

THE AVIFAUNA OF PALM ISLANDS NATURE RESERVE LEBANON 1893-2000



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SUMMARY

This paper intends to emphasise the ornithological importance of Palm Islands Reserve by reviewing its habitats and avifauna and by enumerating the endangered or vulnerable species that have been recorded in the reserve between 1995 and 2000. It highlights and updates the findings of the study and, when relevant, makes comparisons with the previous brief systematic lists of Stenhouse (1904), Hollom (1956) and Tohmé & Neuschwander (1974) in order to follow the changes throughout one century and improve the management plan set for the reserve. Remarkably, this paper also pinpoints the reasons that are behind the disappearance of the threatened Audouin's Gull and inspires the reserve's managing authority to facilitate its return.

Keywords: avifauna, bird, palm island, Lebanon, monitoring, reserve

INTRODUCTION

During one century (1893-1995), the islands were subject to few ornithological visits organized by J.A. Stenhouse (July 4th 1893 and June 20th 1895), P.A.D. Hollom (May 9th 1956) and G. Tohmé & J. Neuschwander (April 3rd and 15th and early August 1973). All these short-term studies provided a list of 22 bird species. Continuous recording by us in the protected area had provided enough data to chart breeding, wintering and migrating patterns for 154 species. Of these, 139 occur in migration and/ or in winter, while 15 are vagrant. Of the migrating species, 8 are proved to breed in the reserve and 1 may breed. Of the remaining 4 species, 2 are resident breeders (*Larus cachinnans* and *Prinia gracilis*), one is apparently resident (*Athene noctua*) and one is obviously extirpated (*Sterna bengalensis*) not only from the reserve but also from Lebanon.



RESULTS, DISCUSSIONS

During the period 1893-2000, four species (*Larus audouinii*, *Sterna bengalensis*, *Sterna hirundo* and *Sterna albifrons*) were published by Stenhouse (1904) as breeding but stopped to do so, at least from 1956 onward. One of these species (*S. bengalensis*) apparently ceased from appearing in Lebanon. The extirpation of these 4 species from the islands is not surprising knowing that insularity makes species susceptible to persecution, disturbance and development that prevailed in the area prior to its declaration a reserve. Only the Yellow-legged Gull *Larus cachinnans* obtaining, throughout the year, ample food from human waste resisted. This wasn't the case of the extirpated species which, mostly rely on natural food. During the civil war (1975-1991) the breeding population dropped to null. In 2000, the number of breeding birds was limited to 10. This is due to insularity factors and other constraints such as severe climatic conditions over the flat islands of the reserve. **More recently, the managing team, in cooperation with municipalities, closed the rubbish dump of mainland which supplies the reserve with human waste and subsequent to this, the dominant *Larus cachinnans* slightly declined and allowed the threatened *Larus audouinii* to reappear.**



CONCLUSION

The use of the reserve by many migrants (53% of the migratory species of Lebanon) as a suitable feeding and resting site, particularly by 42 species known to breed afterward on Lebanese mainland (Ramadan-Jaradi & Ramadan-Jaradi, 1999); together with the fact that 5 threatened species at global level, 5 threatened at regional level and 2 restricted species to Middle East; occur here, make it clear that the Palm Islands Nature Reserve is of unique value on a national and obviously international scales. Following this study, the success of the managing authority in bringing back the threatened *Larus audouinii* through the reduction of the *Larus cachinnans* waste-food is great, but this study expects more success as it can help in the understanding of the avifauna of PINR within an ecosystem approach, improve its management plan and enable the implementation of an effective conservation programme, particularly for the Audouin's Gull.

MATERIAL AND METHODOLOGY

To census birds, we used the 20-minute point-count method, whereby all species noted during this time period are recorded at different places and different times of the year in the most characteristic habitats of a given area (Blondel 1975, Blondel *et al.* 1981). Sometimes it was necessary to estimate, on days of heavy passage, the number of birds passing. At other times birds were identified through capture in single-shelf mist-nets.