

Association " Les Amis des Oiseaux "
Groupe Tunisien d'Ornithologie



Numbers of Eleonora's Falcon breeding in Tunisia

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September 2004

Numbers of *Falco eleonora* breeding in Tunisia in 2004

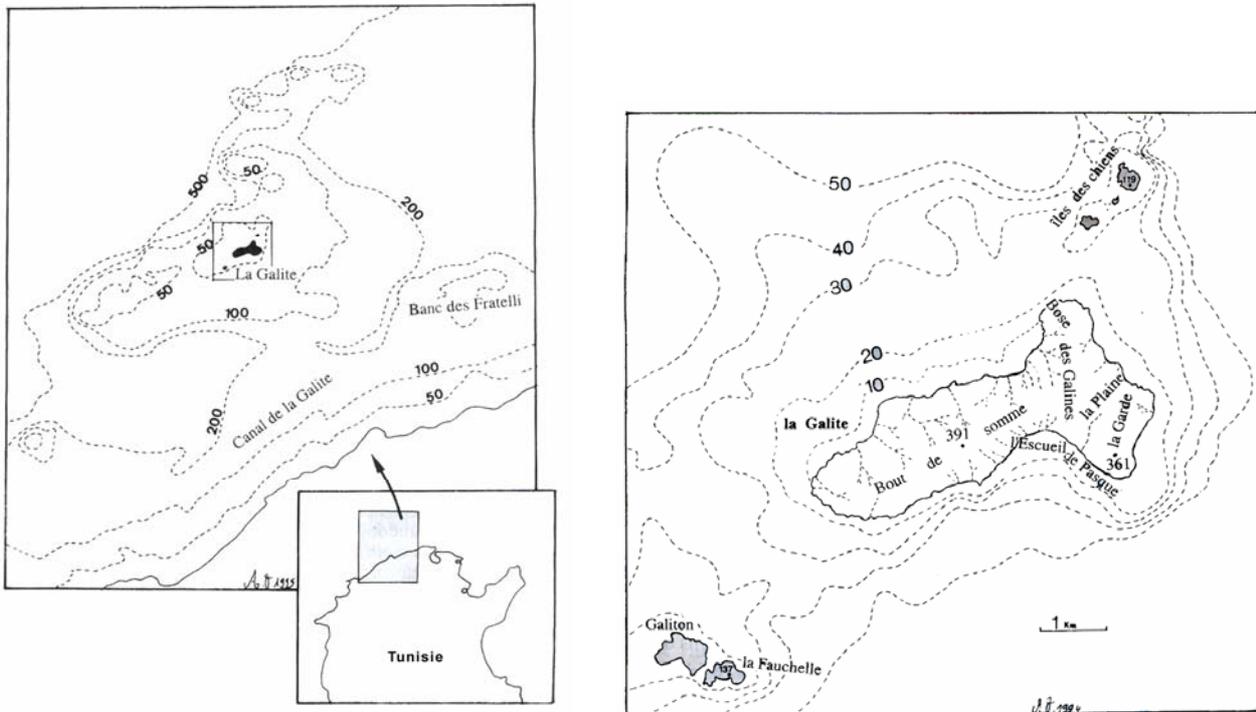
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The Eleonora's Falcon, with a world population of perhaps 6000 pairs, is one of the rarer and least studied raptors on earth. That is why BirdLife International drafted an Action Plan in 1999 for the conservation of the species. After adoption of this plan the EU government granted a LIFE project (no LIFE03NAT/GR/000091) to the Hellenic Ornithological Society (HOS) in Greece to study the needs of this falcon not only in their country, but also to coordinate the census of the species in the other EU countries. Outside the EU, this falcon is known to breed only in Morocco, Algeria, and Tunisia. To use the opportunity to obtain a complete world census as basis for future monitoring, Tunisia was included in a supplementary program of RSPB to this larger project. The Tunisian task was assigned to Association "Les Amis des Oiseaux" (AAO), the Partner Designate of BirdLife in Tunisia, and within this NGO to the Groupe Tunisien d'Ornithologie (GTO).

From a two week GTO study of various islands in 1999 it was known that La Galite archipelago and the Fratelli islands are the only locations in Tunisia where Eleonora's Falcons breed. From south-west to north-east, the six islands of the La Galite archipelago (Fig. 1) are: Le Galiton (area 27 ha, altitude 158 m), La Fauchelle (14 ha, 137 m), La Galite (650 ha, 391 m), Galina (4 ha, 75 m), Pollastro (0.3 ha, 20 m) and Gallo (9 ha, 119 m). The two largest islands have 'human settlements', Galiton with the light house and a meteorological station and La Galite with a dozen houses of the National Guard and the military near the south bay. The other four islets have no landing site, their steep slopes are almost bare of vegetation and are composed of a mixture of gravel, large stones and fractured walls of solid rock; the three largest islets harbour the main colonies of Eleonora's Falcon.

