

# Temporal Dynamics of the Population and Nesting of the Little Egret (*Egretta garzetta*) on the Kuriat Islands (2018-2023)

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## Introduction

The Kuriat Archipelago is a high-valued ecosystem area, nationally and internationally. This archipelago is characterized by its rich biodiversity, culture and heritage (1). In 2020, a total of 99 species of marine and terrestrial birds were recorded on the Kuriat Islands(2). Through continuous monitoring, the number of species exceeds 110, encompassing migratory and endemic species. Among the endemic and nesting species of the Kuriat Islands, the Little Egret (*Egretta garzetta*) stands out. The little egret is a small, entirely white heron belonging to the Ardeidae family (3). The monitoring of this species on the Kuriat Islands has been conducted since 2018 (2).

## Materials



Telescope



Binoculars



Bird guide



GPS



Notepad



Measuring tape

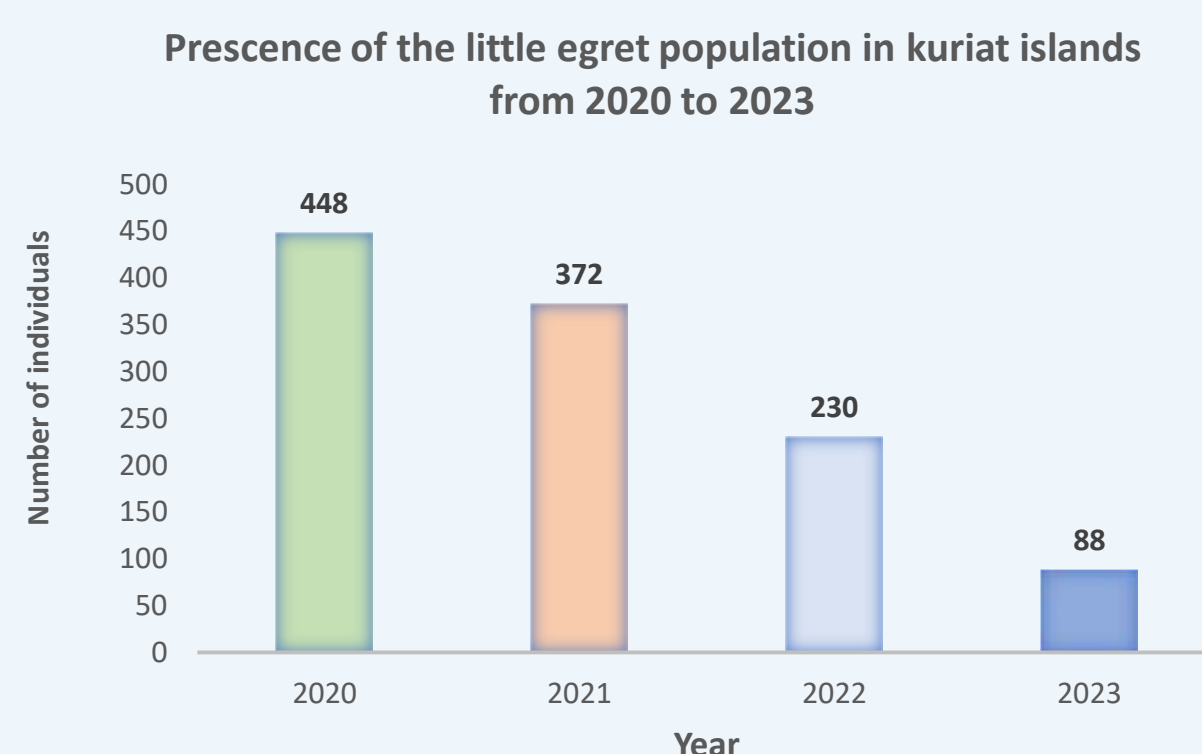
## Methodology

The winter bird census involves regular visits with techniques such as fixed listening points, ensuring reliable results by recording the present species and their behaviors.

