

easterly airflow. An extensive area of intense thundery activity covered most of the central and southern part of the Mediterranean Sea in the vicinity of the Maltese Islands. This instability continued to move slowly westwards during the period, giving cloudy weather with outbreaks of thundery showers over the Maltese Islands. Presumably, birds which were induced to migrate by the fine weather in Central and Eastern Europe and extending down to Sicily (possibly the point of departure of the migrating insects), were met with adverse weather over the central Mediterranean and made for the nearest land. The fall was particularly noticeable on Filfla because of the limited land area. Falls may also have occurred elsewhere along the southern coast of Malta, but probably went unnoticed because they were diffused.

### Acknowledgements

The observations reported here were made during a visit to Filfla as part of an ecological survey of the islet being made by the Department of Biology of the University of Malta, and the Secretariat for the Environment of the Ministry of Education and the Interior. We are grateful to E. Lanfranco and C. Hilli — our companions on Filfla, to the Helicopter Flight of the Armed Forces of Malta for arranging helicopter transport to Filfla even during adverse weather, and to Major J. M. Mifsud and Capt. F. T. Gauci of the Meteorological Office, Luqa for meteorological information. We thank also Stephen Schembri of the National Museum of Natural History, Mdina for information and literature on insect migrations in the Maltese Islands.

### References

- Dannreuther, F. 1948. Migration notes from abroad, 1947. Mediterranean. *The Entomologist* 81:117.
- Darlow, H.M. 1951. Observations on migrant Lepidoptera in the Mediterranean. *The Entomologist* 84:246-254.
- Sultana, J. & Gauci, C. 1969. Exceptional falls (23-26/9). *MOS Quart. Bull.* 3(2):9-10.
- Sultana, J. & Gauci, C. 1977-78. An unusually large influx of Spotted Flycatchers in spring. *Il-Merill* 19:16-17.
- Sultana, J. & Gauci, C. 1982. *A new guide to the birds of Malta*. The Ornithological Society, Valletta.
- Thake, M. A. 1980. Falls of autumn migrants: 7-9.9.76. *Il-Merill* 21:19-20.
- Valletta, A. 1949. A preliminary list of the Odonata of the Maltese Islands. *The Entomologist* 82:85-87.
- Valletta, A. 1952. An unusual migration of *Anax parthenope* Selys in Malta. *The Entomologist* 85:42.
- Valletta, A. 1957. Second contribution to the Odonata of the Maltese Islands. *The Entomologist* 90:306-307.

**Joe Sultana & Patrick J. Schembri**

*J. S. — Secretariat for the Environment, Ministry of Environment, Floriana, Malta.*

*P. J. S. — Biology Section, Science Dept. University of Malta, Tal-Qroqq, Malta.*

### THE PRESENT STATUS OF THE CORY'S SHEARWATER *Calonectris diomedea* ON FILFLA

The presence of the Cory's Shearwater *Calonectris diomedea* on Filfla islet has been reported by several authors (Wright 1863, Becher 1884, Despott 1916, Luxmoore-Duff 1947, Trail 1949-50, Roberts 1954, Sultana and Gauci 1970 and 1982, Sultana *et al.* 1975).

The breeding colony on Filfla has been estimated as less than 30 pairs (Roberts 1954) to about 200 pairs (Sultana *et al.* 1975, Sultana & Gauci 1982). Luxmoore-Duff (1947) was fairly certain that Shearwaters

were not nesting on Filfla when he visited the islet on 11 May. He must have come to this assumption because at that time of the year the Cory's Shearwater would not have yet laid and the birds would be foraging out at sea during daylight. Two years later Trail (1949-50) visited Filfla in late July. Twenty-two occupied nests of shearwaters (species undetermined but presumably Cory's) were located among the boulder and rubble slopes. At night Trail estimated the number of arriving birds as over a thousand, possibly twice as many. This figure seems to be somewhat exaggerated. A hundred birds can make enough noise to mislead an inexperienced observer into overestimating their number. On the other hand, if Trail was correct, the sharp decline in numbers can be partly attributed to bombing (Sultana & Gauci 1970). Filfla was used for bombing practices until 1974.

After several visits during the summer of 1952, Roberts (1954) concluded that the breeding population was about 30 pairs. In 1968 members of the newly-formed ringing scheme of the Malta Ornithological Society started organising expeditions to the islet and the breeding population was estimated at about 100 pairs (Sultana & Gauci 1970). In the following years the breeding population was estimated to have increased to about 200 pairs (Sultana *et al.* 1975, Sultana & Gauci 1982).

By the early seventies the extensive rubble screes, which had been created below the cliffs by bombing, offered many suitable nesting areas for the shearwaters. However, in the following years storms and other natural elements started to change, at times suddenly, the face of the islet. Rubble screes were much reduced and patches of the underlying slopes of blue clay were uncovered. Furthermore bird-shooting at sea from fast motor-powered dinghies and speed boats has increased considerably in the past few years, with an increasingly larger number of shearwaters shot. Recent visits revealed that a decline in numbers of Cory's Shearwaters has taken place on the islet. During a visit in mid-August 1990 the authors, covering nearly half of the surface area below the cliffs, found only thirteen nests occupied by young birds. It seems that at present the population is less than 100 breeding pairs.

## References

- Becher, E. F. 1884. Shearwaters on the rock of Filfla. *Zoologist* (3)8:467-468.  
 Despott, G. 1916. The breeding birds of Malta. *Zoologist* (4)20:161-181.  
 Luxmoore-Duff, M. J. 1947. From Filfla Island. *Sea Swallow* 1:32.  
 Roberts, E. L. 1954. The Birds of Malta. Progress Press: Malta.  
 Sultana, J. & Gauci, C. 1970. Bird Studies on Filfla. Malta Ornithological Society: Malta.  
 Sultana, J. & Gauci, C. 1982. A new guide to the Birds of Malta. The Ornithological Society: Malta.  
 Sultana, J., Gauci, C. & Beaman, M. 1975. A guide to the Birds of Malta. Malta Ornithological Society: Malta.  
 Trail, H. A., 1949-50. Shearwaters on Filfla Island. *Sea Swallow* 3:12-14.  
 Wright, C. A. 1863. A visit to the Islet of Filfla, on the south coast of Malta. *Ibis* (20) 15:432-440.

John Borg & Joe Sultana

*J.B.-Block C2/5, G.H.E., Ta' Xbiex MSD14, Malta.*

*J.S.-3 Sciberras Flats, Fleur-de-Lys Junction, B'Kara BKR 02, Malta.*