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# SANDGROUSE

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1994

Volume 16 Part 2

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OSME



## OSME

OSME was founded in 1978 as the successor to the Ornithological Society of Turkey. Its primary aims are:

- To collect, collate, and publish data on all aspects of the birds of the Middle East.
- To promote an interest in ornithology and bird conservation throughout the Middle East.
- To develop productive working relationships with other governmental and non-governmental organisations with an interest in conservation and/or natural history in the region.

**Publications** OSME publishes a scientific journal, *Sandgrouse*, containing papers on all aspects of Middle Eastern ornithology. The *OSME Bulletin* contains more popular articles, letters, Society news, and other news and information from around the region. Both are published twice a year and are issued free to members.

**Meetings** An Annual General Meeting is held in London at which guest speakers provide new perspectives on ornithology in the region. OSME usually joins forces with other societies for a second meeting each winter and organises occasional special meetings of its own; some meetings take place outside the UK.

**Projects** OSME organises field expeditions to collect data on birds in little-known parts of the region and in areas where OSME can assist by teaming up with local societies. In addition, the Sites Register Scheme collects records from all interested ornithologists of important bird areas in the Middle East.

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# ORNITHOLOGICAL SOCIETY OF THE MIDDLE EAST

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# SANDGROUSE

Volume 16 Part 2 1994

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## EDITORIAL

The task of editing this issue of *Sandgrouse* fell to me rather late in 1994 and the delay in production was further compounded by the vagaries of the European - Arabian postal system. This is the second all-Turkish issue of *Sandgrouse*, following on five years after Volume 11 (1989), and includes the third Turkey Bird Report published in this format. Despite the increasing popularity of Turkey with northwest European birders, as an easily accessible yet very different bird-watching venue, it appears that a large part of this effort is not effectively advancing our knowledge of the country's avifauna. Glancing through the three TBRs, it is very easy to pick out numerous species where an uncertain status has remained throughout the 16 year period, for example Levant Sparrowhawk, White-backed Woodpecker and Radde's Accentor. Although the aim of many visitors is to increase their lists with many species very rarely seen elsewhere in Europe, I personally hope that a significant proportion of OSME members who intend to visit, or regularly return to, the country will strive to contribute something more. Full-scale censussing or constant effort mist-netting is not practical for a short holiday, but waterfowl counts, working a certain habitat type maybe in several localities, or focussing on particular species or groups are all worthwhile activities. Repeat visits following the same itinerary in different seasons or years can often be rewarding in its own right. The papers published here give a flavour of what can be done along several of these themes to clarify the status, distribution and abundance of Turkey's birds.

Stephen Newton

# The breeding status and distribution of the White-headed Duck *Oxyura leucocephala* on the Central Plateau, Turkey

GUY M. KIRWAN

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## Summary

The breeding status of the White-headed Duck *Oxyura leucocephala* on the Central Plateau, Turkey is examined in the light of the discovery of a new breeding locality and surveys of areas already known in 1991 and 1992. The Turkish breeding population is considered to be larger than previously thought, with probably over 150 pairs breeding on the Central Plateau alone. Some recommendations for future research, and a full list of present and suspected breeding areas throughout Turkey are presented.

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THE White-headed Duck *Oxyura leucocephala* is listed as a globally threatened species (Collar and Andrew 1988); the majority of the population breeds on the steppes of former Soviet Central Asia, with Kazakhstan the most probable stronghold (Cramp and Simmons 1977), although there is evidence to suggest a recent decline there and in other parts of the Confederation of Independent States (former Soviet Union, hereafter C.I.S.) (Collar and Andrew 1988, Poslavski 1992). Isolated, and much smaller, populations survive in parts of Europe and North Africa, principally Algeria, Hungary, where it has been reintroduced (Anstey 1989), Spain and Tunisia (Cramp and Simmons 1977). The western Mediterranean populations have all been examined recently and found to be either stable, or increasing in the case of Spain (Green and Anstey 1992). In Turkey there have been a number of population estimates.

## BACKGROUND

Between 100 and 150 breeding pairs were estimated in 1971, including 80 pairs located on the Central Plateau (OST 1975). More recently Green *et al.* (1990) suggest a population of between 150 and 200 pairs, based on the results of a survey undertaken in 1987, while the Important Bird Areas in Turkey publication gave 188-198 pairs at the eleven principal sites (Ertan *et al.* 1989). The aim of this paper is to re-evaluate the breeding status of the species in Turkey, in particular to examine its distribution on the Central Plateau where up to 105 pairs have been estimated to breed at four sites (Grimmett and Jones 1989), based upon an examination of past records and the preliminary findings of a survey of a number of breeding areas in spring and summer 1991, with additional fieldwork during spring 1992.

In order to establish as accurately as possible the breeding population of the White-headed Duck, a certain knowledge of the species' movements and breeding biology is required. In Turkey the species is described as "resident or partial migrant in small or moderate numbers in marshy wetlands on Central Plateau and adjacent parts of Southern Coastlands and East. Winter visitor in large

numbers to several wetlands in Southern Coastlands,.. smaller numbers on the Central Plateau and occasionally elsewhere in western two-thirds of Turkey" (Martins 1989). The majority of the world population, conservatively estimated at 19,000 birds (Green and Anstey 1992), currently winter in Turkey, with decreasing numbers wintering in Pakistan (Scott and Rose 1989, Chaudry 1992) since the original increase recently documented there (Cramp and Simmons 1977). Of the other important wintering areas only Tunisia remains, the majority of the south Caspian population presumably having moved elsewhere (Green and Anstey 1992). However since 1986 approximately 400 birds have wintered in Israel (Green and Anstey 1992). A similar increase has been noted in Greece. At present it is not known from where these originate. In Turkey the vast majority of birds winter on Burdur Gölü, Southern Coastlands. Recent counts from this site include 6,483 in January 1990 (Dijksen and Blomert 1993, Kirwan 1990) and 10,927 in February 1991 (Berrevoets and Erkman 1991), with 2054 still present on 1-3 April 1991 (Bakker *in litt.*). Berrevoets and Erkman (1991) suggest that previous counts, up to and including their own, remain incomplete due to access problems along the southern shore of the lake. In recent winters however, numbers have been much lower, probably representing a significant decrease in the world population, exacerbated by hunting at Burdur Gölü (A. Green *in litt.*).

Other important areas include; Çavuscu Gölü (max. 429), Corak Gölü (max. 930), Akyatan Gölü, Çukurova Deltasi (max. 978) and Yarisli Gölü (max. 420), Salda Gölü (max. 128), while at least four other sites regularly support between 50 and 100 birds (Dijksen 1991, Grimmett and Jones 1989, Magnin 1992). The correlation between high counts at Burdur Gölü and low numbers elsewhere in Turkey and vice versa has been discussed (Green and Anstey 1992). Return passage to the C.I.S. begins in February, with the bulk of the passage in Kazakhstan occurring between 29 April and 5 May, and all return movement is completed by mid-May (Cramp and Simmons 1977). In Turkmenistan, along the Middle Amudarya, an area where the species is not known to winter, ducklings have been noted in mid-May (Poslavski 1992). Thus while Green *et al.* (1990) conclude that "White-headed Duck present in Turkey from late May to early September can be considered summer residents", this former limit is a rather conservative one. In fact the vast majority of birds present in Turkey after the second week of May, at the latest, can be regarded as summer residents, whether breeding or not. However as yet the spring migration through Turkey remains poorly understood. Moderately large concentrations of up to several hundred birds occur throughout March and into the latter half of April at sites which support few if any birds during the mid-winter count period. Such pre-breeding, mixed sex flocks of White-headed Duck are known to occur in areas with little suitable breeding habitat eg. Çavuscu Gölü (OST 1969, 1975), but have also been reported from known breeding areas eg. Ereğli and Hotamis Marshes (Magnin pers. comm., Kirwan 1993), and from sites not known to harbour breeding White-headed Duck but where suitable habitat exists (eg. Eber Gölü) and thus should not be interpreted as being indicative of breeding. In the east, significant concentrations of birds have been noted at Erçek Gölü into the first half of May, where

only a handful of pairs at most breed in the little suitable habitat available. At present it remains unknown whether these birds are still on passage to the C.I.S., or perhaps less likely, originate from the breeding areas around Van Gölü (van der Have pers. comm.). Significant concentrations have been recorded in the Van basin, notably at Sodali Gölü, by the last week of August (Anon 1990) and in September (Green and Anstey 1992), but similarly it is unknown what proportion of these birds are migrants from outside Turkey. Nonetheless, to suggest that such concentrations "up to late May...are not necessarily indicative of breeding." (Green *et al.* 1990) is perhaps over-cautious, as evidence of egg-laying has been recorded in mid-May (Kasperek 1987). While these birds may not breed in the immediate surrounding area, such flocking behaviour, especially after the beginning of May, could presage dispersal into breeding areas elsewhere in Turkey. It is feasible that birds breeding at Uyuz Gölü utilise Kulu Gölü, approximately 50 km to the south-east, in the pre-breeding period and that following nesting the males congregate there along with other post-breeding, moulting birds. These latter concentrations in particular are well documented (Kasperek 1987, Green and Anstey 1992). Despite its threatened status, and the consequent attention devoted to the species, the breeding biology of the White-headed Duck remains poorly known, especially breeding habitat requirements. Eggs are generally laid in late May or early June in the Western Mediterranean basin region and the C.I.S. (Cramp and Simmons 1977). However breeding, estimated from the age of juveniles, was found to be mid-June in central Turkey and early to mid-June in the east in 1987 (Anderson and Hultfeldt undated, Green *et al.* 1990). The latter authors speculate that this apparently rather anomalous situation could be explained by the shorter summers experienced in the east, necessitating earlier nesting. This explanation seems rather too simplistic, considering the preponderance of observations in May and June, with many fewer in July and August. On the Central Plateau previously documented observations (Kasperek 1987, OST 1975) show that egg-laying can start as early as mid-May and as late as the end of July, and exceptionally the beginning of August. The highly variable nature of egg-laying dates, even at the same breeding site in the same season, was closely observed by Warncke at Gogenc Gölü in 1971 (OST 1975). The few available, relevant observations from the breeding areas around Van Gölü generally indicate, subject to the provisos discussed above, that breeding takes place later than on the Central Plateau wetlands. The observations of Green *et al.* (1990) do not conform very well to previously established patterns, however indistinct.

The breeding habitat requirements of White-headed Duck are still poorly known; in Turkey it is not restricted to small pools, its preferred habitat according to Cramp and Simmons (1977). For example on the Central Plateau it habitually utilises large tracts of marshland eg. Eregli and Hotamis Marshes. However, the species does not appear to be dependent upon freshwater, but also uses saline and alkaline wetlands (Cramp and Simmons 1977, van den Berk pers. comm.). In common with other freshwater steppe lakes, both Hotamis and Eregli are becoming steadily more alkaline (Devlet Su Isleri, State Waterworks),

while all the known breeding areas around Van Gölü are to some extent alkaline in nature (van den Berk pers. comm.). Green *et al.* (1990) identified six characteristics shared by all the areas in which they found the species breeding; these were (i) shallow water, up to 2.5m. deep, (ii) water with a relatively high ionic content, (iii) small areas of open water, (iv) a large body of open water nearby, (v) the presence of submerged and emergent aquatic vegetation and (vi) areas of dense *Phragmites* growth. In practice this list only partially explains the species' needs, as several wetlands possessing these characteristics, within the known breeding range of the species, do not hold breeding White-headed Duck. Its absolute requirements are still unknown; nonetheless several points delineated above are probably influential in affecting the species' ability to breed, particularly the former and latter two. In addition, a potentially important and previously unnoted factor is that outside large wetland complexes White-headed Ducks utilised overgrown island reed-stands surrounded by water, such as at Uyuz Gölü and Kulu Gölü.

### THE 1991 SURVEY

Data are presented and discussed from four sites, on the Central Plateau, three of which were previously known: Ereğli Marshes, Hotamis Marshes and Kulu Gölü, and one new area, Uyuz Gölü. In addition information was collected from one other recognised breeding area, Sultan Marshes, although this site was not visited by the author in 1991. During the 1992 season some additional data were gathered from Kulu Gölü, Sultan Marshes and Uyuz Gölü. Data are also presented from a sixth site, Kizilirmak Delta, which is a potential breeding, and important passage, area. At no site was conclusive proof of breeding, in the form of juveniles, observed. However it was not possible to visit any of the areas later than the second week of June, a factor potentially exacerbated by the late (cool and wet) spring in Turkey in 1991. Nonetheless, at all the wetlands included in this study, except Sultan Marshes, both inter-male antagonistic behaviour and several aspects of communal courtship behaviour were noted. Furthermore, in line with the suggestion of Green *et al.* (1990) that intermittent incubation may be undertaken by the females, at Uyuz Gölü females were regularly observed returning to the same small, specific area of reeds after feeding, or engaging in ritualised comfort behaviour, which was suggestive of breeding. Breeding numbers were estimated by a combination of three methods: firstly, all males at each locality were counted on a daily basis; additionally, all records of females and their activity were noted; thirdly, males that were accompanying females, or visiting potential reedbed nest sites, were also counted. In Eastern Turkey in 1993, these two latter observation methods proved very useful for locating nests.

## THE BREEDING AREAS

### Eregli Marshes

The breeding population was previously estimated variously at 35 pairs (Grimmett and Jones 1989) and 20-30 pairs (Kiliç and Kasperek 1990). Visited on 1-2 June, counts were made both from high points overlooking the marshes and by penetrating the area by boat. Only the central and western sectors of the marsh were properly surveyed, although the eastern part of the wetland could also have held a number of breeding White-headed Duck. In the area surveyed, the centre of the White-headed Duck population was found to be the south-central section of the marsh, opposite and to the west of the village of Düden. Few observations were made outside this area, even in areas of apparently suitable habitat. This is a further indication of how poorly known the requirements of the species are and that other, as yet unidentified, factors are crucial to its ability to breed. The maximum count was 62 birds (57 males and 5 females) and thus the total population may in fact be twice as large as the upper limit previously proposed by Kiliç and Kasperek (1990).

### Hotamis Marshes

This area holds a presumed population at least 20 pairs (Grimmett and Jones 1989) but the remaining area of wetland was only properly surveyed for the first time between 23-29 April and 9-15 May 1991. The maximum count was of 354 birds, approximately 55-60% of which were males, on 23 April at Süleymanhaci Gölü, and large numbers were present there throughout the two survey periods. Numbers gradually declined with time, while the percentage of males steadily increased, reaching a maximum of 75%. Birds were also regularly encountered in the main part of Hotamis Marshes, although it proved to be impossible to investigate, by boat, the area thought to be most favourable for breeding, close to Tasagil village. The possibility that a significant proportion of the birds present were still en route to breeding areas in the C.I.S. cannot be discounted, though see previous discussion; nonetheless a population estimate for Hotamis Marshes of 40-50 pairs would be more realistic than that previously published (Ertan *et al.* 1989).

### Kulu Gölü

The population was previously thought to be in the region of 30 pairs (Grimmett and Jones 1989, Kasperek 1987) and estimated at between 25-40 pairs (Green *et al.* 1990). Only the southern shoreline possesses suitable habitat for breeding White-headed Duck. The area was visited on 10-11 June. Two counts were made, the former incomplete: 10 June, 49 males and 27 females; 11 June, 72 males and 33 females. In 1992 the area was visited on 26-27 April. On the former date, 12, mainly adult males, were present along the western side, while 95 (50 males) were counted from the southern shore on 27 April. At this period no nesting or display were noted, with many birds still gathered in small flocks in



the centre of the lake. The previous population estimates are probably quite accurate, as the area is likely to harbour a number of non-breeding summer residents. The total number of breeding pairs is almost certainly within the region of 30-40.

### Sultan Marshes

Visited by the author 12-16 May 1992, but not in 1991. Some data presented here were provided by U. Özesmi. The breeding population was thought to be somewhat less than 20 pairs (Grimmett and Jones 1989, Kasperek 1985), but was later estimated at 20 pairs (Özesmi 1989). During 1990-91 large areas were being drained by the State Waterworks (Devlet Su Isleri), despite it having been accorded full protection (see Albrecht 1989). It was thus presumed that only a handful of pairs of White-headed Duck remained and a single juvenile was seen by Hofland (pers. comm.) in mid-July 1991. Regular counts of between 1 and 25 birds have been recorded between 1987-91 (Kirwan & Martins 1995), and in 1992, with water being pumped back into the area by the authorities, birds were regularly observed in the vicinity of Ovaciftlik, in the southern section of the marshes. Although no counts of more than 10 birds were made, their behaviour indicated that breeding would take place. It seems probable that the population level remains in the region of 20 pairs, as many apparently suitable areas of wetland were impossible to reach during the short survey period.

The birds formerly bred on floating reed-islands, in small lakes, approximately 5-6 m deep (Özesmi 1989), rather deeper than in any other breeding area censused in the 1991 breeding season. Thus the water depth factor previously noted may not be as important as pre-supposed.

### Uyuz Gölü

As this area has not previously been documented, a site description is given here. This comparatively small, shallow lake, c. 1 x 0.3 km, is situated 5 km south of Golbek Gölü, and 1 km north of the village of Komusini (70 km south of Ankara). The eastern side in particular has a number of dense reedbeds lying just offshore. The water depth averages 1-2 m. The whole lake is surrounded by agricultural land. In addition mixed flocks of goats and sheep regularly graze along the shoreline, while cattle frequently enter the water to graze on aquatic vegetation. Uyuz Gölü was visited on four occasions: (i) 26 May 1991, (ii) 31 May 1991 (iii) 2 June 1991 (H. Nijmeijer and Ü. Özesmi), and (iv) 2 May 1992. The following counts of White-headed Duck were made on these four dates; (i) 18 males and eight females, (ii) 10 males and two females, (iii) 17 males and two females, (iv) nine males and two females. A population of about 10 pairs is suggested for this site, although more regular counts by C. Kirac and S. Karauz have been made; Karauz (1993) suggests a population of two pairs based directly upon observed display and other interactions between paired birds. This estimate appears conservative considering the total number of birds present throughout the breeding season. The nature and location of the site makes it unlikely to attract large numbers of non-breeding summer residents as in the case of Kulu Gölü.