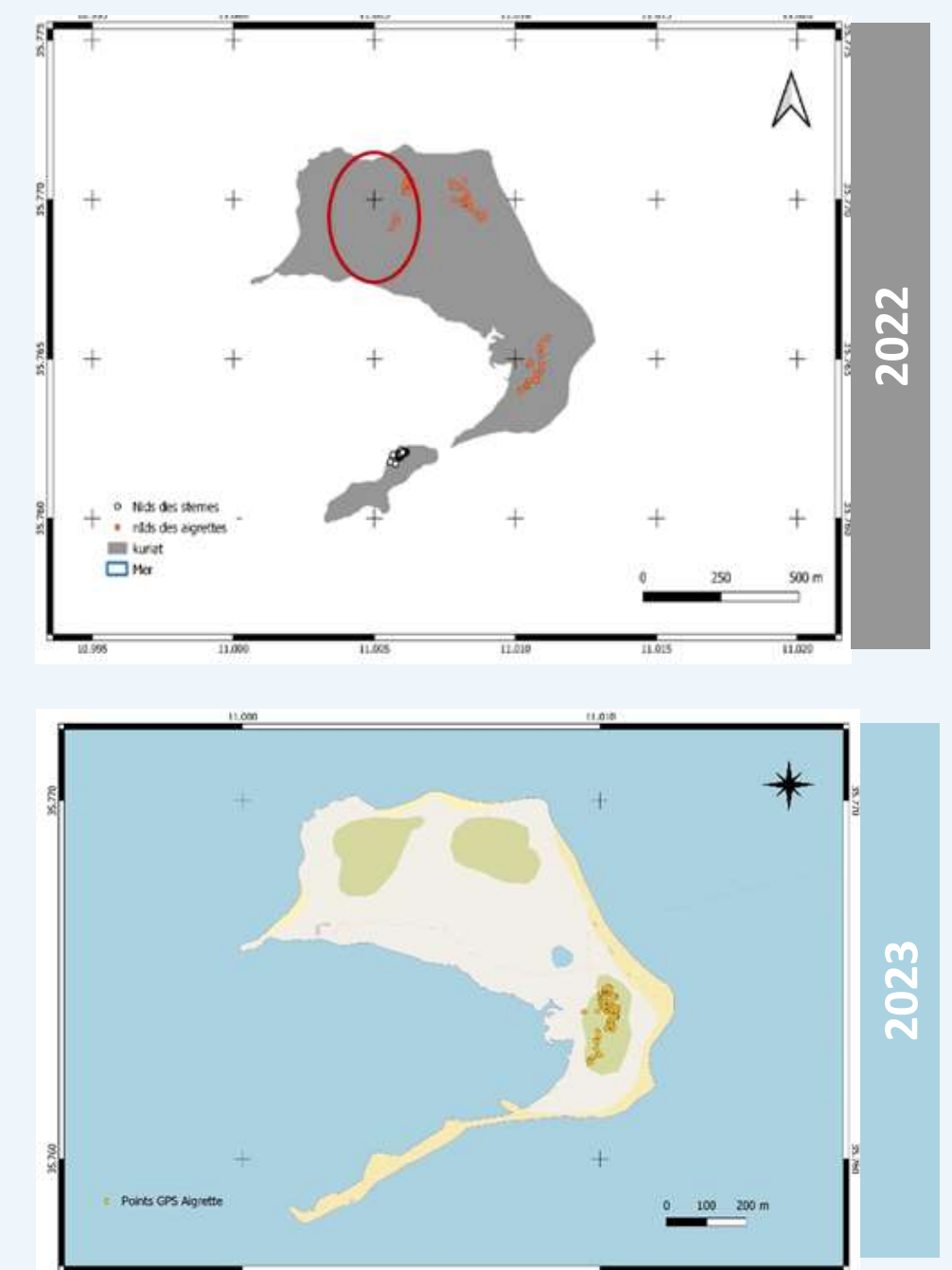
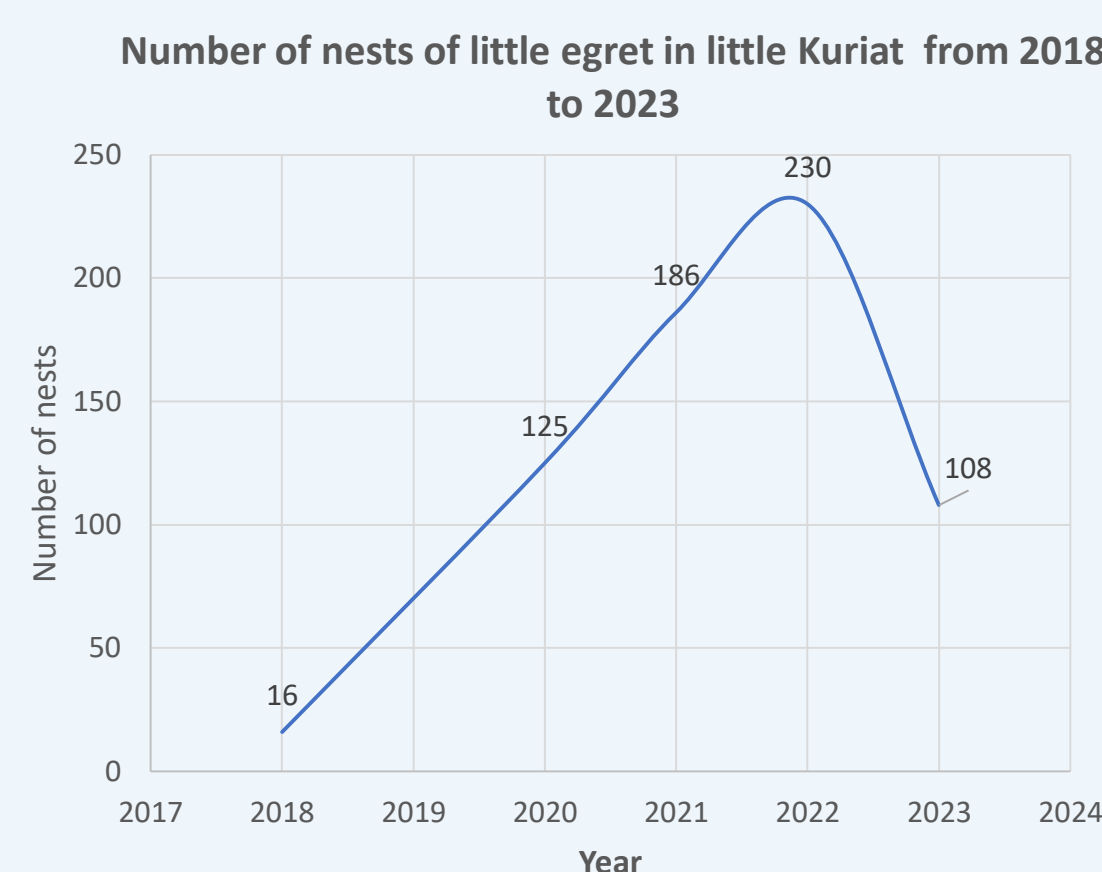
The nesting monitoring of the Little Egret primarily focuses on small wooded areas, especially among thorny bushes, providing protection against predators. Two historically favorable nesting zones, specifically located on little Kuriat, are targeted during this monitoring.

