

# NOTES ON THE RAPTOR MIGRATION ACROSS THE CENTRAL MEDITERRANEAN

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## ABSTRACT

Only a limited number of species cross the Central Mediterranean, chiefly Honey Buzzard, Buzzard, Black Kite, Marsh Harrier and Kestrel; less frequently seen are Montagu's Harrier, Hobby, Lesser Kestrel and Red-footed Falcon during the spring migration.

In spring, whilst the migration in Tunisia is chiefly across Cap Bon, in Sicily—depending on the prevailing wind—it follows the Aeolian Islands and the Straits of Messina (Peloritani, Messina and Aspromonte, Reggio Calabria). In autumn, raptors are generally much scarcer, the only exception being Malta, where more migrants are observed in autumn than in spring.

## INTRODUCTION

The nature of the sea-crossing over the Central Mediterranean means that observations from as many different localities as possible—ideally, simultaneously—are needed to give a clear idea of the numbers and routes. In this note we outline some conclusions reached from observations at (1) Malta; (2) Cap Bon (30 April to 16 May 1979 only); and (3) Sicily—(a) in the area of the Straits of Messina and (b) at Pantelleria (29 August to 6 September 1978 only).

## SYSTEMATIC LIST

### **Honey Buzzard (*Pernis apivorus*)**

The spring passage lasts from about the end of March to early June, peaking in the first half of May. We counted about 10,000 individuals at Cap Bon (see also Dejonghe 1980), well in agreement with observations of Thiollay (1977). However, the appearance of several thousands in the area of the Straits of Messina, not coincident with those at Cap Bon in 1979, plus 300 at the Peloritani (Messina) as late as 25 May (Massa & Galea, in prep.) and a regular passage across the Isle of Ustica (Palermo) and Aeolian islands (Messina), indicate that the total passage involves a much larger number of birds. In Malta and southeastern Sicily this species is not numerous at this season. Probably the bulk of the birds use the Tunisia—northern Sicily route, with alternative routes over surrounding islets of northern Sicily.

The autumn migration lasts from late August to late October, with a peak from mid-September to early October. In Malta the species is much commoner in autumn than in spring and it is also the commonest raptor observed. On 18 September 1981, part of the passage through Malta amounted to over 500 birds. The provenance of the birds and their route have still to be determined.

### **Red Kite (*Milvus milvus*)**

A few individuals recorded for Cap Bon and the Straits of Messina, March to May, apparently annually. Rare and irregular on autumn migration, August to October. It is a winter visitor in Sicily, where there are roosts of up to 40 individuals.

### **Black Kite (*Milvus migrans*) and Buzzard (*Buteo buteo*)**

In spring, both species are common between early March and late May, with a peak in late March/early April; Thiollay (1975) observed at Cap Bon 4208 and 847 respectively while we at the same locality observed 582 and 331. In autumn, the Black Kite migrates from late August to early October, mostly in the first half of September, e.g. c. 400 birds at Pantelleria on 6 September 1978. The Buzzard, appearing during September, October and early November, seems to be uniformly scarce.

### **Long-legged Buzzard (*Buteo rufinus*)**

This species, though recorded by Thiollay (1975 & 1977) in good numbers, was observed only once by us in the Straits of Messina and twice by Dejonghe (1980) at Cap Bon. Most of the birds observed by ourselves at Cap Bon were identical in plumage to the local breeding birds. Any movement of these birds at Cap Bon is probably by individuals of the North African subspecies.

### **Egyptian Vulture (*Neophron percnopterus*) and Short-toed Eagle (*Circus gallicus*)**

Thiollay (1977) recorded several hundred individuals of both species in spring at Cap Bon; Thiollay (pers. comm.) also observed at Zembra Island 22 (1980) and 32 (1981) Egyptian Vultures. However, only 89 Egyptian Vultures and 33 Short-toed Eagles were recorded by ourselves, whereas Dejonghe (1980) in 1979 counted 119 Egyptian Vultures and 21 Short-toed Eagles. This, together with the lack of evidence for any large movement of either species through Sicily, suggests that chiefly birds from Italy are involved. The return migration occurs in September and October.

### **Marsh Harrier (*Circus aeruginosus*)**

The commonest harrier of this region, appearing from late February to late May. At Cap Bon Thiollay (1975) observed 318 for this period, and 91 in the first two weeks of May (Thiollay 1977), while in approximately the same period in 1979 we observed 245. In Malta it shows a peak in late March/early April, when, irregularly, large flights sometimes take place, e.g. 200 harriers, mostly *C. aeruginosus*, on 18 March 1973.

In autumn it is regularly observed in Malta from early September to late October, mostly from mid-September to early October, with up to 40 observed in a day. Throughout the rest of region, like the Honey Buzzard, it seems scarce.

**Hen Harrier (*Circus cyaneus*)**

This species is a rare migrant in the region, appearing from early March to mid-May and again, though apparently still more rarely, in September and early October (Thiollay 1975; Sultana *et al.* 1975; Beaman & Galea 1974; Massa 1976).

**Pallid Harrier (*Circus macrourus*)**

In Malta, from the commonest harrier it has become one of the rarest, with a few birds only appearing in spring, during March and April. This situation appears typical of the region. In autumn it is rarer still, e.g. only three birds recorded from Malta for the period 1969–73 (Beaman & Galea 1974).