### Kizilirmak Delta

The species is known as a winter visitor to the area (Baris pers. comm., Dijkzen and Kasperek 1985) and perhaps as a passage migrant in variable numbers, e.g. 44 on 20 September 1983 (Martins 1989). Large numbers were reported on Karabogaz Gölü, in the western delta, in late winter 1991/92, where shooting was also recorded. The site was surveyed in spring 1992, concentrating on the eastern part, permitting an accurate assessment of the number of migrating White-headed Duck and the timing of their movements. Most observations were made on Cernek Gölü, and all records are attributable to that locality unless otherwise stated. On 16 March 241 birds were present. Thereafter numbers rapidly built up to a maximum of 1246 on 23 March, declining to 727 on 25 March, and 100 three days later. Only 24 were present on 31 March. April set a new pattern, with generally low numbers interspersed with smaller, short-lived peaks, maxima being 272 on 4 April, 74 (including a single female on Liman Gölü) on 7 April, and 130 on 15 April. The last recorded birds were three on 27 April. On most days fewer than 20 were counted. Occasionally it was possible to observe noticeable build-ups of birds during the day, eg. on 4 April, 101 were present at 07.00, 154 at 11.00, 220 at 14.30 and finally 272 at 17.30. As this species roosts on the open water (Cramp and Simmons 1977) it was easy to establish when such flocks had departed, although active migration was not observed. It is likely that the high numbers of late March were wintering birds, as the winter of 1991/92 was particularly harsh in Central Anatolia, and numbers of White-headed Duck on Burdur Gölü were unusually low (Magnin 1992). What is evident is that after the peak on 15 April few birds were seen, giving support to the suggestion that most White-headed Duck present in Turkey at the start of May remain, either to breed, or as non-breeding birds.

There are a number of recent summer records from this locality: a pair, Balik Gölü, 12 May 1991 (Stuiver and Vos 1991); male, Balik Gölü, 13 June 1991 (Bradshaw and Kirwan 1991); three males, Cernek Gölü, 10 May 1992; female, Cernek Gölü, 30 May 1992; a pair, Karabogaz Gölü, and a female, Cernek Gölü, both 5 June 1992 (Hustings and van Dijk 1993). The habitat in the delta appears suitable for breeding (Dijkzen and Kasperek 1985) and such an occurrence would not be unexpected.

### CONCLUSION

Based on these observations it would appear that the White-headed Duck population on the Central Plateau may number at least 150 pairs. Although past authors have been rightly cautious in estimating the number of breeding pairs, it would seem that they have, consistently underestimated. However much further research is required to locate new, undescribed breeding areas, many of which may not be marked on the small scale maps available to most visiting ornithologists, and to re-investigate all currently known, suspected and former sites. As an aid to would-be visitors, a list of such sites is presented in Appendix I where, for each locality, coordinates, province and a reference is given. A num-

ber of these are included in two recent lists of important areas in particular need of additional research (Kasperek 1991, Kirwan and Magnin 1991). However, a chain of small lakes, many with suitable breeding habitat for White-headed Duck, occurs in the extreme east, stretching from the Kars region to the Iranian border near Ozalp. The vast majority have received no ornithological attention and their existence and potential is known only from photographic and more circumstantial evidence (Baris pers. comm.). Those interested should apply to the OSME's Turkey Officer for further information. More importantly, and notwithstanding the major review of Anstey (1989), a much better understanding of the species' breeding requirements needs to be established before conservationists can make realistic recommendations for the protection of the White-headed Duck.

#### ACKNOWLEDGEMENTS

The following observers were of great assistance during the fieldwork: Chris Bradshaw, Suhendan Karauz, Cem Kirac, Gernant Magnin (who also commented on an early draft of the text), Henk Nijmeijer and Uygur Özsesmi. I would like to thank Raymond Pahlplatz and Henk Nijmeijer for supplying the data from the Kizilirmak Delta Project logbook. Mick Davies and Sunay Demircan provided details of some of their White-headed Duck observations. In addition I would like to thank Vincent van den Berk, Tom van der Have and Dr Andy Green for discussion and correspondence on the species' status in Turkey, and Miriam Langeveld (BLI) for help with literature. Duncan Brooks and Dr. Andy Green assisted in the preparation of the final draft while Tony Stones contributed improvements to the original text. Ruth Bimson provided understanding and support during my absences in the field. My sponsors: Aquascribe Ltd., Notts., Bird Exploration Fund, A.S. Butler Charitable Trust, OSME, Sir Philip Reckitt Educational Trust and Spicers Ltd., Cambridge were naturally invaluable in enabling this project to go ahead as planned. Within OSME the following provided much encouragement, support and advice during the planning stages: Chris Bowden, Rod Martins and Hilary Welch.

#### REFERENCES

- ALBRECHT, S. (1989) News and Information. *Orn. Soc. Middle East Bull.* 22: 51
- ANDERSON, B. AND HULTFELDT, A. (undated) *Turkey Bird Report* 1987.
- ANON. (1990) Western Palearctic News. *Birding World* 3: 344.
- ANSTEY, S. (1989) *The status and conservation of the White-headed Duck Oxyura leucocephala*. IWRB Special Publication No.10, Slimbridge.
- BEAMAN, M. (1986) *Turkey Bird Report 1976-81 Sandgrouse* 8: 1-41.
- BERREVOETS, C. AND ERKMAN, A. (1991) *Count of White-headed Duck Oxyura leucocephala in Burdur Gölü, February 1991*. Unpublished report.
- BRADSHAW, C.G. AND KIRWAN, G.M. (1991) *Birds in Kizilirmak Delta*. Unpublished list, TBR files.
- CHAUDRY, A.A. (1992) Habitat changes threaten the White-headed Duck in Punjab, Pakistan. *IWRB Threatened Waterfowl Research Group Newsletter* 2: 5-6.
- COCKER, M. AND TEMPLE LANG, J. (1993) Ahlat Marsh, eastern Turkey. *Orn. Soc. Middle East Bull.* 30: 17-19.
- COLLAR, N.J. AND ANDREW, P. (1988) *Birds to Watch: the ICBP World Checklist of Threatened Birds*. ICBP, Cambridge.
- CRAMP, S. AND SIMMONS, K.E.L. (1977) *The Birds of the Western Palearctic* Vol.1. OUP, Oxford.
- DIJKSEN, L. AND KASPAREK, M. (1985) *The Birds of Turkey: 4 Kizilirmak Delta*. Heidelberg.

- DIJKSEN, L. (1991) *Akyatan Gölü, Turkey: a summary of its biological and ecological importance*. DHKD, Istanbul.
- DIJKSEN, L. AND BLOMERT, A.M. (1993) *Mid-winter waterfowl census, Turkey, January 1990*. WIWO Report 44, Zeist.
- DUBOIS, P.J. (1990) Turkey Bird Report 1990. Unpublished Report, TBR files.
- ERTAN, A., KILIÇ, A. AND KASPAREK, M. (1989) *Türkiye'nin Önemli Kus Alanları*. DHKD and ICBP, Istanbul.
- GREEN, A.J. AND ANSTEY, S. (1992) Status of the White-headed Duck, *Oxyura leucocephala*. *Bird Conservation International* 2: 185-200.
- GREEN, I.A., MOORHOUSE, C.N. AND WEST, S. (1990) *Report of the Turkish Ornithological Expedition 1987*. Privately produced.
- GRIMMETT, R.F.A. AND JONES, T.A. (1989) *Important Bird Areas in Europe*. ICBP, Cambridge.
- HUSTINGS, F. AND DIJK, K. VAN (1993) *Bird census in Kizilirmak Delta, Turkey, in spring 1992*. WIWO Report 45, Zeist.
- KARAUZ, S. (1993) *The Birds of Turkey: 10 Col Gölü*. Heidelberg.
- KARAUZ, S. (undated) Col Gölü ve Üyüz Gölü (Orta Anadolu). Ilkbahar ve Yaz Periyodu. Avifauna Belirleme Çalışmaları.
- KASPAREK, M. (1985) *Die Sultansumpfe. Natureschichte eines Vogelparadieses in Anatolein*. Heidelberg.
- KASPAREK, M. (1987) *The Birds of Turkey: 5 Kulu Gölü*. Heidelberg.
- KASPAREK, M. (1991) Towards a Turkish Atlas? *Orn. Soc. Middle East Bull.* 26: 8-12.
- KASPAREK, M. (1992) *Die Vögel der Türkei*. Heidelberg.
- KASPAREK, M. AND VAN DER VEN (1983) *Birds of Turkey 1: Erçek Gölü*. Heidelberg.
- KILIÇ, A. AND KASPAREK, M. (1990) *Eregli Marshes (Turkey): assessment of their biological importance and recommendations for conservation*. Report prepared on behalf of ICBP/WWF.
- KIRWAN, G. (ed) (1990) Around the Region. *Orn. Soc. Middle East Bull.* 25: 46.
- KIRWAN, G. (1993) *Birds of Turkey 9: Hotamis Marshes*. Heidelberg.
- KIRWAN, G. AND MAGNIN, G. (1991) List of Important Sites in Turkey. *Orn. Soc. Middle East Bull.* 27: 27-29.
- KIRWAN, G. AND MARTINS, R.P. (1995) Turkey Bird Report 1987-91. *Sandgrouse* 16ii: 12-53.
- KUMERLOEVE, H. (1961) *Zur Kenntnis der Avifauna Kleinasien*. Bonn. zool. Beitr. Sonderheft.
- KUMERLOEVE, H. (1967) Neue Beiträge zur Kenntnis der Avifauna von Nordost-bis Ost Kleinasien. *Istanbul Univ. Fen. Fak. Mecumasi*, Ser. B. 32: 79-213.
- KUMERLOEVE, H. (1970) Zur Kenntnis der Avifauna Kleinasien und der europäischen Türkei. *Istanbul Univ. Fen. Fak. Mecumasi*, Ser. B. 35: 85-160.
- MAGNIN, G. (1992) *Results of the International Waterfowl Census, Turkey 1992*. DHKD Bird Section Report No. 6. Istanbul.
- MARTINS, R.P. (1989) Turkey Bird Report 1982-86. *Sandgrouse* 11: 1-41.
- MATTHEWS, G.V.T. AND EVANS, M.E. (1974) On the behaviour of White-headed Duck with especial reference to their breeding. *Wildfowl* 25: 56-66.
- ORNITHOLOGICAL SOCIETY OF TURKEY (OST) (1969) *Bird Report 1 (1966-67)*.
- ORNITHOLOGICAL SOCIETY OF TURKEY (OST) (1972) *Bird Report 2 (1967-69)*.
- ORNITHOLOGICAL SOCIETY OF TURKEY (OST) (1975) *Bird Report 3 (1970-73)*.
- ORNITHOLOGICAL SOCIETY OF TURKEY (OST) (1978) *Bird Report 4 (1974-75)*.
- OWEN, M. AND GREEN, A. (1991) *Threatened Waterfowl Research Group Draft Report*. IWRB, Slimbridge. Draft Report.
- ÖZESMI, U. (1989) Protection of the Sultan Marshes, Turkey. *Sandgrouse* 11: 73-76.
- POSLAVSKI, A. (1992) Status of the Marbled Teal and White-headed Duck in Turkmenistan and Uzbekistan. *IWRB Threatened Waterfowl Research Group Newsletter* 2: 8-10.
- SCOTT, D.A. AND ROSE, P.M. 1989. *Asian Waterfowl Census 1989*. International Waterfowl and Wetlands Research Bureau.

STUIVER, N. AND VOS, R. (1991) Birds in Kizilirmak Delta 9-13 May 1991. Unpublished Report, TBR files.

WINDEN, A. VAN, MOSTERT, K., RUITERS, P., SIKI, M. AND WAARD, H. DE (1989) *Waders and waterfowl in spring 1988 at Eber Gölü*. WIWO Report 28, Zeist.

#### APPENDIX I

Currently known, suspected and former sites of the White-headed Duck in Turkey.

##### Black Sea Coastlands

Kizilirmak Delta (41°40' N, 36°00' E) (Samsun) (Dijksen and Kasperek 1985, Hustings and van Dijk 1993).

Yesilirmak Delta ((41°17' N, 36°50' E) (Samsun) (Grimmett and Jones 1989).

##### Central Plateau

Akköy Barajı (38°19' N, 35°02' E) (Kayseri) (M.Davies pers.comm.)

Eber Gölü (38°38' N, 31°10' E) (Afyon) (Grimmett and Jones 1989, Winden *et al.* 1989)

Eregli Marshes (37°30' N, 33°44' E) (Konya) (Kiliç and Kasperek 1990)

Gogenç Gölü (38°11' N, 32°47' E) (Konya) (OST 1975)

Hotamis Marshes (37°35' N, 33°04' E) (Konya) (Kirwan 1993, Grimmett and Jones 1989)

Kulu Gölü (39°05' N, 33°09' E) (Ankara) (Kasperek 1987)

Sultan Marshes (38°19' N, 35°15' E) (Kayseri) (Kasperek 1985, Grimmett and Jones 1989)

Uyuz Gölü (39°22' N, 32°55' E) (Ankara) (Karauz 1993).

##### Southern Coastlands

Çukurova Deltasi, Akyatan Gölü (36°45' N, 35°25' E) (Adana) (Dijksen 1991)

Karamikbataklığı (38°28' N, 30°53' E) (Afyon) (OST 1975, Grimmett and Jones 1989)

##### East

Ahlat Marshes (38°46' N, 42°30' E) (Bitlis) (Cocker and Temple Lang 1993)

Arin Gölü (38°49' N, 42°59' E) (Bitlis) (Grimmett and Jones 1989)

Bendimahi Deltasi (38°56' N, 43°39' E) (Van) (Green *et al.* 1990)

Edremit Marshes (38°24' N, 43°18' E) (Van) (Grimmett and Jones 1989)

Erçek Gölü (38°39' N, 43°33' E) (Van) (Kasperek and van der Ven 1983)

Göründü (Horkum) Gölü (38°20' N, 42°56' E) (Van) (Green *et al.* 1990)

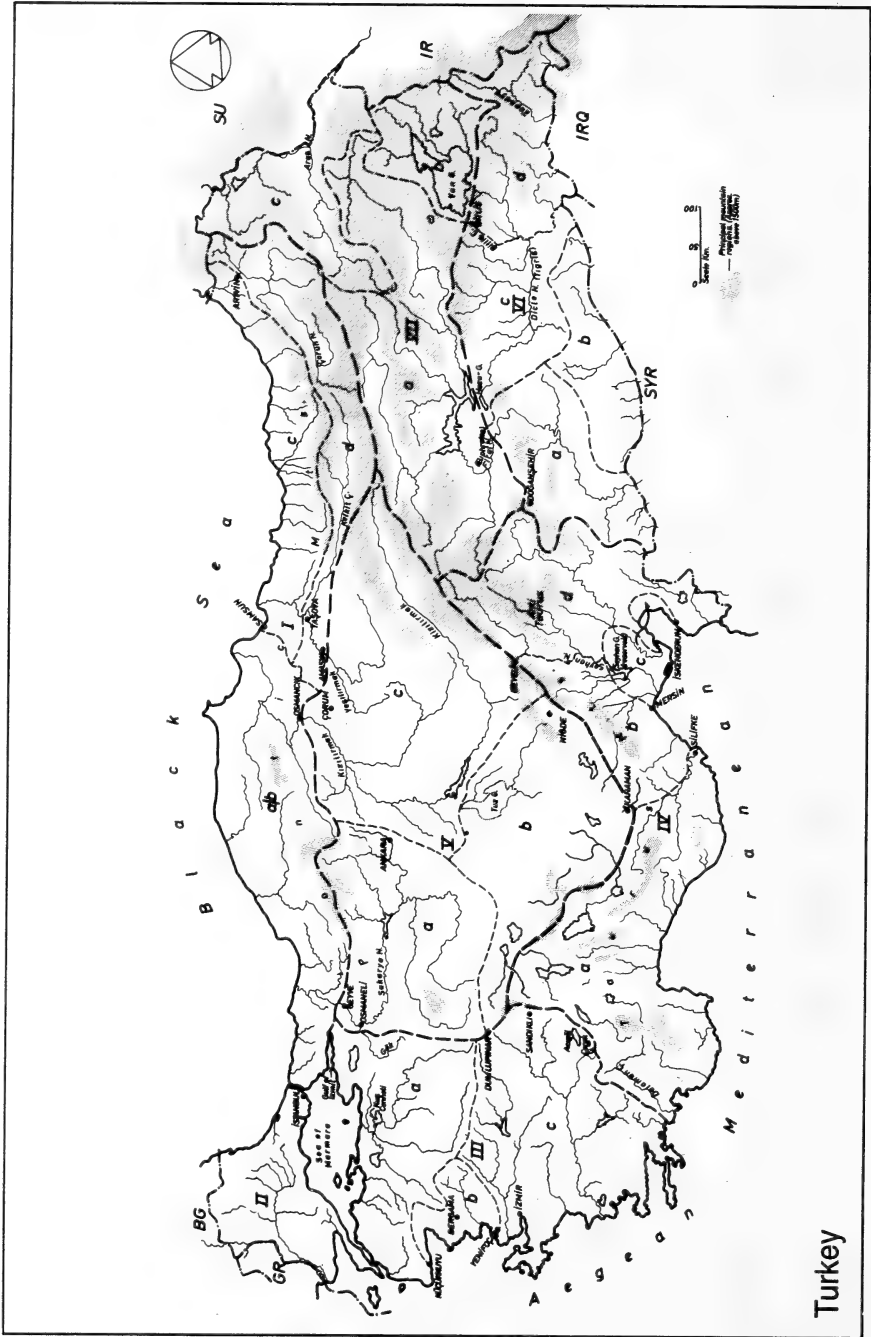
Küyüçük Gölü (40°44' N, 43°27' E) (Kars) (Beaman 1986, Kumerlovee 1970)

Nazik Gölü (38°05' N, 42°20' E) (Bitlis) (OST 1969)

Van Marshes (38°29' N, 43°19' E) (Van) (Grimmett and Jones 1989)

Yeri Gölü (40°34' N, 43°02' E) (Kars) (Dubois 1990).

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Turkey

# Turkey Bird Report 1987-91

Edited by GUY M. KIRWAN and R. P. MARTINS

**T**HIS report, covering the years 1987 - 91, has been compiled jointly by C. Bradshaw, GMK and RPM. During this period, observer activity continued to increase throughout most regional subdivisions of Turkey excepting the (historically, poorly covered) South-East, where serious political strife developed. Security problems in this region persist at the time of writing (October 1994): prospective travellers to Turkey are strongly advised to avoid it.

In contrast to the understandably low level of coverage in the South-East, the advent of package tourism to Turkey has stimulated much useful observer activity in some areas, especially key sites along the west and south coasts. A marked increase in observations from these areas in autumn and spring has been welcome. All areas of the country continue to be severely under-watched by non-Turkish observers during the period November to March.

Record presentation continues to be selective, based upon the principles outlined in the introduction to the Turkey Bird Report 1982 - 86 (Martins 1989), to which the reader is referred. A summary of status and regional distribution, as presently understood, is given as an introductory paragraph for each species, and mention is also made to the recent papers treating these subjects in detail. In a few cases, where such publications address records from within the period covered, only additional unpublished records are given here. Records refer to single birds unless otherwise stated. Observers' initials are given where the record in question merits this, though where more than three observers are involved only the initials of the principal correspondant are given. Records from published sources are cited according to normal convention.

