In Croatia, it breeds on the mainland, where it lives in wetlands, fishponds, and the lowlands of large rivers, while the coastal breeding population is considered extinct (TUTIŠ *et al.* 2013). The last historical breeding sites on the coast were Lake Vrana near Pakoštane in 1965 with 8–10 pairs nesting in the reeds (RUCNER 1998) and the Neretva Valley, where breeding was recorded in 1953 (RUCNER 1954) and the early 1990s (RADOVIĆ *et al.* 1994). Little Egrets breeding in Hutovo Blato in Bosnia and Herzegovina are regularly seen feeding at the mouth of the Neretva River, but breeding has no longer been recorded in the delta of the Lower Neretva area (TUTIŠ *et al.* 2013, ILIĆ 2018). The current national breeding population of the Little Egret is estimated to 680-1350 pairs (KAPELJ *et al.* 2023).

During the survey of the ornithofauna of the Brijuni archipelago on 15 April 2023, adult Little Egrets were observed on the island of Supin (44.933755 N, 13.7229383 E) in the dense maquis (Fig. 1). The island covers 1.28 ha and has a maximum height of 8 m. During a subsequent circumnavigation of the island on 13 June, young herons were discovered in the treetops, and on 20 June 2023, chicks were observed in nests during a field inspection. During a more detailed search before the 2024 breeding season (21 February), 25 old nests were found on olive trees *Olea europaea* and mock privet *Phillyrea latifolia* at a height of 1.30 to 6 m.

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Figure 1: The Little Egrets on the upper parts of the maquis during the breeding period on the island of Supin in the Brijuni National Park (photo: Dora Klisović, 24 May 2024)

Slika 1: Male bijele čaplje na gornjim dijelovima makije tijekom gniježđenja na otoku Supinu u Nacionalnom parku Brijuni (fotografija: Dora Klisović, 24. svibnja 2024.)

Two camera traps, model SPYPOINT FORCE-PRO-S, were installed on 19 February 2024 at the island. The camera traps were set to record nest activity every 5 minutes with the “time-lapse” and “photo” options, both day and night, with the “no glow flash” function to avoid disturbing the birds. One camera trap confirmed successful breeding, while the other recorded the predation of the eggs by a Hooded Crow *Corvus corone cornix*, which led to the abandonment of the nest. On the first nest, the birds were observed from 25 March and monitoring of the successful nesting revealed that incubation of the five eggs lasted from 10 to 29 May, a total of 19 days (Fig. 2). Of the five chicks, two survived until they left the nest, which they damaged by pushing it apart in the fourth week of life (24 June 2024). One two-week-old chick was killed by a Hooded Crow (14 June), and two others died earlier due to competition in the nest. The fledged chicks began to leave the nest around the 20th day of life. On the night of 14 June, the camera recorded the intrusion of a rat *Rattus* sp. into the nest, but no predation occurred. Based on the number of adult egrets flying around the island, the colony was estimated to 20 breeding pairs.



Figure 2: Successful nesting of the Little Egret captured by a camera trap on the Supin island
Slika 2: Uspješno gniježđenje male bijele čaplje popraćeno foto-zamkom na otoku Supinu

The Little Egrets on Brijuni were regularly observed foraging along the shallow coastal waters from April to August. A smaller number of individuals were occasionally sighted in the degraded wetlands of Saline and Bara on Veliki Brijun island. No flights between Supin and the nearest mainland, a distance of approximately 5.9 km, were recorded. However, daily flights to Veliki Brijun island, around 1.3 km from Supin island, were observed. On Supin, it was also observed that egrets fed on young gilthead seabream *Sparus aurata* of about 8 cm in size, suggesting their foraging along the seashore rather than in wetlands.

During the monitoring of Mediterranean Shags *Gulosus aristotelis desmarestii* along the western coast of Istria, the nesting of Little Egrets was observed on 21 March 2024 on the small island of Regata near Poreč (45.211415 N, 13.581592 E). The island covers an area of 0.59 ha and is located about 400 m from the mainland. A subsequent visit on 24 May confirmed the nesting of a single pair, as three newly fledged chicks together with two adult birds were observed in the crown of mock privet on the island. Adult Cattle Egrets *Bubulcus ibis* in breeding plumage were also seen in an Aleppo pine *Pinus halepensis* on the island, but nesting was not confirmed. Further field trips will be necessary to confirm the nesting of both species and to accurately estimate the breeding populations. Like Supin, Regata is a relatively small island without fresh water.

Nesting of the Little Egret on Mediterranean islands has also been observed in Greece and Italy. On the Greek island of Prassoudi, near the estuary of the Kalamas River in the Ionian Sea, Little Egrets nest in a mixed colony with Glossy

Ibises *Plegadis falcinellus* and Cattle Egrets (*Bubulcus ibis*) in the maquis vegetation on wild olive *Olea* sp. and pistachio *Pistacia* sp. trees (KAZANTZIDIS *et al.* 2019. KAZANTZIDIS *et al.* 2024). In Italy, Little Egrets nest on the island of Maraone (Egadi Islands, Sicily) on tree mallows *Malva arborea* (SURDO *et al.* 2021).

These are the first breeding records of the Little Egret on Adriatic islands and the first breeding records outside of wetlands in Croatia. They also confirm the return of the Little Egret to coastal Croatia after around 30 years of extinction. Both surveyed islands are located within the Natura 2000 site HR1000032 – “Akvatorij zapadne Istre”. Continuous monitoring of nesting Little Egrets in the Brijuni National Park and on the islands of western Istria is necessary.

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SAŽETAK

Tijekom istraživanja ornitofaune Brijunskog otočja 2023. godine zabilježeno je prvo gniježđenje male bijele čaplje *Egretta garzetta* na otoku Supinu u Nacionalnom parku Brijuni, gdje su opažene odrasle ptice u krošnjama guste makije te potom i mladunci u gniježdu. U veljači 2024. godine postavljene su foto-zamke koje su potvrdile uspješno gniježđenje, dok je zabilježena i predacija sive vrane nad jajima i ptićima. Na temelju broja odraslih oko otoka, populacija je procijenjena na 20 parova. U ožujku 2024. otkriveno je i gniježđenje na otočiću Regati kod Poreča. Ovi nalazi predstavljaju potvrdu ponovnog gniježđenja male bijele čaplje u primorskoj Hrvatskoj, ali i prvo gniježđenje male bijele čaplje na jadranskim otocima te prvo gniježđenje izvan močvarnih staništa u Hrvatskoj. Potrebno je daljnje praćenje populacije u Nacionalnom parku Brijuni i na ostalim otocima zapadne Istre.