**Montagu's Harrier (*Circus pygargus*)**

Like the other harriers, it is commoner in spring than in autumn, its migrations extending from late March to late May, mostly in late April and May, and from late August to early October (Beaman & Galea 1974; Sultana *et al.* 1975; Thiollay 1975, 1977).

Taken as a whole, the observations confirm that all four species of harrier migrate across the region on a broad front, though there is evidence of some concentration at Cap Bon, especially of the Marsh Harrier and Montagu's Harrier.

**Lesser Spotted Eagle (*Aquila pomarina*) and Booted Eagle (*Hieraaetus pennatus*)**

We did not record the numbers seen by Thiollay (1977). Also Thiollay (pers. comm.) observed at Zembra Island in spring 30 (1980) and 35 (1981) Booted Eagles; Dejonghe (1980) in spring 1979 observed 40 Booted Eagles and 15 Lesser Spotted Eagles. There is no evidence from Sicily of any significant passage of either species, only sporadic observations from the east of the island. The almost annual occurrence of these two species in Malta shows that in autumn some birds, possibly vagrants, are using this route.

**Osprey (*Pandion haliaetus*)**

In spring the few recorded at each locality (e.g. Beaman & Galea 1974; Dejonghe 1980; Thiollay 1975, 1977) would indicate that this species is a broad front migrant, with no concentration points. It appears in March, April and May. In autumn it appears from late August to late October, with the bulk in September and early October, on the same broad front as in spring.

**Lesser Kestrel (*Falco naumanni*)**

This small falcon occurs in spring during March, April and May and again in autumn from late August to late October, when up to 50 may be seen in a day in Malta (Sultana *et al.* 1975).

**Kestrel (*Falco tinnunculus*)**

This is the commonest migrant falcon, with a passage from late February to early June and from late August to November, when the passage migrants start to overlap with winter visitors.

**Red-footed Falcon (*Falco vespertinus*)**

In spring, with a season extending from late March to late May, it is much commoner than in autumn. In spring in Malta up to 25 have been recorded in a day and up to 26 at Cap Bon (Cachia Zammit & Attard Montalto 1980).

**Merlin (*Falco columbarius*)**

Though appearing in both spring (March to mid-May) and autumn (September to November), the few records from each locality (Massa 1976; Sultana *et al.* 1975; Thiollay 1975, 1977) show this species to be a scarce migrant in this area.

**Hobby (*Falco subbuteo*)**

In spring a few are recorded throughout the region, mostly in April and May; in autumn in Malta up to 60–80 may be seen in a day in a season which lasts from late August to late October, peaking in late September and early October. Though relatively few birds are recorded at this season at other localities, this species may indeed be commoner in this region in autumn than in spring.

**Eleonora's Falcon (*Falco eleonora*)**

The presence of several colonies in the region makes the interpretation of the records of this species difficult. Apparently it arrives mainly in late April and early May, but in Sicily not until July. In Malta it is recorded mostly in September and early October.

**Lanner Falcon (*Falco biarmicus*)**

This species is a resident, but a few immatures migrate across Sicily (Peloritani) from February to March.

**Saker Falcon (*Falco cherrug*)**

A rare though apparently regular migrant in spring (mid-March to mid-May) and autumn (September to November).

**Peregrine Falcon (*Falco peregrinus*)**

Undoubtedly some migration does take place, but it is extremely difficult to assign a bird to the migrant population rather than to the resident one. Some specimens captured in Sicily during spring and autumn migration were of the *calidus* subspecies.

**Accidentals**

In addition to this list, some other species of an accidental occurrence have been recorded in the region, namely Steppe Eagle (*Aquila rapax nipalensis*) (Dejonghe 1980; Vailland 1981); American Kestrel (*Falco sparverius*), and Sooty Falcon (*Falco concolor*) (Sultana *et al.* 1975).

**ACKNOWLEDGEMENTS**

We would like to thank many ornithologists, especially R. Cachia Zammit, E. Curmi, N. Fenech, C. Iapichino and R. Testa for their help in the observations and also the Council of the Ornithological Society of Malta for authorizing us to use its records, and J.-M. Thiollay for his records from the island of Zembra.

**REFERENCES**

- BEAMAN, M. & GALEA, C. 1974. The visible migration of Raptors over the Maltese Islands. *Ibis* **116**, 419–31.  
 CACHIA ZAMMIT, R. & ATTARD MONTALTO, S. 1980. Systematic list for 1977–78. *Il Merill* **21**, 26–43.

- DEJONGHE, J.-F. 1980. Analyse de la migration prénuptiale des rapaces et des cigognes au Cap Bon (Tunisie). *Oiseau et Rev. Fr. Orn.* **50**, 125–47.
- MASSA, B. 1976. I Falconiformi della fauna siciliana. *Atti I Conv. Sicil. Ecol.* (Noto 1975) 117–34.
- SULTANA, J., GAUCI, C. & BEAMAN, M. 1975. *A guide to the birds of Malta*. Malta Ornithological Society.
- THIOLLAY, J.-M. 1975. Migration de printemps au Cap Bon. *Nos Oiseaux* **33**, 109–21.
- THIOLLAY, J.-M. 1977. Importance des populations de rapaces migrateurs au Méditerranée occidentale. *Alauda* **45**, 115–21.
- VAILLANT, G. 1981. Observation d'un Aigle des steppes en Tunisie. *Alauda* **49**, 229–30.