The next report will cover the period 1992 - 96 and records are now requested. Photographs for publication would be most welcome. Contributors may either send photographs with records submitted or list those species for which photographs are available so they may be requested at a later date. Material should be sent to G.M. Kirwan and R.P. Martins, Turkey Bird Report, OSME, c/o The Lodge, Sandy, Bedfordshire SG19 2DL, UK.

*It is regretted that because of difficulties in typesetting Turkish text, various inflexions modifying certain place names have had to be omitted. We apologise for this, especially to our Turkish readers.*

## SYSTEMATIC LIST

### **Black-throated Diver** *Gavia arctica*

Widespread and common winter visitor to the Black Sea coast, though less common in its western half and on Marmara coast. Recorded on Mediterranean coast, also inland in both winter and summer.

**Black Sea Coastlands:** Kizilirmak Delta: regularly recorded in all months throughout the period except Jul-Sep.

**East:** Bendimahi 6 Jul 87.

**Red-throated Diver** *Gavia stellata*

Very rare winter visitor to the Black Sea, Marmara, Aegean and Mediterranean coasts. Has occurred inland in East.

**Black Sea Coastlands:** Kizilirmak Delta: 5, 5 Jun 89 (JRH *et al.*); 9 May 91 (NS, RV). 2, Samsun 17 May 89 (Kasperek 1990a).

**Thrace:** 2, Longoz Ormani 18 May 91 (GMK, GM, MY).

**Southern Coastlands:** Tuzla Golu, Cukurova: 2, 31 Dec 88; 6 Jan 90 (Kasperek 1990a).

**Great Northern Diver** *Gavia immer*

Vagrant, or perhaps rare winter visitor.

**Southern Coastlands:** Dead, Goksu Delta 13 May 89 (EH *et al.*).

**Cory's Shearwater** *Calonectris diomedea*

Fairly widespread and locally not uncommon summer visitor to Mediterranean and Aegean coasts. Occasionally recorded from Sea of Marmara and even from Black Sea coast. Probably remains under-recorded; may perhaps breed although no positive evidence documented.

**Western Anatolia:** Off Canakkale 21 Aug 87. Kusadasi 28 May 88. 20+, from Rhodes-Marmaris ferry 8 May 90. 6, Dilek Yarimadasi National Park 14 Jun 90. 3, between Kusadasi and Samos 30 Apr 89. 7, between Bodrum and Datca 3 Oct 90.

**Southern Coastlands:** Off Goksu Delta/Tasucu: 10, 26 May 87; 3, 1 Aug 87; 12 May 88; 27 May 88; 3, 11 May 89; 2, 1 Jul 90.

Tasucu-Girne (Cyprus) ferry: 15 Jul 88; 2, 15 Jun 89. 32, Cukurova mid Oct 88. Yumurtalik Bay (Cukurova) 6 Apr 87. 12, 7 km east of Anamur 13 May 89. 2, Gazipasa 19 May 88. 2, Alanya 10 Jun 89. Antalya: 2, 1 Sep 88; 11, 9 Jul 89.

**Storm Petrel** *Hydrobates pelagicus*

Status uncertain; probably vagrant.

**Southern Coastlands:** 3 off Kas 29 Apr 88 (Haas 1990); brief identification details were supplied. The record has been accepted by the German rarities committee. First record for Turkey.

**Gannet** *Sula bassana*

Scarce and irregular visitor offshore along Mediterranean coast in winter and spring. Kasperek (1990a) lists 13 records from Turkey; two in Dec/Jan and the others all in Mar/Apr; five additional reports are listed here, including one in October. All records are from two well-watched localities on the Mediterranean coast. The species is apparently severely under-recorded.

**Southern Coastlands:** Goksu Delta: 1-2, 11 Apr 85; immature, 31 Dec 85 (Kasperek 1990a; not previously mentioned in these reports). Eight singles seen on various dates, Apr 87 (Kasperek 1990a); 8, 23 Apr 87 (PJD *et al.*); 2 immatures, 9 Apr 89; immature, 14 Apr 89; 2 immatures, 21 Apr 89 (Meininger *et al.* 1989). Cukurova: 2 immatures, 7 Apr 83 (Kasperek 1990a) has not previously been mentioned in these reports; adult, mid-Oct 88 (van den Berk 1991); 2 immatures, 9 Jan 90 (Kasperek 1990a).

**Pygmy Cormorant** *Phalacrocorax pygmeus*

Very local resident, generally in moderate numbers in marshy wetlands in Western Anatolia and Central Plateau, presumably also breeding in East although presently unproven. More widespread in autumn and winter when also occurs in Southern Coastlands, Thrace and South-East. Also recorded from the Kizilirmak Delta, Black Sea Coastlands where could breed, in summer.



**Black Sea Coastlands:** Kizilirmak Delta: 3, 11 Jun 87; 11, 17 Jul 87; 11 Sep 91.

**Thrace:** 7, Buyukcekmece 18 Sep 87.

**Western Anatolia:** 90, Civril Golu 19 Aug 87. 40, Manyas Golu 4 Jun 89 was highest count here during the period. Apolyont Golu: 110, 22 Sep 87; 290, 3 Jan 88; 219, 2 Jan 90. 127, Camalti Tuzlasi 24 Jan 90. Also recorded outside the breeding season in smaller numbers at the following localities: Bafa Golu, Buyuk Menderes Delta, Gokgol, Koycegiz Golu and Kocacay Delta.

**Southern Coastlands:** Regular at Goksu Delta outside the breeding season; maximum numbers: 117, 12 Jan 90; 70, 11 Jul 91. Cukurova: 4, 5 Apr 87; 20, 2 May 87; 4, 4 May 87; 7, 19 Oct 91. 87, Egridir Golu 15 Jan 90. Isikli Golu: 200, 28 Jan 88; 128, 18 Jan 90.

**Central Plateau:** Sultan Marshes: many records of up to 100; 677, 19-22 Jul 87; 378, 11 Apr 88; 470, 24 May 88; 350, 4 May 89; 320, 25 May 89; 250, 12 May 90. Aksehir Golu: several records of 1-10: 47, 13 Sep 91. Hotamis: noticeable decline since 1987; 100, 22 May 87; 82, 16 Jul 91 were highest counts. Eber Golu: 25, 2-4 Apr 88; 163, 18-20 Apr 88. Eregli Marshes: maximum numbers; 850, 15 Jun 89; 1500, 15 Jun 90; 900-1000, 2 Jun 91; 1000, 6 Jul 91.

Recorded in small numbers, generally less than 20, at many other wetlands in this area.

**South-East:** Birecik: 3, 19 Apr 87; 20 Apr 87; 2, 24 Nov 89. 6, Hancagiz Baraji 8 May 89. Devegeci Baraji 26 May 90.

**East:** Bulanik: 10, 10-12 Jun 87; 13, 30 Jun 88; 30, 31 May 89; 20+, 10 Jun 89; 12, 12 Jun 90; 27, 31 Jul 91. Many records of smaller numbers. Bendimahi: 10 Jun 87; 20, 16 Aug 88; 2, 6 May 89; 6, 25 Sep 89; 14 Jun 90; 15, 15 Jul 90; 10, 28 Jun 91; 10, 29 Jul 91. Ercek Golu 9 Jun 87. Hacli Golu: 10 Jun 87; 15, 20 Jun 90. Van Marshes: 29 May 88; 26 Sep 88. Ahlat Marshes: 15, 21 Sep 89; 4, 25 Jun 91.

#### **White Pelican** *Pelecanus onocrotalus*

Very local summer visitor to extensive wetlands on Central Plateau (probably also to Southern Coastlands until draining of Amik Golu) and locally in large numbers in Western Anatolia and East. No recorded instances of breeding during the period. Fairly widespread on passage across the country. Occasionally recorded in winter, mainly in south of western two-thirds of the country.

**Black Sea Coastlands:** Kizilirmak Delta: 2, 6 Jan 87; 11 Jun 87; 20, 18 Jul 87; 4, 2-4 Jan 88; 2, 17 Jun 90; 8 Sep 91.

**Thrace:** Buyukcekmece 18 Sep 87. 23, Cerzekoy 17 May 91.

**Western Anatolia:** Maximum numbers at Manyas Golu: 1000, 23 Sep 87; 23 Apr 89; 21 Jan 90; 80. 3, Marmara 8 Jun 87. Bafa Golu: 4, 1 Feb 88; 3, 7 May 88; 5, 17 May 88; 5, 29 May 88.

**Southern Coastlands:** Maximum numbers in Cukurova: 2000, 27 Apr 87; 500+, 16 Apr 88; 650, 19 Apr 88; 1900, 12 Oct 88; 520, 16 Oct 88; 344, 20 Mar 90; 200, 6 May 90; also many other counts of under 200. Regular at Goksu Delta in very small numbers between Apr-Jan. Gulf of Iskenderun: 200, 4 Sep 88; 700, 15 Sep 88; 357, 16 Sep 88; 210, 16 Sep 91; 150, 18 Sep 91; many other records of smaller numbers in this area and at Belen Pass.

**Central Plateau:** Sultan Marshes: 19, 26 Apr 87; 16, 25 May 87; 40, 5 May 88; 22, 21 May 88; 31, 25 May 88; 11, 25 May 89. Eregli Marshes: maximum numbers: 200, 25 May 87; 450-500, 22 May 88; 300, 14 May 89; 200, 29 May 89; 900, 20 Sep 91. Eber Golu: 800, 15 Apr 88; 1500, 18 Apr 88; 700, 19 Apr 88. 300, Aksehir Golu 13 Sep 91. Also recorded irregularly at Kulu Golu, Hotamis, Cavuscu Golu and Seyfe Golu in small numbers.

**East:** Bendimahi: 200, 31 May 87; 6-7 Jun 87; 70, 2 May 89; 250, 30 May 89; 400, 1 Jun 90. 2, Murat River, east of Agri 29 Jun 91. 20, North Van Marshes, 3 May 89.

#### **Dalmatian Pelican** *Pelecanus crispus*

Very local resident or partial migrant, generally in small numbers, in extensive wetlands in Black Sea Coastlands, Western Anatolia and Central Plateau; may also breed elsewhere. Occurs more widely across Turkey on passage, wintering in moderate

numbers in western two-thirds (especially Western Anatolia). Apparently declining. A recent review of wintering population and movements has been published (Crivelli *et al.* 1991).

**Black Sea Coastlands:** Kizilirmak Delta: 32, 6-8 Jan 87; 6-9, 26 Jun 87; 3, 18 Jul 87; 2, 30 May 89; 16, 30 Jun 89; 14, 9 Feb 91; 10, 12 Feb 91; 6, 12 May 91; 5, 21 Jul 91; 16, 8 Sep 91.

**Western Anatolia:** Manyas Golu: 9, 2 Jan 87; 12, 8 Jul 87; 6, 18 Jul 88; 7, 22 Jan 89; 25, 21 Jul 89; 16, 1 Jan 90; 44, 11-12 May 90; 51 plus 47 juveniles, 4 Jun 91. 9, Apolyont Golu 22 Sep 87. Camalti Tuzlasi: 24, 4 Feb 88; 35, 26 Jan 89; 11, 24 Jan 90; 41, 11-12 Jun 91. Bafa Golu: 31, 27 Jul 87; 175, 31 Dec 87; 11, 29 Apr 89; 2, 29 May 89; 20, 5 Aug 89; 7, 19 Sep 89; 33, 22 Jan 90. Buyuk Menderes Delta: 145, 31 Jan 87; 129, 1 Feb 88; 250, 23-24 Jan 89; 27, 6 May 89; 60, 16 Nov 89; 154, 23 Jan 90; 56 plus 38 (1 dead) juveniles, 3 Jun 91. Marmara Golu: 12, 24 Apr 88; 40, 25 Jan 89. 33, Gediz Delta 1 Feb 87.

**Southern Coastlands:** Goksu Delta: 14, 18 Jan 87; 17-18 Jan 88; 8 Apr 88; 3, 16 Apr 88; 9-10 Jan 89; 7, 12 Jan 90; 30 Jun 90; 16 Jun 91; 10 Jul 91; 14 Sep 91. Cukurova 6 May 90. Belen Pass 16 Sep 88.

**Central Plateau:** Hotamis: no records since 1985. Eregli Marshes: 2, 20 Jan 87; 3 pairs bred 1987; 2 with nesting material, 20 Apr 88; 4-13 May 88; 3, 11-13 Jul 88; 18, 3 May 89; 4, 11 May 89; 6, 19 May 89; 25-26 May 89; 21, 15 Jun 89; 6, 31 Jul 89; 14 May 90; 3, 15 Jun 90; 50, 15-17 Aug 90; 19 plus 2 juveniles, 13 Jun 91; 5, 20 Sep 91. Sultan Marshes: no recent records.

### **Bittern** *Botaurus stellaris*

Very local resident in small numbers in Kizilirmak Delta, and perhaps Yesilirmak Delta (Black Sea Coastlands), on Central Plateau in the East, and perhaps other regions. Otherwise scarce passage migrant and winter visitor, mostly in western two-thirds of Turkey.

**Black Sea Coastlands:** Regularly recorded in Kizilirmak Delta, where a substantial breeding population exists; also regular counts of between 1 and 10 individuals in winter. Booming, Simenlik Golu (Yesilirmak Delta) 4 Jun 89. River Melet (Ordu) 16 May 90.

**Western Anatolia:** Dalyan: 6 May 89; 9 May 89. Apolyont Golu: 22 Jan 89; 2 Jan 90.

**Southern Coastlands:** Goksu Delta: 11 Jun 90; booming, 29 Jun 90.

**Central Plateau:** Eber Golu 2-4 Apr 88. Eregli Marshes: 25 May 88; 14 May 90; 2, 1 Jun 91; 7 Jun 91. Hotamis: 10 booming, 29 Apr 88; dead, 25 Apr 91; two booming, 10-15 May 91.

Karapinar Ovasi: 8 Jul 87; 2, 28 Apr 91. Palas Golu :10-17 Apr 88; another dead, 10 Apr 88.

**South-East:** Devegecidi Baraji 17 Apr 87. Birecik 21 Apr 88. 2, Yuksekova Ovasi 21-22 May 89.

**East:** South Van Marshes, 5 May 89. Booming, Van Marshes 14 May 90. Caldiran 16 May 90.

### **Cattle Egret** *Bubulcus ibis*

An irregular visitor to wetland areas in Black Sea Coastlands, Southern Coastlands, Central Plateau, South-East and East. Despite some evidence of increased occurrence in recent years, the relative scarcity of this species in Turkey seems surprising, for example there are four breeding records (at Eregli Marshes in 1968/69 and Amik Golu in 1881 and 1933). However, low winter temperatures throughout much of the country must be a significant restraint.

**Black Sea Coastlands:** Balik Golu (Kizilirmak Delta): 2, 17 Jul 87; 2, 30 May 89; 2, 5 Jun 89; 4, 30 Jun 89.

**Western Anatolia:** Dalyan: 2 May 89; 9 May 89.

**Southern Coastlands:** Goksu Delta: regularly recorded, maximum numbers: 13, 28 Apr 89; 32, 12 Oct 89. 8-10, Manavgat 3 May 88. 2, Cukurova 30 May 89.

**Central Plateau:** 3, Sultan Marshes 1 Jun 89. Kulu Golu 10 Jun 91.

**East:** Van Marshes: 15 Aug 88; 2, 5 May 89; 6, 8 May 89; 4, 11 May 89; 19 May 89; 3, 12 Jun

90. 4, Ahlat 24 May 89. Bulanik: 29 May 90; 24 Jun 90. 7, near Igdir 7 Jul 90. 2, Bendimahi 1 Jun 90. 2, Ahtamar Adasi (Van Golu) 23 Jun 91. Ercek Golu: 2, 7 May 89; 24 Jun 91.

**Bald Ibis** *Geronticus eremita*

Formerly a very rare summer visitor to colony at Birecik in South-East. A total of only three wild birds returned in spring 1989; one pair nested. Subsequently one of the pair plus the lone bird disappeared during a storm, later one was found dead, effectively signalling the extinction of the Turkish wild population. A history of the species' decline available (Peter 1990).

**Spoonbill** *Platalea leucorodia*

Local summer visitor or partial migrant in large numbers in wetlands in Western Anatolia, Central Plateau, and (in much smaller numbers) in Black Sea Coastlands and East. Widespread on passage. Small numbers winter in Western Anatolia mainly at coastal sites, occasionally elsewhere.

**Black Sea Coastlands:** Kizilirmak Delta: 70+, 30 Jun 89; 70 including 20 juveniles, 18 Aug 91; several other records of 1-10.

**East:** Bulanik area (including Murat River and Balatos): regular breeding season records included: 15+, 31 May 89; 11, 10 Jun 89; 12, 19 Jul 90; 16, 31 Jul-1 Aug 91. 2, Cildir Golu 3 Jun 90. 4, Bendimahi 22-23 Jun 90.

**Greater Flamingo** *Phoenicopterus ruber*

Very local breeding resident and partial migrant in large numbers at saline or semi-saline wetlands in Western Anatolia and Central Plateau. Fairly widespread winter and non-breeding visitor in large numbers to suitable wetlands in Western Anatolia, Southern Coastlands, Central Plateau and East.

**Western Anatolia:** Camalti Tuzlasi: regular breeding by 100-200 pairs during the period.

**Central Plateau:** Eregli Marshes: 35-40 nests, perhaps old, 10 May 87 (Kilic 1988); 127 nests, 60 with eggs, some nests perhaps old 1 Jun 91 (Kirwan 1992a). 1100 adults and 4100 juveniles Tuz Golu 12 Jun 91 (GM *et al.*).

**Whooper Swan** *Cygnus cygnus*

Scarce winter visitor to western two-thirds of Turkey.

**Black Sea Coastlands:** Kizilirmak Delta: 15, 6-8 Jan 88 (Dijksen & Blomert 1988); 7, 6 Feb 91; 3, 9 Feb 91 (UO *et al.*). Yenicaga Golu 31 Dec 88 (Dijksen & Blomert 1989).

**Western Anatolia:** 4, Camalti Tuzlasi 26 Jan 89 (Dijksen & Blomert 1989).

**Southern Coastlands:** Burdur Golu: 14, 5-6 Dec 87 (Magnin 1988); 24, 19 Jan 89 (Dijksen & Blomert 1989); 29, 16 Jan 90 (LJD, AMB). Goksu Delta: 18 Jan 87 (Dijksen & Wolf 1987); 11, 12 Jan 90 (LJD, AMB).