A house of the National Guard on La Galite provided room for up to ten expedition members who need to bring their food and drinking water. Transportation from the port of Bizerte to La Galite and back (81 km) by a ship of the military was scheduled for 18 and 26 September respectively, provided that the weather allows carrying out the landing manoeuvres at La Galite. The plan called for two Zodiacs to carry the ornithologists to the study sites who could work in two independent groups and mark special locations with bamboo sticks, in case a re-visit is advisable.

Fig. 1 Maps of Galite archipelago
(Ameur OUESLATI, *Les Îles de Tunisie*, CERES, Série Géographique N° 10, Tunis, 1995)



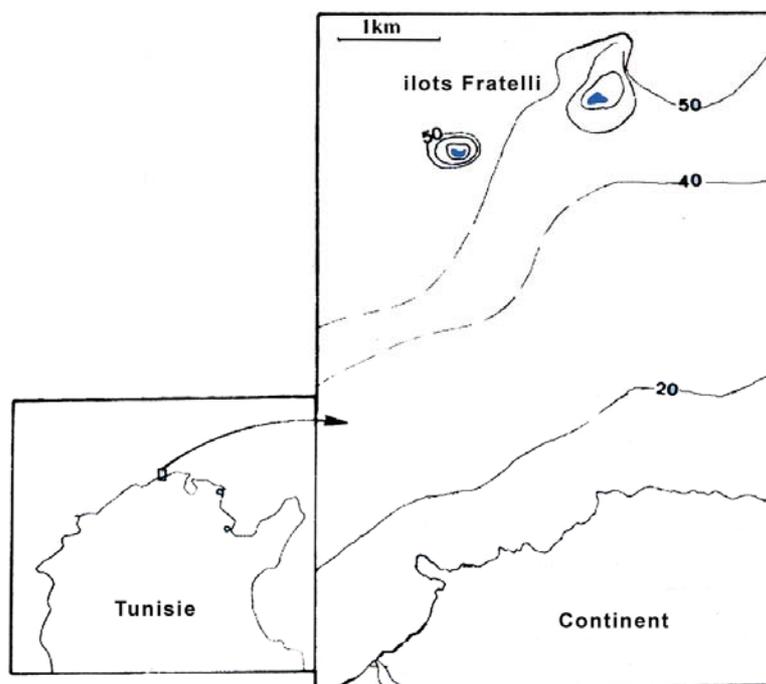
Apart from the two Zodiac drivers, there were 7 ornithologist in the expedition team: Hichem Azafzaf/Ariana GTO Co-ordinator and expedition leader, Abdelmajid Dabbar/Tunis, Rachid Haagui/Ben Arous, Habib Dlensi/Sfax, Walid Gherairi /Gabès, Ridha Ouni /Sidi Thabet all AAO/GTO members, and Dr. Dietrich Ristow/Germany, Compiler of the International Action Plan for Eleonora's Falcon. Due to the wind conditions (Fig 4), the military delayed departure from Bizerte till 21 September 4:00 am. Strong winds during the next days prevented the team from going by Zodiac to the study islets, and counts from the Zodiac and perhaps getting ashore were possible only on 25-28 September. When the weather forecast for 27-29 September predicted less wind, it was possible to arrange a later transport back by the military, so that the team returned to Bizerte in the night of 28/29 September. The final day of Dietrich Ristow in Tunis was used for a dialogue between the GTO Co-ordinator and the Compiler to reflect on the results achieved and to discuss potential improvements for future monitoring at La Galite archipelago.

After the events on La Galite, the plan to visit the two Fratelli islets (Fig. 2) on 3 October had to be altered. The unfortunate wind conditions continued until mid-October and even though the expedition team went twice to the beach of Sidi Ali Mekki on the North coast, the departure for the islets was impossible and it finally became too late to visit the breeding colony at the Fratelli islets. Therefore the last estimates for this site (1999) have been included in this report. The Fratelli islets are situated 4km north of Kef Abed, west of Bizerte. These islets are two huge rocks, almost bare of vegetation and without human

settlements. They have an area of about 6 and 3 ha and an altitude of 92 and 40m respectively.

(Fig. 2) Map of Fratelli islets

(Ameur OUESLATI, *Les Îles de Tunisie*, CERES, Série Géographique N° 10, Tunis, 1995)



The survey results are listed in Table 1. It was not possible from the Zodiac to map perching falcons or spot apparent nest sites by their faeces. So the numbers of adult falcons, sounding the alarm call when flushed, were the best reference number. The total of 180 flying and alarm calling birds could mean that 150 pairs started breeding and 120 pairs were successful breeders. In comparison to estimates in previous years, there is no marked change in the size of the population.