## Results

It was observed that between 2020 and 2023 on these islands, there were variations in the number of Little Egret individuals, with a winter average of 98 individuals.



In 2023, the island of Kuriat experienced an unusual absence of the little egret nesting colony, with a decrease of 53.04% compared to the year 2022.



## Discussion

The decrease in the number of nests in 2023 is directly correlated with the decline in the number of individuals compared to the year 2022. This connection underscores a notable trend that warrants further investigation into the factors influencing both nest and population numbers. Additionally, the complete absence of the second colony of nests in 2023 could be attributed to weather conditions, climate change, and/or early mass tourism activity this year.



## Conclusion

Overall, the decrease in the population and nests of the Little Egret on the Kuriat Islands can be explained by climate change, the possibility of disease, and the impact of sea gulls. The results underscore the importance of closely monitoring ecological dynamics for the effective conservation of this species on the small Kuriat Island.

## Perspectives

The preservation of the little egret on the Kuriat Islands is of crucial importance for the local ecological balance. By strengthening awareness, environmental education, and protective policies, we contribute to ensuring a sustainable future where the little egret can continue to captivate future generations on these islands.

## References

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- 2 : AZAFZAF ,H., KAYSER ,Y., FELTRUP-AZAFZAF ,C., REBAH ,S.,HAMMOUDA ,N., AISSA ,H.,MALLAT ,H.,KILANI ,S.,ZADEM ,A. ,DOREI ,S.,MECHEMECH ,A. & JRIJIR, J. 2020. L'avifaunedes îles Kuriat, Tunisie. *Go-South Bull.*17, 140-155.
- 3: <https://www.oiseaux.net/oiseaux/aigrette.garzette.html>