**Central Plateau:** Eregli Marshes: 20 Jan 87 (Dijksen & Wolf 1987); 8, 19-20 Jan 88 (Dijksen & Blomert 1988). 41, Tuz Golu 22-24 Jan 88 (Dijksen & Blomert 1988).

**Bewick's Swan** *Cygnus columbianus*

Vagrant.

**Southern Coastlands:** No records during 1987-91. 2 adults and 4 immatures, Goksu Delta 3 Jan 83 (Kasperek 1990a); brief details were published. First record for Turkey.

**Mute Swan** *Cygnus olor*

Local resident in small numbers at several wetlands in Black Sea Coastlands, Western Anatolia, Southern Coastlands and Central Plateau, perhaps also Thrace.

Fairly widespread winter visitor in small or moderate numbers throughout Turkey. Both resident and winter populations apparently declining.

**Black Sea Coastlands:** Kizilirmak Delta: 35, 6-8 Jan 87; 2, 6-8 Jan 88; 14, 1-3 Jan 89; 32, 22 Dec 90; 5, 9-10 May 91.

**Thrace:** Buyukcekmece: 18 Sep 87; 3, 26 Dec 90. 3, including 1 immature, Longoz Ormani 17 May 91.

**Western Anatolia:** Manyas Golu: 2, 12 May 90; 27 Aug 90. 2, 1 Jan 90. 22, Menderes Delta 31 Jan 87. 4, Menderes lagoons 1-2 Feb 88.

**Southern Coastlands:** 2, Cukurova 13 Apr 88. Goksu Delta: 10, 17-18 Jan 88; 4, 16 Apr 88; 3, 9-10 Jan 89; 2, 15 Jun 89; 4, 12 Jan 90; 5 May 90; 25 May 90; 6 Jun 90; 3, 29 Jun 90; 6 Jul 90; 8 May 91. 3, Kadilar Golu, near Alparslan 14 Apr 88. Burdur Golu: 12, 29 Jan 88; 13, 19 Jan 89.

**Central Plateau:** Kulu Golu: 27 Apr 88; 10 May 88. Mogan Golu 7 Jan 90. Seyfe Golu: 2, 16 Apr 88; 2, 5 Jan 89. Eregli Marshes: 3 pairs with 1 juvenile, 17 May 87, plus nest with hatched young; 2, 24 May 89; 2, 14 May 90; 2, 16 Jun 90; 2 Jun 91.

**East:** Edremit (Van Golu) 7 Jun 90. No previous records from this region.

### **Bean Goose** *Anser fabalis*

Vagrant.

**Central Plateau:** 2, Aksehir Golu 5 Apr 88 (van Winden *et al.* 1989). Seyfe Golu 30 Apr 88 (Schekkerman and van Roomen 1993).

### **White-fronted Goose** *Anser albifrons*

Widespread and common passage migrant and winter visitor to wetlands in western two-thirds of Turkey, with very large numbers wintering on Central Plateau; less common further east. Small numbers of non-breeding birds occasionally summer.

**Central Plateau:** Kulu Golu: 40, 12 May 87 (Eames 1989); 23, 17 Jun 87 (BA, AH *et al.*); 2, 13 May 90 (PB, CJ); 80, 13 Jun 90 (AF, TN). 4, Col Golu 6 Jun 89 (JRH *et al.*).

**South-East:** 2, Hancagiz Baraji 8 May 89 (EH *et al.*).

**East:** Bendimahi 31 May 89 (JRH *et al.*). Caldiran 1 Jun 90 (PJD *et al.*). Van Golu 9 Jun 89 (AB *et al.*).

### **Lesser White-fronted Goose** *Anser erythropus*

Vagrant.

**Western Anatolia:** 3, Bafa Golu 31 Dec 87 (Kasperek 1988).

**Central Plateau:** 12, Seyfe Golu 6 Apr 90 (NS, RV). First and second records for Turkey.

### **Red-breasted Goose** *Branta ruficollis*

Rare winter visitor to western two-thirds of Turkey.

**Black Sea Coastlands:** 7, Kizilirmak Delta 22 Dec 91 (Samsun Bird Group).

**Central Plateau:** 4, Seyfe Golu 5 Jan 89 (Dijksen & Blomert 1989).

### **Marbled Teal** *Marmaronetta angustirostris*

Local breeder in moderate numbers in lowland wetlands of Southern Coastlands, and in small numbers in some wetlands on Central Plateau and in East, where perhaps declining. Mainly a summer visitor but has overwintered. Status uncertain in peripheral localities.

**Western Anatolia:** Koycegiz Golu: 2, 2 Apr 88; 8 May 89. Babaderkoy 1 Jun 88.

**Southern Coastlands:** Goksu Delta: 52, 28-29 May 87; 40, 2 Aug 88; 40, 11 Sep 88; 61, 7 Aug 89; 31-50 breeding pairs 1989; 75 pairs, Jun 91; numerous records of 1-30. Cukurova: 32 breeding pairs, 1987, 50-100 pairs suspected; 38, 21-22 Mar 90; 58, 26-28 Mar 90; 106, 11-12 Apr 90; 62, 25-26 Apr 90; many records of 1-25 in all years.

**Central Plateau:** Eregli Marshes: 40, 12-13 Jul 88; 22, 15 Jun 89; 10, 21 Jun 89; several records of 1-5. Hotamis: 10-15 pairs, May 1991; adult with 6 juveniles, 16 Jul 91. Kulu Golu: 4, 7 Jun 89; many records of 1-3. Uyuz Golu 26 May 91. Sultan Marshes: several records of 1-4; 22, 19-22 Jul 87.

**South-East:** 2 pairs, Devegeçidi Barajı 26 May 90 (a potential breeding site).

**East:** Van Marshes: 2, 4 Jun 87; 2 pairs with young, 22 Jul 87; 4, 19 May 89; 2, 12 Jun 90; 2, 25 Jun 90; 28 Jul 91. Ercek Golu 9 Jun 87. 3, Bendimahi 31 May 89. Adult with five juveniles, Van Golu 23 Jul 87. 2, Ahlat 26 Jun 91.

### **Red-crested Pochard** *Netta rufina*

Fairly widespread and common resident and partial migrant in wetlands of Central Plateau and adjacent parts of Southern Coastlands; also, in smaller numbers, in East and perhaps elsewhere. Widespread passage migrant throughout Turkey, wintering in considerable numbers in western two-thirds, but mainly in south and on Central Plateau.

**Black Sea Coastlands:** Kizilirmak Delta: 140, 6-8 Jan 87; 20, 26 Jun 87; 6, 18 Jul 87; 10+, 30 Jun 89; 15, 17 Jun 90; 6, 10 May 91; 20, 13 Jun 91; 11, 12 Sep 91.

**Thrace:** 5, Longoz Ormanı 17 May 91.

**East:** Van Marshes: 20, 26 Sep 88; 2, 3 May 89; 4, 5 May 89; 3, 30 May 89. Ercek Golu 1 May 89. 25, Sodali Golu 26 Jun 91. Ahlat 26 Jun 91. 2, Van Reservoir 25 Jul 91.

### **Eider** *Somateria mollissima*

Vagrant.

**Black Sea Coastlands:** Male, Cernek Golu (Kizilirmak Delta) 20 Sep 83 (Dijksen & Kasperek 1985) has not previously been mentioned in these reports; no description published. First record for Turkey.

**Southern Coastlands:** Dead female, Goksu Delta 3 Jan 84 (Kasperek 1990a).

### **Long-tailed Duck** *Clangula hyemalis*

Vagrant.

**Southern Coastlands:** Goksu Delta: 1-2 Jan 86 (Kasperek 1990a) has not been mentioned previously in these reports; female, 5 Jan 90 (Kasperek 1990a).

**East:** 10 km south of Van 22 Jun 87 (Eames 1989). Male, Van Marshes 9 Jun 87 (BA, AH *et al.*).

### **Common Scoter** *Melanitta nigra*

Vagrant or very rare winter visitor.

**Black Sea Coastlands:** 2, Samsun 6 Jan 87 (Dijksen & Wolf 1987). 3, off the coast between Hopa and Of 6 Sep 88 (MR *et al.*).

### **Goldeneye** *Bucephala clangula*

Uncommon winter visitor to wetlands and, more normally, coastal areas in the western two-thirds of the country. The pattern of occasional summer records from the East is perhaps emerging as a trend.

**Black Sea Coastlands:** Female, Giresun 16 May 90. Kizilirmak Delta: 25, 6-8 Jan 88; male, 22 Dec 90; 8, 10 Feb 91; 11, 12 Feb 91; 29, 15 Feb 91; 4, 18 Feb 91.

**East:** Immature male, Van Golu 8 Jun 87. Bendimahi: female, 10 Jun 87; 2, 28-29 Jun 88; female, 26 May 89; 2, 16 May 90.

### **Smew** *Mergus albellus*

Rather local and generally scarce winter visitor to wetlands and coastal areas in the western two-thirds of the country. Occasionally in considerable numbers.

**Black Sea Coastlands:** Kizilirmak Delta: 13, 6-8 Jan 87 (Dijksen & Wolf 1987); 10, 2 Feb 91; female, 10 Feb 91 (UO *et al.*).

**Western Anatolia:** Manyas Golu: 2, 22 Jan 89 (Dijksen & Blomert 1989); 1 Jan 90 (AMB, LJD). Apolyont Golu: 60, 3 Jan 88 (Dijksen & Blomert 1988); 111, 22 Jan 89 (Dijksen & Blomert 1989); 12, 2 Jan 90 (AMB, LJD).

**Southern Coastlands:** Yarisli Golu 19 Jan 90 (LJD, AMB). 2, Cukurova 13 Mar 90 (van den Berk & van der Have 1990).

**Central Plateau:** 3, Seyfe Golu 10 Jan 88 (Dijksen & Blomert 1988).

**South-East:** Pair, River Tigris at Diyarbakir 17 Apr 88 (JYF *et al.*).

**East:** Gorundu 27 Jun 87 (IG, NM, SW).

### **Red-breasted Merganser** *Mergus serrator*

Scarce winter visitor to western two-thirds of Turkey, usually in coastal areas.

Occasionally recorded in considerable numbers.

**Black Sea Coastlands:** Kizilirmak Delta: 9, 6-8 Jan 88; 9 Feb 91.

**Thrace:** 6, Eceabat, Dardanelles 31 Dec 89. 9, Dardanelles 2 Jan 87.

**Western Anatolia:** Lapseki/Cardak lagoon: 5, 2 Jan 88; 4, 1 Jan 90. Camalti Tuzlasi: 35, 4 Feb 88; 26 Jan 89; 62, 24 Jan 90. 40, Gediz Delta 2 Feb 87. Buyuk Menderes Delta: 4, 31 Jan 87; 4, 12 Dec 90. 7, Gala Golu 6 Feb 88.

**Southern Coastlands:** Goksu Delta 18 Jan 87.

### **Goosander** *Mergus merganser*

Rare winter visitor to wetlands in the western two-thirds of Turkey in very small numbers. Has been recorded in spring and early summer in East, but no evidence of breeding.

**East:** Bendimahi 29 Jun 88 (MT).

### **White-headed Duck** *Oxyura leucocephala*

Local resident, and more usually partial migrant in small or moderate numbers in marshy wetlands on Central Plateau, perhaps adjacent areas of Southern Coastlands, and East. Breeding numbers in East still unclear, many potential breeding areas remain unknown or unvisited. Winter visitor in large numbers to several wetlands in Southern Coastlands, generally in much smaller numbers on Central Plateau, and, during hard weather, occasionally elsewhere in western two-thirds of Turkey, including Black Sea Coastlands. Return passage through all areas of Turkey, except extreme west, may obscure true understanding of breeding situation until late May. For a recent review of the status and distribution of the species see Green and Anstey (1992), Kirwan (1995).

**Black Sea Coastlands:** Kizilirmak Delta: pair, 12 May 91; 13 Jun 91. The first summer records from this locality.

**Southern Coastlands:** Burdur Golu: regularly recorded Aug-Feb: 6400, 26 Jan 87; 120+, 31 Jan 87; 157, 30 Oct 87; 9230, 29 Jan 88; 6700, 19 Jan 89; 6483, 16 Jan 90; 10927, 4 Feb 91; 2054, 1-3 Apr 91. Goksu Delta: 16 Apr 88; 18 May 89. Beysehir Golu 14 Jan 90. Cukurova: maximum 901, 19 Jan 90. 83, Yarisli Golu 27 Jan 87. Also recorded in winter in numbers less than 10 at Salda Golu and Karatas Golu.

**Central Plateau:** Eregli Marshes: 200, 25 Jul 87; 140+, 3 May 89; 105, 15 Jun 89; 508, 9 Mar 90; many other records of up to 70. Hotamis: regular counts of 100; 10-15 May 91; maximum 354, 24 Apr 91. Suleymanhaci 1 Dec 90. Kulu Golu: regular counts of up to 100 throughout the year: 138, 17 Jun 87; 319, 27 Apr 88; 120, 2 Aug 88; 130, 7 Jun 91. Sultan Marshes: regular in small numbers: maximum 38, 19-22 Jul 87. Uyuz Golu: 26, 25 May 91; several other counts of 1-20.

**East:** Van Golu/marshes: true situation in all suspected and known breeding areas in need of much fuller clarification: 2-4, 3-8 Jun 87; 21 including juveniles, 9 Jun 87; 3, 22 Jul 87; 10, 12 Aug 88; 5 May 89; 9, 8 May 89; 2, 11 May 89; 6, 30 May 89; 5, 9 Jun 89; 4, 17 May 90; 2, 6 Jun 90; 2, 13 Jun 90; 24 Jun 91; 9, 28 Jul 91. Bendimahi: 7, 7 Jun 87; 24 Jul 87; 14 Jul 88; 6, 4 Aug 88; 6, 2 May 89; 7, 9 May 89; 6, 30 May 89; 8, 31 May 89; 12, 16 May 90; 5 with 2 juveniles, 14 Jun 90; 22 Jun 90; 5 Jul 90; 2, 28 Jun 91; 3, 29 Jul 91. Ercek Golu: 4, 25 May 89; 27 Sep 89; 5, 15 May 90. Gevas: 30 May 90; 2+, 11 Jun 90. Sodali Golu: 38, 4 Aug 88; 30, 23 Sep 89; 750, 29 Aug 90; 26 Jun 91. 3, Tatvan 29 May 88. Caldiran 1 Jun 90. 5, Yeri Golu, near Kars 2 Jun 90. 6, Ahlat 26 Jun 91.

### **Red Kite** *Milvus milvus*

Apparently a rare passage migrant and winter visitor across Turkey. Recorded in summer in north and east, but no evidence of breeding. Much confusion has often occurred with pale (especially immature) Black Kites *M. migrans*, and undoubtedly many published records from Turkey are erroneous.

**Thrace:** Camlica 6 Sep 90 (GB).

**Central Plateau:** Between Demirkazik and Konya 11 Aug 88 (SdB).

**East:** Near Tatvan 30 Jul 88 (RH). Near Eretepe 9 Jul 87 (IG).

### **White-tailed Eagle** *Haliaeetus albicilla*

Until recently a local resident in small numbers in wetland areas in Black Sea Coastlands, Thrace, Western Anatolia, Southern Coastlands and probably Central Plateau and East. Now seriously endangered and exact status as a breeding species unclear; a few pairs may still breed in Western Anatolia and adjacent areas of the Southern Coastlands and Central Plateau. More widespread across Turkey outside breeding season, suggesting some immigration.

**Black Sea Coastlands:** Adult, above Taslica 10 Oct 89.

**Thrace:** Sariyer (Istanbul) 25 Sep 88.

**Western Anatolia:** Bafa Golu: 9-10 May 88; 17 May 88; 29 Apr 89; 6 May 89; 2 adults, 17 Oct 89; 2, 28 Sep 90. Koycegiz Golu: 26 Apr 89; first-year, 21 May 89; 5 May 90.

**Southern Coastlands:** Goksu Delta: immature, 18 Jan 87; 14 May 87; 18 Jul 87; adult, 21 Apr 88; 2, 28 Apr 88; adult, 29 Aug 88; adult, 11 Sep 88; adult, 12 Jan 90; 9 Oct 91; 16 Oct 91.

**Central Plateau:** Dead, Kulu Golu 12 May 87. Immature, Kizilcahamam 1 Sep 88.

### **Lammergeier** *Gypaetus barbatus*

Fairly widespread but uncommon resident in most mountainous areas. Occurs erratically at lower altitudes outside breeding season.

**Black Sea Coastlands:** Sumela Monastery 5 Jun 87. Sivri Kaya / Ispir area: 11 Jun 87; 19 Jul 87; adult and immature, 2 Jun 88; adult, 3 Jun 88; 27 May 89; adult and immature, 1 Jun 89; 3, 2-3 Jun 89; 2 adults, 12-13 Jun 89; 20 May 90; adult, 14 Jun 90; 3-4, 27 Jun 90. Adult, Artvin-Demirkent 6 Oct 89. Camliamac, near Yusufeli: adult, 8 Oct 89; 28 Sep 91. 2 adults, Demirkent 11 Oct 89. 2, near Demirkent 2 Oct 91. Yaylalar 10 Jul 90. 2-3, Dilberduzu 11-12 Jul 90. Upper Hevek Valley 2 Jul 91.

**Thrace:** Immature, near Sergen 17 May 91. First record for Thrace.

**Western Anatolia:** Uludag: immature, 16 Aug 87; adult, 27 May 88; immature, 28 May 88; adult and immature, 24 Apr 89; 16 May 90; 3, 24 May 90.

**Southern Coastlands:** Demirkazik/Emlil area: 25 Apr 87; 2 adults, 24 May 87; 9 Jul 88; 4, 10 Sep 88; immature, 10 May 89; 2, 13 May 90; 18-19 May 90; 20 Jun 90; 4 Jun 91. Immature, 30 km north of Pozanti 5 May 89. 2, between Pozanti and Demirkazik 31 May 89. South of Pozanti 3 May 90. Between Hadim and Demirkazik 13 Apr 91.

**Central Plateau:** Immature, Kizilcahamam 11 May 87; 2 Sep 88; 6 Jun 89. Adult, Yildizeli 8 May 91.

**South-East:** 2, 30 km north-east of Hakkari 18 May 89. Hakkari 14 Jun 90. Birecik 5 May 90.  
**East:** Guzeldere Gecidi 23 May 89. Buyukagri Dagi 13 Sep 89. Adult, Sac Gecidi, near Horasan 29 Jun 91.