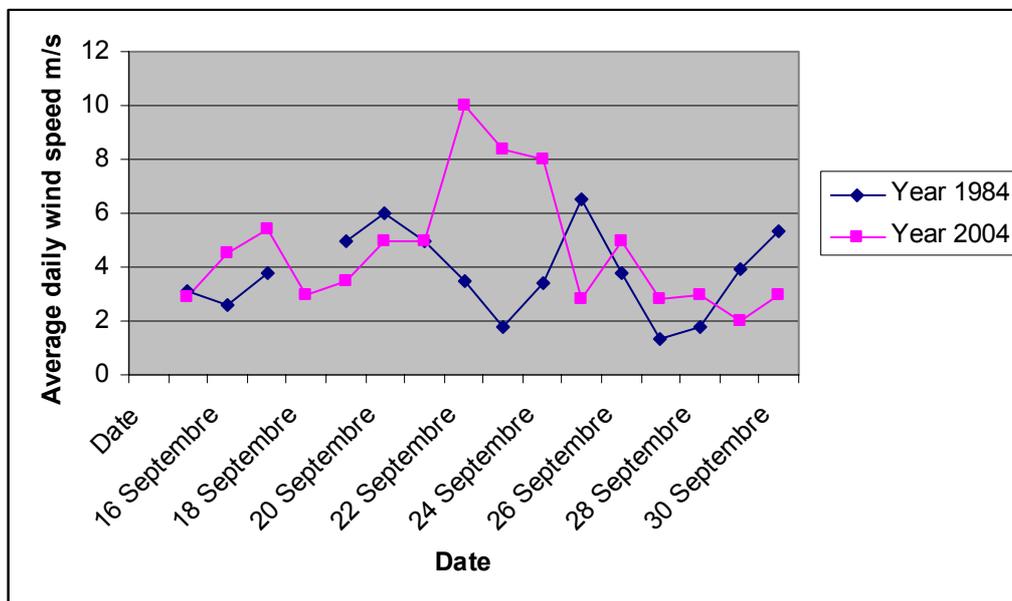
Table 1 Number of adult Eleonora's Falcons, flying and alarm calling, at the islets of La Galite and Fratelli archipelagos.

Sites	Number of adult Eleonora's Falcons, flying and alarm calling
Galiton	0
La Fauchelle	58
La Galite	0
Gallina	40
Pollastro	0
Gallo	70
Fratelli	12
Total	ca. 180

For monitoring breeding success, the south slopes of La Fauchelle and Gallina (the only two islets accessible at this weather) were searched for falcon nests for about two hours each, 10 and 6 nests were found respectively, and 28 juveniles ringed. The observed average of 1.88 young per successful pair is 8 % and >10 % higher, respectively, than the long year average from Sardinia and Crete. So the breeding success of this year can be termed 'good'.

But unexpectedly on La Fauchelle this number was higher and the average hatching date, as inferred from wing chord measurements, was earlier than on Gallina. Further,, whilst on La Fauchelle the ratio of dark morph juveniles amounted to about 30%, which is a typical value for an Eleonora's Falcon population, no such individual was found in the 6 nests on Gallina. The apparent differences between the two islets are not understood. Juvenile sex ratio, as judged from colour pattern details, was even. At one falcon nest all pluckings were collected to obtain an example for typical food composition during rearing of nestlings. 67 specimens from 21 species could be identified: 5 *Coturnix coturnix*, 1 juv. *Apus apus*, 1 ad. *Merops apiaster*, 1 *Upupa epops*, 1 *Jynx torquilla*, 1 juv. *Delichon urbica*, 1 *Riparia riparia*, 4 *Anthus trivialis*, 2 *Anthus campestris*, 1 *Motacilla flava*, 1 *Locustella spec.*, 3 *Sylvia cantillans*, 5 *Sylvia borin*, 8 *Phylloscopus trochilus*, 4 *Ficedula hypoleuca*, 1 ad.+1 juv. *Saxicola rubetra*, 9 *Oenanthe oenanthe*, 10 *Phoenicurus phoenicurus*, 2 *Luscinia megarhynchos*, 3 *Erithacus rubecula*, 1 ad. f. + 1 juv. *Oriolus oriolus*.

In accordance with the Scientific Annex of the Action Plan, blood samples of juveniles were collected and forwarded to Heidelberg University for phylogeographic analysis.



The financial accounts are covered in a separate document (financial report).

The list of daily bird observations during the La Galite stay (in French) can be sent on request.

Acknowledgements

Our thanks go to the Royal Society for the Protection of Birds (RSPB) for the financial support of our expedition. We also would like to thank the Tunisian Navy for the transportation of our expedition team and material between Bizerte and La Galite and the Forest Department at the Ministry of Agriculture, Environment and Water Resources for the authorisation to access and study the mentioned sites.

Annex 1 Photos from La Galite archipelago (Photos Hichem AZAFZAF)



La Fauchelle et le Galiton vu de la Galite



La Galite vue de la Fauchelle



Les Iles des chiens (de droit à gauche)
Gallo, pollastro, et Gallina



La Fauchelle coté Ouest



Nests of Eleonora's Falcon with 3 young – La Fauchelle



Young of Eleonora's Falcon – La Fauchelle