**Black Vulture** *Aegypius monachus*

Fairly widespread but rather uncommon resident and perhaps partial migrant in most regions, but perhaps only rather local in Thrace and probably absent in South-East. Generally in high, wooded, occasionally arid, mountainous areas and plains but sometimes at lower altitudes, especially in west. Occasionally in other areas outside breeding season (a few on passage at Bosphorus and Dardanelles).

**Black Sea Coastlands:** Ispir area: 2, 3 Jun 87; 2, 4 Jun 88; 31 May 89; 28 Jun 89; 23 Jun 90.

Erzurum-Ispir: 1 Jun 88; 3, 17 Aug 88. Demirkent: 2, 6 Oct 89; 29 Sep 91. Upper Hevek Valley 1 Jul 91. 2, between Sarikamis and Karakurt 9 Sep 89.

**Southern Coastlands:** Sertavul Gecidi 24 Apr 87. 4, north of Tarsus 17 Apr 88. Near Kalkan 24 Sep 89. Near Alanya 23 May 90.

**Central Plateau:** Kizilcahamam/Soguksu National Park: 5, 31 May 87; 6, 18 Jun 90; 8, 23 Dec 90; regular records of 1-4 birds. 25, Corum 7 Jun 87.

**East:** Ercek 15 May 90.

**Levant Sparrowhawk** *Accipiter brevipes*

Status uncertain. Apparently a local summer visitor in very small numbers in north-west, north-east, Southern Coastlands, South-East, and perhaps also adjacent areas of the Central Plateau. Breeding recently proven in Southern Coastlands. otherwise uncommon on passage across Turkey, except locally in considerable numbers in Bosphorus area and around Gulf of Iskenderun, and in moderate numbers in eastern Black Sea Coastlands. Breeding distribution requires clarification.

**Black Sea Coastlands:** Ispir: 4 Jun 88; 20 May 90; pair, 2 Aug 90. Borcka: 13, 2 Sep 88; 41, 3 Sep 88; 8, 4 Sep 88. Tortum Golu 28 Sep 91. 6, Camliamac 28 Sep 91. Abant Golu 4 Aug 89.

**Thrace:** Camlica: 2, 29 Aug 87; 520, 301, 562, 207, 267, 785, 141 on consecutive days, 13-20 Sep 87; 350, 10 Sep 88; 60, 70, 63, 407, 86, 299, 66, 5, 114, 7, 22 on consecutive days, 17-27 Sep 88; 358, 1095, 308, 328, 3, 1 on consecutive days, 17-22 Sep 89; 10 May 90; 166, 20 Sep 90; 22 Sep 90; 66, 23 Sep 90, 3, 26 Sep 90.

**Western Anatolia:** Sarakoy 19 May 87. West of Aydin 18 May 88. Dalaman 27 Apr 89.

**Southern Coastlands:** Gazipasa 4 Jul 87. Xantus 9 Mar 88. North of Tarsus 17 Apr 88.

Tasucu 2 May 88. Beskonak 6 Jun 89. Tasagil: pair at nest, 15 Jun 88 (CM); 18 Jun 89. Serik 18 Jun 89. Fethiye 21 Sep 89. Toprakkale: 18, 8 May 88; 23, 5 May 89; 5, 8 May 89; 2, 10 May 89.

Iskenderun/Belen area: 2, 5 Sep 88; 220, 497, 11, 740, 1010 on consecutive days, 13-17 Sep 88; 1062, 16 Sep 91; 425, 17 Sep 91; 427, 18 Sep 91. Cukurova: 18, 3 May 87; 4, 10 May 87.

**Central Plateau:** Soguksu National Park: 5 Jun 89; 22 Aug 89.

**South-East:** Birecik: 21 Apr 88; 2, 22 Apr 88; 25 Apr 88; 3, 8 May 90. Uludere: 13 Jul 90; pair displaying, 14 Jul 90.

**East:** Near Ercis 24 Sep 89. Van 15 May 90. Van Golu 17 May 90. Erzurum 23 Sep 91.

**Rough-legged Buzzard** *Buteo lagopus*

Rare winter visitor in very small numbers to Black Sea Coastlands, Thrace, Western Anatolia and Central Plateau.

**Black Sea Coastlands:** Kizilirmak Delta: 5 Feb 91; 8 Feb 91 (UO *et al.*); 29 Dec 91 (SB *et al.*).

**Central Plateau:** Between Aksaray and Eregli 19 Apr 88 (CJC).

**Spotted Eagle** *Aquila clanga*

Localised winter visitor in small numbers to wetland areas in western two-thirds of



Turkey, slightly more widespread on passage. In the past has been recorded in summer in north and east.

**Black Sea Coastlands:** 2, near Borcka 7 Oct 89. Kizilirmak Delta: 6 Jan 87; 2, 7 Jan 87.

**Thrace:** Bosphorus: 2, 27 Sep 88; 2, 26 Sep 90; 27 Sep 90. Longoz Ormani 18 May 91. Buyukcekmece 26 Dec 90.

**Western Anatolia:** Acigol 29 Oct 87. 2, Isikli Golu 28 Jan 88.

**Southern Coastlands:** Goksu Delta: 20 Nov 89; 3, 22 Nov 89; 10 Oct 91; 16 Oct 91.

**Central Plateau:** Cavuscu Golu 23 Jan 87.

### **Imperial Eagle** *Aquila heliaca*

Rather local resident or partial migrant in small numbers in all regions except perhaps South-East (perhaps very local in East). Generally in wooded lowland or hilly areas at moderate altitudes during breeding season, more rarely in virtually treeless areas. More widespread across Turkey on passage; in winter largely in west and south and on Central Plateau.

**Black Sea Coastlands:** 106 km south of Ispir 1 Jun 89. Hacıhamza, near Tosya 5 Jun 89. Demirkent 6 Oct 89.

**Thrace:** Bosphorus: immature, 19 Sep 87; 27 Sep 90.

**Western Anatolia:** Koycegiz Golu 2 Apr 88. Immature, Bafa Golu 22 Jan 90. Immature, Uludag 24 Apr 89.

**Southern Coastlands:** Adult, near Bozkir 13 May 88. Sub-adult, 15 km north of Tarsus 24 May 88. 2, Kovada National Park 2 May 89. Goksu Delta: immature, 22 Nov 89; 2 immatures, 13 Jan 90. Findikli 27 May 90. 7 km east of Silifke 17 Jan 88. Yumurtalik 13 Jan 89. Beysehir 18 Jun 87.

**Central Plateau:** Corum: immature, 7 Jun 87; adult, 28 Jul 87. 2, north-west of Ankara 31 May 87. Soguksu National Park: immature, 15 Jul 87; 2, 16 Jul 87; 1 Sep 88; 2, 30 May 89; 22 Aug 89. North of Kulu Golu 2 Jul 90. Between Konya and Aksaray 23 Jul 87. Adult, between Bor and Nigde 18 Apr 88. Sub-adult, 30 km north of Karaman 7 Jun 91. Hotamis 30 Nov 90. Between Goreme and Zelve 16 Jul 87. Sultan Marshes: 2, 20-22 Jul 87; 6 Jan 89. **East:** Adult, near Bulanik 23 Jul 87. Varto 17 Sep 89. Immature, Nemrut Dagı (Tatvan) 28 May 90. Adult, Refahiye area 28 Jun 90. Immature, Yoncalı 13 Aug 89. Immature, Soylemez 30 Apr 89.

### **Bonelli's Eagle** *Hieraetus fasciatus*

Status uncertain. Apparently a rare and local resident in Western Anatolia, Southern Coastlands, South-East and adjacent areas of the Central Plateau. Past confusion between this species and other raptors especially immature Honey Buzzard *Pernis apivorus*; has generated many published records which may be erroneous.

**Black Sea Coastlands:** 2, Borcka 2 Sep 88.

**Western Anatolia:** Dalyan: 29 Oct 87; 2, 29 Mar 88. Dilek Yarımadası National Park 20 Jun 89. 2, Ephesus 27 Mar 88. 3, Priene 27 Sep 90.

**Southern Coastlands:** Hasanbeyli, near Bahce 14 May 89.

**South-East:** Pair, Halfeti; seen regularly throughout the period; immatures there 21 Apr 88; 7 May 89; 23 May 89. Between Kurtulan and Baykan 29 May 89.

### **Eleonora's Falcon** *Falco eleonora*

Breeds locally on islands in Sea of Marmara and off south-west coast, perhaps elsewhere. Regularly recorded along west and south coasts and inland from these areas on passage or as a non-breeding visitor. Occasionally observed in Bosphorus area, inland in Western Anatolia and Central Plateau. Most significant records in the period are given here.

**Black Sea Coastlands:** Sivri Kaya 27 May 89.

**Thrace:** Topkapi Palace, Istanbul 3 Jul 87. Bosphorus: 24 Sep 88; 10 May 90.

**Western Anatolia:** Uludag: 6-7 Jun 88; 9 migrating north, 8 Jun 88 (GG, HN).

**Southern Coastlands:** Toprakkale 10 May 89.

**Central Plateau:** 2, Eregli Marshes 28 Jun 87. 2, south of Nigde 3 Jun 87. Demirkazik 24 May 89. Tuz Golu 2 Jun 89.

**South-East:** River Tigris at Diyarbakir 17 Apr 87. Birecik: 17 May 87; 2, 28 May 87; 5 Jun 87.

**East:** East of Van 3 Jun 87. Ercek Golu 9 Jun 87.

### **Lanner** *Falco biarmicus*

Status uncertain. Probably a rare resident in all regions except Thrace and perhaps Black Sea Coastlands. Apparently more widespread in winter and on passage. Chronic confusion with other large falcons, especially Saker and pale morph Eleonora's Falcon, has obscured status of this species, and many published records must be erroneous. Observers are requested to substantiate all future records with a description.

**Black Sea Coastlands:** Kizilirmak Delta 7 Jan 88.

**Thrace:** Bosphorus: 3, 25 Sep 88; 21 Sep 89.

**Western Anatolia:** 2, Kusadasi 16 May 88. Bafa Golu 17 May 88. Kaya 4 May 90. Marmara Golu: 2, 12 Jul 88; 2, 31 Jul 89.

**Southern Coastlands:** 7, Toprakkale 8 May 89. Goksu Delta: 2, 12-13 May 89; 26 May 90; 11 Jun 90; dead, 6 May 91. Fethiye 22 Sep 89. Yankilar 20 Sep 89.

**Central Plateau:** Zelve 26 Apr 87. Kizilkaya 3 Jul 90. Demirkazik 23 May 88. Eregli Marshes 29 May 90.

**South-East:** Nemrut Dagi 12 Aug 89. 2, Isikli 12 Aug 90.

**East:** Aygir Golu 5 Jul 90.

### **Saker** *Falco cherrug*

Fairly widespread but rare resident in Central Plateau and East plus adjacent areas of Black Sea Coastlands, Southern Coastlands and South-East. In breeding season generally in high, arid plains and broad valleys near suitable breeding sites. Somewhat more widespread across Turkey on passage and in winter.

**Black Sea Coastlands:** Kizilirmak Delta 27 Jul 87. 2, Artvin Daglari 1 Oct 89. Ispir: 21 Jul 87; 2 adults and a young bird, 18 Aug 89. Between Askale and Bayburt 16 Jul 88. 3, Borcka 3 Sep 88.

**Western Anatolia:** Immature, Manyas Golu 15 Aug 88.

**Southern Coastlands:** Demirkazik 24 Aug 87. Sertavul Gecidi 28 Apr 91. Akseki: 2, 11 Jun 87; 14 Jun 90. Beysehir 7 May 88. Aydinlik 30 Aug 88. Hasanbeyli, near Bahce 14 May 89. Fethiye: 3, 22 Sep 89; 14, 23 Sep 89. Goksu Delta 17 Jan 88.

**Central Plateau:** Avanos (Cappadocia) 29 Apr 89. Eregli Marshes 14 May 90. Adult with 2 juveniles, Selima 21 Jun 90. Sultan Marshes: 7 Jul 87; 2, 11 Jan 88. Demirkazik 29 May 88.

**East:** Ercek Golu: 14 Jul 88; 2 Jul 90; 27 Jul 91. Between Van and Ercek 31 Jul 88. Bulanik 31 May 89. Aygir Golu 4 Jul 90. Nemrut Dagi (Tatvan) 13 Jul 88. 7 km east of Horasan 30 Sep 89. Hamur 14 May 90. Refahiye 28 Jun 90. Sodali Golu 5 Jul 90. Gonderme: 7 Jul 87; 17-18 Sep 88. Adilcevaz 8 Jul 87.

### **Caucasian Black Grouse** *Tetrao mlokosiewiczii*

Scarce, and poorly known in Turkey. Apparently very localized resident at high altitudes in Black Sea Coastlands; western limits unclear.

**Black Sea Coastlands:** Sivri Kaya: 5, 4 Jun 87; 5 Jun 87; 2, 10 Jun 87; 12, 17 Jun 87; 2, 21 Jul 87; 9, 2 Jun 88; 3, 3 Jun 88; 2, 6 Jul 88; 17 Jul 88; 7, 28 May 89; 15, 1 Jun 89; 13, 3 Jun 89; 10, 12

Jun 89; 7, 22 May 90; 15, 3 Jun 90; 7, 6 Jun 90; 14 Jun 90; 16, 16 Jun 90; 2, 23 Jun 90; 25-26 Jun 90; female on nest with five eggs, 6 Jun 91 (Cocker & Temple Lang 1991).

**Caspian Snowcock** *Tetraogallus caspius*

Not uncommon but localized resident in montane areas (generally above 2400 m in summer) in eastern third of Turkey, west to main Taurus, but precise western limits unclear.

**Black Sea Coastlands:** Sivri Kaya: several, 17 Jun 87; 4, 17 Jul 88; 28 May 89; 2, 1 Jun 89; 7, 12 Jun 89; 2, 13 Jun 89; 2, 22 May 90; 3, 6 Jun 90; 6, 3 Aug 90. 2, Cakiltepe (Kackar) 7 Sep 89. Karadag: 8, 8 Oct 89; 9, 28 Sep 91. 5, Dilberduzu 11 Jul 90.

**Southern Coastlands:** Aladag (including Demirkazik): 1-2, 25 Apr 87; 3, 24 May 87; 5, 25 May 87; 4-5, 28 May 87; 6-7, 3 Jun 87; 10, 22 Aug 87; several, 19 Apr 88; 10-15, 4 May 88; 6, 6 May 88; 4, 10 May 88; 3, 25 May 88; 5, 16-17 Jun 88; 5, 10 Sep 88; 4, 3 May 89; 6, 20 May 89; 3, 24 May 89; 12, 25 May 89; 3, 26 May 89; 6, 1 Jun 89; 5, 13 May 90; 5, 19 May 90; 2, 21 May 90; 11, 14 Jun 90; 8, 17 Jun 90; 5, 20 Jun 90; 2, 22 Jun 90; 6, 3 Jul 90; 5, 5 Jun 91; 5, 9 Jul 91; 5, 19 Sep 91. Ortaburun: 2, 16 Aug 89; 6-8, 17 Aug 89.

**South-East:** Recorded, Yuksekova 22 May 89.

**See-see Partridge** *Ammoperdix griseogularis*

Rather local but not uncommon resident in southern South-East. Found in arid, usually fairly rocky country not far from the Syrian border. Records are listed for all localities except Birecik area where recorded regularly in spring and summer in all years 1987-91.

**South-East:** 4, Burhan 18 Apr 87. 2, 6 km north of Kilis 21 Apr 87. 2, north-west of Kilis 14 May 89. Idil: 5, 2 Jun 87; 23 Jun 88; 29 May 89. Yesilce 21 May 90. Halfeti: 7, 6 Jun 87; 24 Apr 88; 2-4, 10 May 88; 3, 7 May 89; 4, 16 May 89; 23 May 89; 28 May 89; 7 May 90; 4, 1 Jun 91.

**Black Francolin** *Francolinus francolinus*

Scarce but locally not uncommon resident in Southern Coastlands and South-East; occurring generally in moist, scrubby and agricultural areas in two major south coast deltas and their immediate surroundings and along the Euphrates and Tigris near the Syrian border.

**Southern Coastlands:** 2-3, Avsallar 3-17 May 88.

**South-East:** Cizre: 3 Jun 87; 4, 7 Jun 87. Birecik: 3 Jun 88; 8 May 90.

**Grey Partridge** *Perdix perdix*

Rather local resident in fairly small numbers in parts of Central Plateau and north of Taurus in Southern Coastlands. Also very local resident in small numbers in eastern Black Sea Coastlands, Thrace, Western Anatolia and East. Generally in rather open agricultural country.

**Southern Coastlands:** Goksu Delta 16 Apr 88; 2, Kemerhisar 5 May 88.

**Central Plateau:** Recorded, Eber Golu 11-12 May 88. 2, 40 km east of Develi 10 May 90. 2, Yozgat 14 May 91.

**South-East:** 30 km south of Gaziantep 14 May 89.

**East:** 2, Nemrut Dagi 10 Jun 90.

**Spotted Crake** *Porzana porzana*

Status uncertain. Rarely but widely recorded on passage across Turkey and probably more common than records suggest. May breed very locally in very small numbers.

**Central Plateau:** Eber Golu: 14 Apr 88 (van Winden *et al.* 1989). Eregli Marshes 21 Jun 90 (AF, TN). Aksehir Golu 14 Sep 91 (GMK).

**Southern Coastlands:** Cukurova: 4-5 May 87; 8 May 87 (van der Have *et al.* 1988). Goksu Delta: 2, 25 Sep 88 (IG); 16 Apr 89; 1 May 89; 5 May 89 (Meininger *et al.* 1989); 3, 8 Sep 91 (GMK). 2, Buyuk Golu 20 May 88 (IH *et al.*).

**South-East:** 2, Yuksekova Ovasi 21-22 Jun 89 (MF, CP, KW).

**East:** 3, South Van Marsh 19 Sep 89 (SF *et al.*). Near Patnos 24 Jun 90 GMK,DR,MR).

#### **Little Crane** *Porzana parva*

Status uncertain. Rarely but widely recorded on passage across Turkey, almost certainly more common than records suggest. Probably breeds very locally in small numbers.

**Black Sea Coastlands:** Rize 20 Aug 88 (VD).

**Western Anatolia:** Menderes Delta 4 Jun 88 (GRL).

**Southern Coastlands:** Goksu Delta: 2, 23 Apr 87 (PC *et al.*); 8 Aug 88 (GdS, FV). Cukurova: 16 May 87 (van der Have *et al.* 1988); 4, 9-17 Apr 88 (C & CB); 20 Mar 90; 27 Mar 90 (van den Berk & van der Have 1990).

**Central Plateau:** Golbasi Golu: 6, 27 Apr 87 (PJD *et al.*); 4, 2 May 90 (BM,EM). Palas (Tuzla) Golu: 2, 16 Apr 88; regularly seen, maximum 6, late Apr-10 May 88 (Schekkerman & van Roomen 1993). Hotamis: 24 Apr 91; 3, 25 Apr 91; 2, 14 May 91 (Kirwan 1993).

**East:** 2, South Van Marsh 19 Sep 89 (SF *et al.*).

#### **Baillon's Crane** *Porzana pusilla*

Status uncertain. Rarely but widely recorded on passage across Turkey and probably more common than records suggest. Recorded in winter from Western Anatolia. May breed very locally in small numbers.

**Southern Coastlands:** Goksu Delta 6 May 91 (GMK).

#### **Corncrake** *Crex crex*

Status uncertain. Rarely but widely recorded on passage across Turkey but probably more common than records suggest. There are a number of recent records suggestive of breeding.

**Black Sea Coastlands:** Between Ispir and Erzurum 21-22 Jul 90 (HD *et al.*).

**Southern Coastlands:** Cukurova: 19 Apr 87; 23 Apr 87; 1 May 87; 7 May 87 (van der Have *et al.* 1988). Goksu Delta: 26 Apr 89; 2, 29 Apr 89; 7 May 89 (Meininger *et al.* 1989); 11 May 89 (NG *et al.*); 15 May 89 (UGS); 2, 11 Sep 89 (SF *et al.*); 2 May 91; dead, 7 May 91 (GMK).

**Central Plateau:** Eber Golu 22 Apr 88 (van Winden *et al.* 1989). 40 km east of Develi 10 May 90 (GA, GS *et al.*).

#### **Purple Gallinule** *Porphyrio porphyrio*

Not uncommon resident at the Goksu Delta (contra Kasperek *et al.* 1989) where 50-70 pairs were estimated in 1989 (Meininger *et al.* 1989) and a total of 60-70 pairs were found in 1991 (van den Berk pers. comm.). A smaller breeding population recently discovered at Akyatan Golu, Cukurova (Dijksen 1991, Ovaa and Vos 1989). Recorded several times on the Central Plateau (Kasperek *et al.* 1989).

**Central Plateau:** 6, Sultan Marshes 7 May 88 (MU *et al.*).

#### **Demoiselle Crane** *Anthropoides virgo*

Rare and very local breeding summer visitor to East. On passage occurs in larger numbers in East, occasionally west as far as Sea of Marmara.

**Central Plateau:** 2, Kulu Golu 27 Apr 88 (Schekkerman & van Roomen 1993). Eregli Marshes 22 May 89 (JRH *et al.*).

**East:** Bulanik-Balatos: 2, 6 Jun 87; 4, 10 Jun 87; 2, 11-13 Jun 87 (breeding noted); 2, 9 Jul 87;

7, 23 Jul 87; 6, 27 Jul 87; 2, 11 Jun 88; 5, 30 Jun-1 Jul 88; 4, 2 Jul 88; 2, 15 Jul 88; 2, 20 May 89; 4, 30-31 May 89; 5, 1 Jun 89; 2, 10 Jun 89; 2, 27 Jun 89; 19 May 90; 3, 29 May 90; 2, 22 Jun 90; 25 Jun 90; 21, 3 Aug 90; 3, 18 Jun 91; 2, 27 Jun 91. Pair on nest and adult with juvenile, between Agri and Horasan 1 Jun 88 (GG, HN). 3, west of Agri 12 May 90 (BM, EM). West of Ercek Golu 11 May 90 (BM, EM).

### **Little Bustard** *Tetrax tetrax*

Status uncertain. May still survive as rare and localised resident or summer visitor on Central Plateau and adjacent parts of the Southern Coastlands. Recorded in late autumn in East and spring in South-East (where it is reported to winter). For review of historical and current status and distribution in Turkey, see Kasperek (1989a).

**East:** 26, including two males, Bulanik 20 Sep 89 (SF *et al.*).

### **Great Bustard** *Otis tarda*

Local resident and partial migrant (movements remain only partially understood) on Central Plateau and adjacent parts of Western Anatolia and Southern Coastlands, apparently in small numbers, and in South-East and East where locally more common. Recorded more widely in Western Anatolia and on south coast autumn to spring. Considerable numbers winter in South-East; such concentrations appear too large to originate entirely from breeders in this region and may comprise birds from elsewhere in Turkey (breeding areas are largely vacated in winter) and/or outside it; there is no evidence for latter possibility. Despite evidence of decline in recent decades, particularly in west of range (Kasperek 1989a), survey by Goriup and Parr (1985) indicated that short-term prospects for the species' survival are less dire than previously believed and that Turkey may be one of the more important centres of distribution. There remains an acute need for a systematic survey of Turkish breeding populations.

**Black Sea Coastlands:** 10 km north of Erzurum 2 Oct 89.

**Western Anatolia:** Gokcek, near Acigol 3 Jun 91.

**Southern Coastlands:** 2, Goksu Delta 12 Jan 90.

**Central Plateau:** 18, Sultan Marshes 11 Jan 87. Between Corum and Sungurlu 9 Jan 88. 2, 24 km east of Aksaray 21 Jan 88. 30 km south-west of Bor 21 Aug 88. Tuz Golu: 2, 21 Jan 88; 15 Apr 88. 2, Golbek Golu 24 Jul 89. 2, Palas Golu 22 Apr 88. Kulu Golu 27 Apr 88.

**East:** Bulanik-Balatos area: 1 Jun 87; 3, 7 Jun 87; 11 Jun 87; 2, 13 Jun 87; 9, 31 May 89; 8, 19 May 90; 12 Jun 90. Between Korkut and Guraymak 29 May 90. Golduzu: 23, 4 Jul 90; 32, 5 Jul 90; 31, 26 Jun 91. 4, 15 km west of Mus 22 Sep 88.

### **Cream-coloured Courser** *Cursorius cursor*

Scarce summer visitor (breeding status unclear) to South-East and parts of Southern Coastlands. Recorded in autumn in East.

**South-East:** South-east of Harran 17 May 89 (MF, CP, KW). 2, north of Birecik 8 Jun 89 (AB *et al.*). 6, Birecik 7 Aug 88 (SdB *et al.*). Near Birecik 6 Aug 90 (Anon 1990).

### **Black-winged Pratincole** *Glareola nordmanni*

Generally uncommon and local on passage, mostly in eastern two-thirds of Turkey. Occasionally in considerable numbers, usually in autumn. Regularly recorded in summer, largely in East, where probably breeds locally although insufficient breeding records are available for the emergence of any pattern.

**Black Sea Coastlands:** 2, Melet River, near Ordu 16 May 90 (BM,EM).

**Southern Coastlands:** Cukurova: 4 Apr 87; 2, 10 Apr 87 (van der Have *et al.* 1988); 7, 11 Apr 88 (C & CB). Goksu Delta: 3, 28 Apr 88 (PAL, JMP, DAR); 8, 11 Sep 88 (MHK *et al.*).

**Central Plateau:** Sultan Marshes: 2, 19-22 Jul 87 (Lensink 1987); 28 Apr 89 (AGB *et al.*). 10, Eber Golu 18-20 Apr 88 (van Winden *et al.* 1989). 2, Kulu Golu 2 Jun 89 (JY *et al.*).

**South-East:** Birecik: 21 Apr 88 (PAL, JMP, DAR); 3, 9 Sep 88 (MHK *et al.*). 2, Devegeçidi Barajı 26 May 90 (PJD *et al.*).

**East:** 2 holding territory, Murat River, near Bulanik 10 Jun 87 (Eames 1989); another apparently paired with a Collared Pratincole *G. pratincola*, Balatos 10 Jun 87 (BA, AH). Yoncalı: 20 adults and juveniles, 23 Jul 87 (GdS, CB); 2, 27 Jul 87 (JV *et al.*); 2 adults and 2 unfledged juveniles, 13 Aug 89 (GdS, CB). 160, 20-30 km south-east of Mus 18 Sep 89. 20 km west of Ahlat 20 Sep 89 (LvB, LJD). c.100, between Bendimahi and Bulanik 20 Sep 89. c.1000, Bulanik 20 Sep 89 (SF *et al.*). Bendimahi: 16, 6 May 89; 9, 9 May 89 (van den Berk *et al.* 1993).

#### **Pacific Golden Plover** *Pluvialis fulva*

Vagrant.

**Thrace:** Buyukcekmece 21 Sep 88 (Kasperek 1990a, 1992a); description accepted by the German rarities committee (P.H. Barthel *in litt.*). First record for Turkey.

#### **Lesser Sand Plover** *Charadrius mongolus*

Vagrant. At least two historical records have been cited in the literature but their provenance is unclear (Bezzel 1986). One other recent record (Martins 1989). A full review is needed of all reports from Turkey.

**Southern Coastlands:** Goksu Delta 24 Aug 89 (DG, MM, ET) was well described.

#### **Dotterel** *Charadrius morinellus*

Passage migrant, found locally in considerable numbers on Central Plateau, occasionally in smaller numbers elsewhere. Has occurred in summer on Central Plateau, but no evidence of breeding, and in early winter on Central Plateau and South-East.

**Black Sea Coastlands:** Kizilirmak Delta 13 May 91 (NS, RV).

**Western Anatolia:** 7, Manyas Golu 23 Sep 87 (MU *et al.*).

**Central Plateau:** 1-2, Sultan Marshes 26 Apr 87 (PJD *et al.*). 8, west of Tuz Golu, 13 Apr 88 (Schekkerman & van Roomen 1993).

#### **Caspian Plover** *Charadrius asiaticus*

Vagrant, or perhaps very rare passage migrant.

**Central Plateau:** 15, Palas (Tuzla) Golu 23 Aug 88 (RM, TV, TW).

**East:** 2, Bulanik 3 Aug 91 (MR).

#### **Red-wattled Plover** *Hoplopterus indicus*

Resident or summer visitor, breeding in areas of gravel deposits with associated pools along Tigris near Syrian border. Since first record in 1983 (Martins 1989) has been discovered at at least two new localities on Tigris, north of Cizre (perhaps spreading) and appears to be locally not uncommon in this area (Mild pers. comm.).

#### **Sociable Plover** *Chettusia gregaria*

Rare passage migrant, perhaps formerly more common. Recorded in spring in Western Anatolia, Southern Coastlands, Central Plateau and South-East, and in autumn in eastern Black Sea Coastlands, Western Anatolia and East. For a review of the species' status see Kasperek (1992b).

**Western Anatolia:** 2, Bafa Golu 18 Sep 82; not previously mentioned in these reports (Kasperek 1988).

**Southern Coastlands:** Cukurova 5 Apr 90 (van den Berk & van der Have 1990).

**Central Plateau:** 2, Eber Golu 3 Apr 90 (van Winden *et al.* 1989).

**East:** Near Erzurum 23 Sep 85; not previously mentioned in these reports (Kasperek 1992b). 79, near Agri 23 Sep 91 (MASB, JW).

**White-tailed Plover** *Chettusia leucura*

Status uncertain. Has bred Southern Coastlands and Central Plateau, but no breeding records since 1986, and occasionally recorded between spring and autumn usually in very small numbers from Southern Coastlands, Central Plateau, South-East and East. For a review of status and distribution see Kasparek (1992b).

**Southern Coastlands:** 2, Cukurova 16 May 87 (van der Have *et al.* 1988).

**Central Plateau:** Sultan Marshes 25 Apr 89 (HK).

**Knot** *Calidris canutus*

Scarce passage migrant.

**Black Sea Coastlands:** Kizilirmak Delta 8 Sep 91 (LJD *et al.*).

**Southern Coastlands:** Cukurova: 2, 7 Apr 87; 19 Apr 87 (van der Have *et al.* 1988); 29 May 89 (NJ, KM, JS). Goksu Delta: 20, 13 May 89 (AWC, ME, GS); 8, 30 May 89 (NJ, KM, JS); 5 May 90 (GA, GS).

**Central Plateau:** 128, Seyfe Golu 24-27 Jul 87 (Lensink 1987); no description published. 5, Sultan Marshes 20-22 Jul 87 (Lensink 1987).

**Broad-billed Sandpiper** *Limicola falcinellus*

Uncommon to fairly common passage migrant across Turkey.

**Black Sea Coastlands:** Kizilirmak Delta: 8, 18 Aug 91 (UO *et al.*); 6, 8 Sep 91; 3, 10 Sep 91 (LJD *et al.*). 2, Rize 20 Aug 88 (VD). Terme 14 Sep 91 (LvB, LJD).

**Thrace:** Buyukcekmece 18 Sep 87 (MU *et al.*).

**Southern Coastlands:** Goksu Delta: 14, 20 May 87 (Eames 1989); 13, 23 May 87 (MHR *et al.*); 10, 28-29 Aug 87 (DG, SML); 20 May 88 (BJ); 2, 25 May 88; 5, 27 May 88 (IH *et al.*); 3, 13 May 89 (AWC, ME, GS); 7, 20 May 89 (van den Berk *et al.* 1993); 5, 6 May 90 (GA, GS); 26 May 90 (PH, JM). Cukurova: total of 123, 24 Apr-20 May 87 (van der Have *et al.* 1988); 6, 23 Aug 88 (RM, TW, TV); 5, 9 Sep 88; 15 Sep 88 (MHK *et al.*); 5, 24 Apr 90; 59, 8 May 90; 58, 15 May 90 (van den Berk & van der Have 1990). Alara River 16 May 88 (RB).

**Central Plateau:** maximum 41, Palas (Tuzla) Golu 15 May 88, with passage from 3-26 May 88 (Schekkerman & van Roomen 1993); 6, 23 Aug 88 (RM, TW, TV). 3, Eregli Marshes 15-17 Aug 90 (HD, DV). 6, Sultan Marshes 20-22 Jul 87 (Lensink 1987). 2, Kulu Golu 14 Aug 88 (SdB *et al.*).

**South-East:** Devegeçidi Baraji 17 Apr 87 (PJD, JVF).

**East:** Bendimahi: 16 Aug 88 (VD); 80, 16 Aug 89 (FV); 11 May 90 (BM, EM). Ercek Golu 15 May 90 (EH *et al.*). Over 100 at various sites in East, 26-30 Aug 90 (Anon 1990). 4, Van Marshes 27 Jul 87 (JEvV *et al.*). 3, South Van Marshes, 8 May 89 (van den Berk *et al.* 1993).

**Jack Snipe** *Lymnocyptes minimus*

Status uncertain. Rarely recorded passage migrant and winter visitor to wetlands and other moist habitats in western two-thirds of Turkey. In view of its winter habitat requirements this species is almost certainly severely under-recorded.

**Thrace:** Kavak Delta 29 Jan 89.

**Western Anatolia:** Koycegiz Golu 11 Feb 87.

**Southern Coastlands:** Cukurova: 2, 22 Mar 87; 13 Mar 90.

**Central Plateau:** Eber Golu: 4 Apr 88; 12 Apr 88; 20 Apr 88. Palas (Tuzla) Golu 14 Apr 88.

**Great Snipe** *Gallinago media*

Probably not uncommon passage migrant in wetlands across Turkey. Recorded in

winter on Central Plateau and in south. For discussion of status and distribution see Kirwan (1992b).

**Western Anatolia:** Troja 9 Apr 90 (Kirwan 1992b).

**Southern Coastlands:** Cukurova: 2, 5 May 87 (van der Have *et al.* 1988); 11 Apr 88 (C & CB); 1 May 89 (EH *et al.*); 6 Mar 90; 2, 30 Apr 90; 8 May 90; 15 May 90 (van den Berk & van der Have 1990). Goksu Delta: 21 May 87 (Eames 1989); 11 Sep 88 (MHK *et al.*); 8 Apr 89 (Meininger *et al.* 1989); 29 Apr 91 (RV); 8 May 91; 2, 3 Sep 91 (GMK).

**Central Plateau:** 2, Eber Golu 18-20 Apr 88 (van Winden *et al.* 1989). 2, Eregli Marshes 28 May 89 (IG).

**East:** 2, Bendimahi 16 May 90 (MU *et al.*). Bulanik 29 May 90 (PJD *et al.*). South Van Marshes: 8-9 May 87 (ABvdB, CB); 2, 15 Aug 88 (DS); 11 May 89 (van den Berk *et al.* 1993).

### **Bar-tailed Godwit** *Limosa lapponica*

Scarce or uncommon migrant across Turkey. Recorded in winter on south coast.

**Southern Coastlands:** Cukurova: recorded from 27 Apr-15 May 87; maximum 12, 2-12 May (van der Have *et al.* 1988); 23 Aug 88 (RM, TW, TV); 5, 15 Sep 88 (MHK *et al.*); 4, 27 Mar 90; 3, 30 Apr 90 (van den Berk & van der Have 1990); 13, 6 May 91 (NS, RV). Goksu Delta: 28 Apr 88 (PAL, JMP, DAR); 12 May 89 (EH *et al.*); 3, 10 Sep 91 (GMK *et al.*).

**Central Plateau:** Eregli Marshes: 7, 25 May 89 (JRH *et al.*); 10, 7 Jun 91 (CB *et al.*).

**East:** Arin Golu 21 Sep 89 (IG). Bulanik 1 Aug 91 (NL).

### **Whimbrel** *Numenius phaeopus*

Not uncommon passage migrant in wetlands, and more particularly coastal areas across Turkey. For discussion and analysis of Turkish records see Kasperek (1990b).

**Black Sea Coastlands:** Kizilirmak Delta: 8 Sep 91; 11 Sep 91.

**Western Anatolia:** Dalyan: 2 Apr 88; 2 May 89.

**Southern Coastlands:** Cukurova: recorded 13 Apr-20 May 87, maximum 8; 3, 24 Aug 87; 11 Apr 88; 17 Apr 88; 2, 1 May 89; 20 Mar 90; 18, 3 Apr 90; 2, 10 Apr 90; 8, 17 Apr 90; 4, 24 Apr 90; 14, 31 Apr 90; 7, 8 May 90. Goksu Delta: 2, 2 Aug 87; 4, 28 Aug 87; 16 Jun 88; 3, 28-30 Aug 88; 14 Apr 89; 21 Apr 89; 3, 29 Apr 89; 4, 29 Apr 91; 10, 8 May 91; 10, 10 Sep 91. Antalya 19 Aug 88. Beysehir Golu 16 May 90.

**Central Plateau:** Kulu Golu 13 May 87. Karamikbatakligi 8 Apr 88. 2, Eber Golu 2 Apr 88. Hotamis 25 Apr 91.

**East:** South Van Marsh 14 May 90.

### **Terek Sandpiper** *Xenus cinereus*

Uncommon passage migrant in wetlands across Turkey.

**Black Sea Coastlands:** Kizilirmak Delta 5 Jun 89 (JRH *et al.*).

**Southern Coastlands:** Cukurova: 7 Apr 87; 2, 15 Apr 87; 2, 14 May 87 (van der Have *et al.* 1988); 2, 9 Apr 88 (C & CB); 19-20 Apr 88 (PAL, JMP, DAR); 20 Mar 90; 3, 27 Mar 90; 2, 3 Apr 90; 10 Apr 90; 10, 15 May 90 (van den Berk & van der Have 1990). Goksu Delta: 2, 2 Aug 88; 4 Aug 88 (SdB *et al.*); 14 May 89 (Meininger *et al.* 1989).

**Central Plateau:** Kulu Golu 17 Jul 88 (MT). Palas (Tuzla) Golu 18 May 88 (Schekkerman and van Roomen 1993).

**East:** Ercek Golu: 5 Jun 87 (Eames 1989); 10 May 89 (van den Berk *et al.* 1993) 5, 20 May 89 (IG); 15 May 90 (EH *et al.*); 4, 31 May 90 (PJD *et al.*); 3, 27 Jul 91 (NL). Bendimahi: 31 May 87 (MHR *et al.*); 16 Aug 88 (VD); 16 Aug 89 (FV); 2, 2 May 89; 6 May 89 (van den Berk *et al.* 1993); 4, 29 Jul 91 (NL). Van Marshes: 2, 27 Jul 87 (FV, CB); 3, 12 Aug 88; 2, 14 Aug 88 (VD) 12, 15 Aug 88 (DS, FV); 16, 5 May 89; 4, 8 May 89 (van den Berk *et al.* 1993); 4, 13 May 89 (AWC, ME, GS); 6, 12 Aug 89; 10, 15 Aug 89 (FV); 10 May 90 (BM, EM); 2, 15 Jul 90; 16 Jul 90 (HD *et al.*).



**Spotted Sandpiper** *Actitis macularia*

Vagrant. The first record for Turkey.

**Southern Coastlands:** Adult in summer plumage, Goksu Delta 2 Aug 88 (Bruin 1989); photograph and description published.

**Wilson's Phalarope** *Phalaropus tricolor*

Vagrant.

**Central Plateau:** Adult in summer plumage, Sultan Marshes 5 May 84 has not previously been mentioned in these reports (Kasperek 1990a); no description published. Second record for Turkey.

**Red-necked Phalarope** *Phalaropus lobatus*

Uncommon and local passage migrant in wetlands and coastal areas across Turkey.

Sometimes in considerable numbers, especially in East.

**Black Sea Coastlands:** Kizilirmak Delta: 8, 8 Sep 91; 4, 10 Sep 91; 3, 11 Sep 91.

**Thrace:** Buyukcekmece 18 Sep 87.

**Western Anatolia:** Manyas Golu 24 Aug 89.

**Southern Coastlands:** Cukurova: recorded 26 Mar-20 May 87, maximum 95, 14 May 87; 2, 10 Apr 88; 15, 3 Apr 90; 4, 17 Apr 90; 3, 24 Apr 90; 14, 30 Apr 90; 13, 5 May 90; 17, 8 May 90. Goksu Delta: 2-3 Aug 88; 7 May 89. Beysehir Golu 15 May 90.

**Central Plateau:** Kulu Golu: 3, 12 May 87; 13 May 87; 4, 31 May 87; 2, 5-6 Jun 87; 20, 27 May 88; 7, 2 Sep 88; 5, 2 Jun 89. Hotamis 28 Apr 91. 22, Seyfe Golu 13 May 88. Maximum 43, Palas (Tuzla) Golu 21 May 88. 4, Sultan Marshes 1 Jun 89. 98, Golbek Golu 31 May 89. Eregli Marshes: 16 Jun 89; 4, 15-17 Aug 90.

**East:** Bendimahi: 7, 31 May 87; 6-7 Jul 87; 23 Jul 87; 181, 2 May 89; 87, 6 May 89; 191, 9 May 89; 200+, 19 May 89; 40, 24 May 89; 62, 30 May 89; 27, 10 Jun 89; 12, 16 May 90; 29 Jul 91. Ercek Golu: 14, 30 May 87; 412, 1 May 89; 400, 4 May 89; 207, 7 May 89; 185, 10 May 89. North Van Marshes: 27 Jul 87; 9, 3 May 89; 163, 5 May 89; 252, 8 May 89; 160, 11 May 89; 2, 10 Jun 90. South Van Marshes: 29, 3 May 89; 2, 5 May 89.

**Pomarine Skua** *Stercorarius pomarinus*

Vagrant. For analysis of skua records in the Middle East, see Meininger and Sorensen (1986).

**Western Anatolia:** 2 adults, Izmit 24 May 87 (Kasperek 1990a); no description published.

**East:** Immature, Bendimahi 26 Jul 89 (Kasperek 1990a); no description published.

**Arctic Skua** *Stercorarius parasiticus*

Scarce but regular passage migrant along Black Sea coast and through Bosphorus and Sea of Marmara. Probably also regular on Aegean and Mediterranean coasts.

Recorded inland in several regions.

**Black Sea Coastlands:** Sakarya Delta 4 Jan 90 (AMB, LJD). Kizilirmak Delta: 2, 20 Jan 91; 4, 17 Feb 91 (UO *et al.*); 2, 13 May 91 (NS, RV).

**Thrace:** 2, Karaburun, near Istanbul 18 Sep 87. 2, Kartal/Yalova, near Istanbul 20 Sep 87 (MU *et al.*).

**Southern Coastlands:** Cukurova: 20 Mar 87 (VvdB); 4 May 88 (MU *et al.*). Goksu Delta 1 Aug 88 (SdB). Tasucu 30 May 91 (CGB *et al.*). Between Tasucu and Girne (Cyprus) 16 Jun 89 (AB *et al.*). Burdur Golu 6 Sep 91 (GW, HW).

**Central Plateau:** Kulu Golu 6 Sep 90 (Anon 1990).

**Long-tailed Skua** *Stercorarius longicaudus*

Vagrant. Second to fourth records for Turkey.

**Thrace:** Off Karaburun, near Istanbul 17 Sep 91 (Robel 1992).

**Southern Coastlands:** 2 immatures, Tasucu 11 Jun 91 (VvdB), description listing salient features supplied.

**Central Plateau:** Adult, Kulu Golu 3 Jun 91 (CWB, RHC *et al.*).

**Great Skua** *Stercorarius skua*

Vagrant. Second and third records for Turkey.

**Southern Coastlands:** Cukurova: Tuzla Golu 30 Dec 83 (Kasperek 1990a); has not previously been mentioned in these reports; Ceyhan Delta 9 Jan 90 (Kasperek 1990a), no descriptions published.

**White-eyed Gull** *Larus leucoptthalmus*

Vagrant.

**Western Anatolia:** First-winter, Marmaris 28 Mar 88 (RM, JHB), description supplied. The first record for Turkey.

**Great Black-headed Gull** *Larus ichthyaetus*

Uncommon. A recent substantial increase in winter records is perhaps more likely to reflect true status during this season than an increase in observer coverage. Records during other seasons presumably reflect the movements of non-breeding immature birds. Recorded in wetlands and coastal areas in Black Sea Coastlands, Thrace, Southern Coastlands and East.

**Black Sea Coastlands:** Kizilirmak Delta: 4, 6-8 Jan 87; 9, 6-8 Jan 88; 5, 1-3 Feb 89; 5 Feb 91; 28, 6 Feb 91; 19, 9 Feb 91; 5, 10 Feb 91; 7, 11 Feb 91; 14, 12 Feb 91; 2, 15 Feb 91; 8, 17 Feb 91.

**Thrace:** Immature, Istanbul 13 May 89.

**Southern Coastlands:** Cukurova: 4, 13 Jan 88; 2 yr, 4 Sep 88; 20 Mar 90; 2, 17 Apr 90; 24 Apr 90; 3, 30 Sep 90.

**Common Gull** *Larus canus*

Rather local but not uncommon winter visitor to wetlands and coastal areas across Turkey (mainly west and north). Irregularly reported in much larger numbers. Recently recorded in western Turkey and East in summer.

**Black Sea Coastlands:** Kizilirmak Delta: 99, 6-8 Jan 87; 63, 6-8 Jan 88; 25, 1-3 Feb 89; 29 Oct 90; 5, 22 Dec 90; 50, 20 Jan 91; 6, 2 Feb 91; 15, 3 Feb 91; 31, 4 Feb 91; 27, 5 Feb 91; 60, 6 Feb 91; 30, 7 Feb 91; 6, 8 Feb 91; 14, 9 Feb 91; 38, 10 Feb 91; 6, 11 Feb 91; 51, 12 Feb 91; 303, 13 Feb 91; 30, 14 Feb 91; 10, 15 Feb 91; 30+, 17 Feb 91; 18 Feb 91. 2, Sapanca Golu 4 Jan 88. 64, Sakarya Delta 4 Jan 90.

**Western Anatolia:** Camalti Tuzlasi: 3, 26 Jan 89; 24 Jan 90. Ad, Manyas Golu 23 Jul 90. Apolyont Golu 27 Jan 89.

**Southern Coastlands:** 3, Hoyran/Egridir Golu 24-25 Jan 87. Cukurova: 2, 9 Jan 90; 11, 10 Jan 90. 18, Goksu Delta 12 Jan 90.

**Central Plateau:** Tuz Golu: 51, 21-22 Jan 87; 2, 21-23 Jan 88; 2, 14 Jan 89.

**East:** 2 yr, Gorundu 27 Jun 87.

**Stock Dove** *Columba oenas*

Rather local and uncommon resident or partial migrant in wooded but open upland areas over much of Turkey, except apparently much of Central Plateau and South-East. More widespread on passage, wintering in western two-thirds of Turkey (principally west and south-west). Locally recorded in considerable numbers.

**Black Sea Coastlands:** 6, between Erzurum and Artvin 31 Aug 88. Artvin to Borcka: 5, 1 Sep 88; recorded, 5 Sep 89. 3, Sivri Kaya 2 Jun 89. Between Trabzon and Ankara 3 Jun 89. 5, Abant Golu 3 Jun 89. 2, between Hopa and Borcka 5 Sep 89. 10 km north of Erzurum 2 Oct 89. Kizilirmak Delta: 6, 29 Oct 90; 3, 21 Jul 91.

**Western Anatolia:** 4, south of Canakkale 2 Feb 87. Recorded between Canakkale and Burlu 10 Jul 87. 2, Manyas Golu 23 Sep 87. Cardak, Acigol 21 Jan 89.

**Southern Coastlands:** 4, between Silifke and Eregli 18 May 89. 2, Patara 11 May 90. Kocaaliler 31 Mar 91. 2, Cukurova 14 May 87.

**Central Plateau:** 2, Cappadocia 17 May 90. Recorded Kulu Golu 4-8 Jun 87. Recorded between Ankara and Eskisehir 30 May 89.

**South-East:** Birecik: 10 Jul 90; 2, 11 Jul 90.

**East:** Bendimahi 31 May 89.

### **Palm Dove** *Streptopelia senegalensis*

Local resident, often in considerable numbers at, and in the environs of, urban settlements, probably in all regions. Well established populations exist in South-East and in Istanbul area (Black Sea Coastlands/Thrace). Not infrequently recorded from widely scattered localities in Western Anatolia and Southern Coastlands as well as in regions where well established populations exist. Not always clear whether such records represent wandering individuals, or, perhaps more likely in many cases (as range is apparently expanding), recently established populations. In at least one such area, Samsun (Black Sea Coastlands) this species is already ousting the once commoner Collared Dove *S. decaocto*. Records are listed only from localities where previously unreported.

**Western Anatolia:** Recorded, near Selcuk 27 Mar 88.

**Southern Coastlands:** Cukurova: 12 May 87; 10, 20 Apr 88; 1 May 88; 1 May 89. Mersin 8 Apr 88. Between Antalya and Tasucu 24 May 89. Kilis 14 May 89. Islahiye 14 May 89. Maras 24 Jun 89. Alanya 23 May 90.

**South-East:** Recorded, Catak 6 Jun 87. Recorded, Baskale 7 Jun 87. 2, Nizip 31 May-2 Jun 87. 2, Batman 12 Jul 88. Recorded, Harran 16 May 89. Diyarbakir 27 May 90. Cizre 12 Jul 90. Over 100, between Birecik and Nemrut Dagi 9 Sep 88.

**East:** West of Agri 15 Jul 88. Van: 24 May 89; 14 Jun 90. Dogubayazit 2 Jun 90.

### **Barn Owl** *Tyto alba*

Uncommon resident in Thrace, extreme western Black Sea Coastlands, Western Anatolia, Central Plateau, Southern Coastlands and South-East. Fewer records from eastern third of Turkey. For recent review of distribution see Kasperek (1986a).

**Western Anatolia:** Dead, Ayvalik 2 Feb 87. Heard, Akhisar 24 Apr 88. Dead, Apolyont Golu 27 Jan 89. Dead, 20 km north of Mustafakemalpaşa 27 Jan 89.

**Southern Coastlands:** Goksu Delta/Tasucu: regularly recorded 1987-91; one pair bred in most years. Cukurova: one pair bred, May 1987; 2, 16 Apr 88; 22 Aug 88; 8 Jan 90.

**Central Plateau:** Esmekaya 31 May 91. Sultanhani 31 May 90.

**South-East:** 2, north of Ceylanpinar 17 May 89.

### **Striated Scops Owl** *Otus brucei*

Status uncertain. Apparently rare summer visitor (first recorded in 1982) to at least 3 localities in Euphrates valley in South-East. No records during the period away from the Birecik area; records have been reviewed in detail by van den Berg *et al.* (1988).

### **Eagle Owl** *Bubo bubo*

Sparsely distributed resident over most of Turkey, with possible exception of Thrace, although locally recorded in high densities. Only records from new localities are presented here.

**Black Sea Coastlands:** Heard, Kurtluhan Gecidi 18 May 90.

**Southern Coastlands:** 1-2, Kanlidvane 25 Jun 87. Heard, Demirkazik 25 Jul 90. Dead, north

of Silifke 17 Jun 89. Cukurova 14 May 87. Heard, south-west of Golydu, Sugla Golu 11 Apr 91.

**East:** Heard, Nemrut Dagi 8 Aug 90. South-east of Erzurum 16 Sep 89. 25 km north of Tekman 16 Sep 89. Gonderme 21 May 89.

### **Brown Fish Owl** *Ketupa zeylonensis*

Status uncertain. A small population may survive in forested lowlands by rivers in Southern Coastlands. For discussion of Turkish records see Magnin (1991).

**Southern Coastlands:** Caught by fisherman and photographed, Adana area, late April 1990 (Magnin 1991).

### **Tawny Owl** *Strix aluco*

Locally distributed resident in small numbers over much of Turkey but apparently absent from most of South-East and East. Found in areas of deciduous and coniferous woodland.

**Black Sea Coastlands:** 2, Carsamba 16 May 90. Kizilirmak Delta: 18 Feb 91; 3 young, 12 May 91; 3, 9-12 Sep 91. Heard, Aybasti 16 Sep 91.

**Western Anatolia:** Dilek National Park 5 May 89. Kusadasi: 29 Apr-2 May 89; 14 Jun 90. Dalyan 3 May 89. Heard regularly, Fethiye 19 May-1 Jun 89; 2, 13 May 90. Heard, Kocabas 27 May 91. Dalaman 27 Apr 89. Agla: 30 Apr 89; 20 May 89. Dead, south of Kizilagac 14 May 89.

**Southern Coastlands:** Cukurova 12 May 87. Akseki area: 2, 15 Jun 87; 4, 19 May 88; 2, 14 Jun 88; 8 Jul 88; 2, 5 May 89; 2, 4 Jun 89; 6 Jun 89; dead, 7 Jul 89; 6, 5 Jun 90; 18 Jun 90; 2-3 Jul 91. 2, Sutculer 6 Apr 91, Ermenek 13 Apr 91. 2, Kas 26 Mar 91. Uzuncaburc: 3, 22 May 89; 30 May 89. 3, including 2 young, Tasagil 11 Jun 89.

**Central Plateau:** Kizilcahamam 28 Jul 88.

**South-East:** Heard, Gureniz 4 May 90. Heard, Nemrut Dagi 25 Jun 87.

**East:** Between Van and Balatos 10 Jun 87. Balatos 10 Jun 87.

### **Long-eared Owl** *Asio otus*

Status uncertain. Apparently sparsely distributed in small numbers across western two-thirds of Turkey in winter. Recorded in breeding season in woodland areas in all regions but only regular series of records comes from South-East. Probably more widespread than records suggest.

**Thrace:** 40 km south of Edirne 28 Sep 88.

**Western Anatolia:** Dead, Isikli Golu 29 Jan 87. Heard, Manyas Golu 11 May 90. 10 km south of Canakkale 25 Jan 90.

**Southern Coastlands:** Cukurova: 13 Jan 87; 27 Apr 87; 13 May 87; 18 May 87; 20 May 87; adult and juvenile, 18 May 88; 2, 8 Jan 90.

**Central Plateau:** Heard several times, Eber Golu 4-23 Apr 88. Dead, Aksehir Golu 17 Jan 89. Heard, Eregli 6 Jun 91. Heard, Kizilcahamam 16 Jul 87.

**South-East:** Birecik area: breeding regularly recorded 1987-91; maximum 9, including 6 young, 15 May 89. Heard, Gureniz 4 May 90.

### **Short-eared Owl** *Asio flammeus*

Scarce passage migrant and winter visitor in western two-thirds of Turkey. Has bred in Central Plateau and probably in Black Sea Coastlands and East.

**Southern Coastlands:** Cukurova: 22 Mar 87; 14 Jan 88. Goksu Delta 18 Jan 88.

**South-East:** Yuksekova Ovasi 22 May 89.

**East:** Between Patnos and Malazgirt 29 Jun 88.

**Tengmalm's Owl** *Aegolius funereus*

Status uncertain. Four records from widely spaced localities in northern Turkey suggest that this species is a widely distributed resident in montane coniferous forest in Black Sea Coastlands, adjacent areas of Central Plateau and (in isolated tract of forest) on Uludag in Western Anatolia. This inferred range requires confirmation.

**Black Sea Coastlands:** Between Sumela and Macka 21 Jun 90 (GMK, DR, MR).

**Pallid Swift** *Apus pallidus*

Status uncertain. Regular summer visitor in small numbers to Uludag (Western Anatolia) and Istanbul. Also breeds at one site in East. Rarely recorded elsewhere, most often in extreme eastern Southern Coastlands and adjacent parts of South-East.

**Black Sea Coastlands:** Camlica: 9, 14 Sep 87; 2, 25-26 Sep 87.

**Thrace:** regularly recorded Istanbul where maximum of 30, 15 May 89.

**Western Anatolia:** Regular counts of 10-40 on Uludag where maximum of 150, 21 Sep 87. 2, Troy 22 Jul 88.

**Southern Coastlands:** Avsallar: 4 May 88; 14-15 May 88. 5, Goksu Delta 12 Sep 88. 10, Osmaniye 13 May 89.

**South-East:** Yesilce: 27 Jun 90; 5, 28 Jun 90.

**Little Swift** *Apus affinis*

Very local and rather uncommon summer visitor and passage migrant to the extreme eastern Southern Coastlands and a few localities in the South-East.

**Southern Coastlands:** Belen Pass: 40, 5 Sep 88; 13 Sep 88. 10, Yumurtalik 9 Sep 88. Goksu Delta 12 Sep 88. 4, Adana 17 May 89. Yilankale: 20, 18 May 89; 4, 22 Jul 90; 26, 6 May 91.

Between Tasucu and Islahiye 13 May 89. 120, Kilis 14 May 89 in suitable breeding habitat. 20, Ceyhan 6 May 90.

**South-East:** Breeding recorded at Birecik in all years 1987-91, where maximum of 20. More numerous Halfeti where peak counts include: 200+, 6 Jun 87; 120, 24 Apr 88. 2, 100 km east of Birecik 28 May 87. Hasankeyf 8 Jun 89.

**White-breasted Kingfisher** *Halcyon smyrnensis*

Local and generally uncommon resident in coastal lowlands and along rivers in south Western Anatolia and in Southern Coastlands. Rarely recorded in South-East where status unclear. A few records outside known breeding areas suggest limited, perhaps irregular, dispersal within these regions outside the breeding season. For review of status and distribution see van den Berk and Kasperek (1988).

**Western Anatolia:** Regularly recorded from Koycegiz Golu. 2, Troy 6 Jun 90 (Deppe 1990).

**Southern Coastlands:** Regularly recorded from Goksu Delta, where 8-10 and 8 pairs breeding in 1989 and 1991 respectively. Karatas/Akyatan Golu (Cukurova): 27 Aug 87; 9-10 Apr 88; 10 Jan 90; 2, 19 Oct 91. Karabucak (Cukurova) 17-18 May 88. Seyhan 8 Jan 90. Near Terliksiz 10 Jan 90. North of Dogankent 10 Jan 90. South of Solakli 10 Jan 90.

**South-East:** 2, Halfeti 6 Jun 87.

**Blue-cheeked Bee-eater** *Merops superciliosus*

Local and generally uncommon summer visitor to dry, open country in South-East and adjacent parts of Southern Coastlands. Also recently discovered in East near border with Armenia. A little more widespread on passage.

**Southern Coastlands:** 2, Belen Pass 13 Sep 88.

**South-East:** Regularly recorded in Birecik area: maximum 50-100 in two colonies 27 May 87. 3, Mezra 6 Jun 87. 10, near Hocangiz Baraji 25 Aug 87.

**East:** Van hills 15 May 90. 7, 17 km east of Igdir 7 Jul 90 breeding suspected (Eames 1991).

**Wryneck** *Jynx torquilla*

Local summer visitor in small numbers to forested areas of Southern Coastlands and apparently Black Sea Coastlands. Otherwise widespread passage migrant in small numbers. Occasional in winter in south-west and south. Passage obscures breeding status and distribution. Records suggestive of breeding are given here. For a recent review of status and distribution see Kasperek (1989b).

**Black Sea Coastlands:** Ispir 4 Jun 90. 4, in pine woods near Abant Golu 3 Jun 89. Samanpazari 3 Jun 89.

**Western Anatolia:** Uludag: 18 Jun 87; 24 May 90.

**East:** Tatvan 31 May 88.

**Black Woodpecker** *Dryocopus martius*

Local and uncommon resident in montane coniferous forest in Black Sea Coastlands, north Western Anatolia, extreme north of Central Plateau and Southern Coastlands.

**Black Sea Coastlands:** Sumela: 21 Jun 90; 12 May 91. Artvin Daglari: 26 Sep 91; 1 Oct 91. Taslica 10 Oct 89. Demirkent 11 Oct 89. Cankurtaran 4 Jun 90. 19 km south of Alacam 12 Jun 87.

**Western Anatolia:** Uludag: 7 Jun 88; 21 Sep 88; 2, 24 May 90.

**Southern Coastlands:** Akseki 11 May 88.

**Central Plateau:** 18 km west of Bolu 10 Jun 88.

**Grey-headed Woodpecker** *Picus canus*

Status uncertain. Recently recorded at Akseki (Southern Coastlands) and twice in eastern Black Sea Coastlands. There are several older records from various parts of the country. No conclusive proof of breeding but presumably does so. For a review of records in Turkey see van den Berg (1988).

**Black Sea Coastlands:** Ikizdere 30 Jul 83 not previously mentioned in these reports (van den Berg 1988). 7 km south of Ikizdere, near Camcavus 14 May 87 (van den Berg 1988).

**Southern Coastlands:** Akseki: 6 Jun 89 (AB *et al.*); heard, 30 May 90 (PMH, JM); 5 Jun 90 (BJ, MIE *et al.*); 1-2, 15 Jun 90 (GMK, DR, MR).

**White-backed Woodpecker** *Dendrocopus leucotos*

Status uncertain. Apparently rare and very local resident in Black Sea Coastlands, Thrace, Western Anatolia and Southern Coastlands.

**Southern Coastlands:** Regularly recorded from Akseki throughout 1987-91.

**Citrine Wagtail** *Motacilla citreola*

Not uncommon summer visitor to eastern Black Sea Coastlands and East (see Kasperek 1992a), although as yet few confirmed breeding records. Also occurs as a rarer summer visitor to Central Plateau. Widespread and fairly common on passage, although scarcer in western third of the country. Records suggestive of breeding are noted below.

**Black Sea Coastlands:** Male, between Ispir and Sivri Kaya 27 May 89.

**Western Anatolia:** Female, Menderes Delta 3 Jun 91.

**Southern Coastlands:** Female, Goksu Delta 5 Jun 91.

**Central Plateau:** Pair (female with nest material) and male, Palas Golu 17 May 88. Bogecik (Eregli) 23 Jun 90.

**East:** 2 males, near Guzeleva, Erzurum 17 Jun 91 in suitable breeding habitat. Ercek Golu: 9 Jun 87; 2 Jul 90 (Eames 1991); 24 Jun 91. Possibly breeding at South Van Marsh 28-29 Jun 87. Bendimahi: 31 May 87; 10 Jul 90.

**Radde's Accentor** *Prunella ocularis*

Status uncertain. Apparently local and generally uncommon resident or partial migrant in high mountains in East and adjacent parts of Black Sea Coastlands, South-East and Southern Coastlands. Probably more widespread than records suggest. On rocky slopes with low scrub, generally above 2200 m in summer.

**Black Sea Coastlands:** Sivri Kaya 5 Jun 90.

**Southern Coastlands:** Regularly recorded from Demirkazik. Peak counts refer to post breeding concentrations of 20, 10 Sep 88; 20, 17 Aug 89. Gezbeli Gecidi 10 May 90.

**East:** Regularly recorded from Nemrut Dagi (near Tatvan). 2, Tatvan 26 Jul 87 (JV *et al.*); 1 Jun 90 (PJD *et al.*). Patnos 22 Jul 87 (JV *et al.*). 2, south of Erzurum 30 Aug 88 (MR). Suphan Dagi, above Hermantepe 22 Sep 89 (LJD).

**South-East:** 2, south of Yuksekova 21 May 89, with nest containing three eggs (MF). Near Catak 25 May 89 (JY *et al.*).

**Thrush Nightingale** *Luscinia luscinia*

Not uncommon passage migrant, mainly in western two-thirds of Turkey.

**Black Sea Coastlands:** Kilyos 28 Aug 87. Ispir 18 Aug 88. Sivri Kaya 19 Aug 88. Rize 20 Aug 88. Balik Golu (Kizilirmak Delta) 30 May 89.

**Western Anatolia:** Ataturk Park, near Marmaris 7 Aug 88.

**Central Plateau:** Between Urgup and Yesilhisar 11 May 90. 2, 8km west of Beloren 15 May 90.

**Southern Coastlands:** 2, Harb-is (Cukurova) 17 Apr 88. 15 Harb-is/Karatas 19 Apr 88.

Akyatan Golu (Cukurova) 16 trapped between 8 Apr and 27 Apr 90. Side 30 Apr 88.

Tarsus 2 May 89. Camardi 2 May 89.

**South-East:** Regularly recorded at Birecik in April and early May; peak counts include 6, 22 Apr 88; 4, 25 Apr 88. Burhan 18 Apr 87. Hilvan 18 Apr 87.

**East:** South Van Marsh 31 May 89.

**Bluethroat** *Luscinia svecica*

Local and generally uncommon summer visitor to high uplands in East and adjacent parts of Black Sea Coastlands and South-East. Uncommon on passage across Turkey. Occasional in winter in coastal areas in western two-thirds of Turkey. Passage obscures breeding status and distribution. Records suggestive of breeding are given here.

**Black Sea Coastlands:** Near Sivri Kaya 12 Jun 87. Male, between Erzurum and Ispir 2 Jun 87. 2 juveniles at separate sites between Erzurum and Ispir 28 Jun 89. 106 km south of Ispir: singing Jun 88; 6 males, 1 Jun 89; 3 males, 2 females, 2 Jun 89.

**Central Plateau:** Male, Imranli 20 Jun 90.

**East:** Pair, Hinis 2 Jun 87. Bendimahi 1 Jun 90. Ishak Pasa Sarayi 6 Jul 90. North of Caldiran 5 Jul 90. 4, Tahir Gecidi 12 May 90.

**Pied Wheatear** *Oenanthe pleschanka*

Status uncertain. Formerly believed to be primarily an uncommon passage migrant, mainly through eastern two-thirds of Turkey. However this assessment now confounded by the elevation of *cypriaca*, a migratory breeder on Cyprus, to specific rank. Several records at coastal localities in Southern Coastlands of definite *cypriaca* (see Cyprus Pied Wheatear below) demonstrate unsurprising occurrence of this form as an overshooting spring migrant on south coast, and thus many previous records of 'Pied Wheatear' particularly in central southern Turkey, are probably attributable to *cypriaca*. Status of *cypriaca* and the continental form *pleschanka* can only be clarified if observers supply detailed field descriptions for future records. Records listed were

submitted as *pleschanka*, but some at least, on the basis of evidence presented, could equally refer to *cyprica*.

**Black Sea Coastlands:** Pair, Maden Koprubasi 22 Jun 90 (GMK, DR, MR).

**Western Anatolia:** Dalyan 29 Mar 88 (RM)

**Southern Coastlands:** Goksu Delta 13 May 88 (MU *et al.*). 9 km south of Akseki 19 Aug 88 (RM, TW, TV). 2 males, Yesilce 26 Jul 91 (MR).

**South-East:** Male, 25 km west of Burhan 18 Apr 87 (PJD *et al.*). Female, 20 km south of Sanliurfa 19 Apr 87. 2, Devegeçidi Baraji 26 May 90 (PJD *et al.*).

**East:** Tatvan 26 Jul 87 (JyMV *et al.*). Kucuk Agri Dagi 6 Jul 90 (Eames 1991). Pair with three juveniles, Van reservoir 29 Jul 90 (Anon 1990). Van 1 Aug 91 (MR).

#### **Cyprus Pied Wheatear** *Oenanthe cyprica*

Regular passage migrant (overshooting breeding range in Cyprus) to coastal localities in Southern Coastlands and perhaps elsewhere (see Pied Wheatear).

**Southern Coastlands:** Goksu Delta: 8 Apr 88 (C & CB); 9 Apr 89; 14 Apr 89; 28 Apr 89; 14 May 89 (Meininger *et al.* 1989). Harb-is (Cukurova): 11 Apr 88; 15 Apr 88 (C & CB). Karatas (Cukurova) 17 Apr 88 (C & CB). 2, near Ovacik 4 Jun 89 (JY *et al.*).

#### **Desert Wheatear** *Oenanthe deserti*

Vagrant.

**Southern Coastlands:** Fevzipasa 6 Sep 88 (MHK *et al.*); description supplied.

#### **Red-tailed Wheatear** *Oenanthe xanthopyrmyna*

A scarce, sparsely distributed summer visitor in small numbers to South-East and East. Recorded on passage in Southern Coastlands. For detailed review of status, distribution and other records see Kasperek (1986c).

**South-East:** Regularly recorded from Yesilce/Isikli, with breeding proven in 1987 and 1989-91. Gaziantep 25 May 88. 2, near Halfeti 27 May 88. Halfeti 18 Jun 90. Tanintanin Gecidi 19 May 89. 4, between Uludere and Hakkari 18 May 89. Near Uludere 13 Jul 90. 2 adults with young, Hakkari 14 Jul 90.

**East:** 5, Nemrut Dagi (near Tatvan) 12 Aug 89. Guzeledere Gecidi 23 May 89. 25, Bahcesaray 30 Sep 88.

#### **Grasshopper Warbler** *Locustella naevia*

Status uncertain. Apparently rare passage migrant through western two-thirds of Turkey. No evidence of breeding.

**Western Anatolia:** Apolyont Golu 25 Apr 89. 2, Ataturk Park, Marmaris 7 Apr 88.

**Southern Coastlands:** Akgol, Goksu Delta 9 Apr 89. Side 30 Apr 88.

#### **River Warbler** *Locustella fluviatilis*

Rare passage migrant in small numbers across Turkey. Probably more widespread and frequent than records suggest.

**Southern Coastlands:** Akgol, Goksu Delta: 4 May 89; 9 May 89 (Meininger *et al.* 1989).

**South-East:** Halfeti 7 May 90 (GSA, GS).

#### **Aquatic Warbler** *Acrocephalus paludicola*

Status uncertain. Apparently a vagrant, though possibly more frequent than records suggest.

**Southern Coastlands:** Anamur 5 Sep 91 (Kirwan 1992c).



**Paddyfield Warbler** *Acrocephalus agricola*

Very rare summer visitor to one site in East. Very scarce passage migrant elsewhere.

**Southern Coastlands:** Goksu Delta 22 Sep 90 (RV).

**Central Plateau:** Eregli Marshes trapped 15-17 Aug 90 (HD, DV).

**East:** South Van Marsh: trapped 8-9 May 87; present Jun 88 (van den Berg and Bosman 1988); 31 May 89 (JRH *et al.*). 3, Saz Golu 3 Jul 89 (Kasperek 1990a).

**Blyth's Reed Warbler** *Acrocephalus dumetorum*

Vagrant.

**Central Plateau:** Eregli Marshes trapped 15-17 August 90 (HD, DV), the first record for Turkey.

**Marsh Warbler** *Acrocephalus palustris*

Locally common summer visitor to eastern Black Sea Coastlands and East.

Widespread passage migrant, usually in small numbers.

**Black Sea Coastlands:** Regularly recorded from Sivri Kaya and Ispir throughout 1987-91. 3 pairs, Borcka 14 May 90.

**Southern Coastlands:** Goksu Delta: regularly recorded as a passage migrant with highest spring counts involving 50, 16 Apr 88; 20, 27-28 Apr 88. Less frequently recorded in autumn, but 22 ringed 19-25 Sep 90. A very late bird present 20 Nov 88 (AR). Alanya 14 May 88. Akyatan Golu (Cukurova) 20 May 90. 2 pairs, Osmaniye 4 May 90. 2, Cankurtaran 4 Jun 90 (PJD *et al.*). 2, Seyhan 26 Apr 88.

**Central Plateau:** 8 trapped, Eregli Marshes 15-17 Aug 90.

**South-East:** Birecik: 22 Apr 88; 26 Jun 90.

**East:** Regularly recorded from Bulanik where maximum 20, 24 May 89. Balatos: 5, 10 Jun 87; 6, 19 May 90. Bendimahi: 3, 6-8 Jul 87; 6, 1 Jun 90. Erdek 25 May 90. Regularly recorded 106 km south of Ispir, maximum 20, 2 Jun 89. 2, Murat River near Yoncali 14 Jul 88. 5, Hinis 2 Jun 87.

**Upcher's Warbler** *Hippolais languida*

Local and generally uncommon summer visitor to rocky hills and mountainous country in South-East. A little more widespread on passage. Only records from new areas are presented.

**South-East:** Cizre, 13 Jul 90. 2, between Sirnak and Uludere, 18 May 90. Between Uludere and Hakkari, 18 May 90.

**Olive-tree Warbler** *Hippolais olivetorum*

Rather local and generally uncommon summer visitor to Thrace, Western Anatolia and Southern Coastlands. Recorded from western Black Sea Coastlands. Records from new breeding areas or passage localities are presented.

**Western Anatolia:** 20 and a nest with 4 pulli, Erdek, 19-20 Jun 87. 2, Dalyan 24 Apr 89.

Buyuk Menderes Delta 29 Apr 89. Apolyont Golu, 18 Aug 87. Iskele, 1 Apr 88. 2, Bergama, 1 Jun 87.

**Southern Coastlands:** Cukurova: 25 Apr 87; 3 May 87. Esen: 2, 10 Jun 87; 13 Jun 90.

Antalya 12 Jul 87. Avsallar: 6 May 88, 10 May 88. 7, Side, 30 Apr 88. Kizkalesi, 12 May 88.

Uzumlu: 7 May 88; 15 May 88; 4, 22 May 89; 3, 24 Jun 90. 2, near Alanya, 30 Aug 88. 2,

Serik, 8 Jun 90. 2, north of Sarkikaraagac, 27 May 91. Beskonak, 6 Jun 89. 3, Kovada Milli

Parki, 2 May 89. Tasagil: 23 May 89; 11 Jun 89.

**Central Plateau:** Beloren: 2, 15 May 88; 24 May 89.

**South-East:** 2, Birecik 10 Aug 89.

**East:** 18 km east of Bingol, 20 May 89.

**Booted Warbler** *Hippolais caligata*

Vagrant

**Black Sea Coastlands:** Rize, 20 Aug 88 (VD). Photograph and description supplied to the German Rarities Committee which has accepted the record. Second record for Turkey.

**Melodious Warbler** *Hippolais polyglotta*

Vagrant

**Thrace:** No records during 1987-91. First-year, Kavak, 25 Jul 73, trapped and ringed, some details have been published (Eyckerman *et al.* 1992). The first record for Turkey.

**Icterine Warbler** *Hippolais icterina*

Regular passage migrant, usually in small numbers, and perhaps an occasional breeding bird though confirmation required (one old record). No recent evidence exists, however, to suggest that occasional singing birds, usually in Thrace or north Western Anatolia, are not on passage.

**Subalpine Warbler** *Sylvia cantillans*

Fairly widespread and not uncommon summer visitor to western half of Western Anatolia, where southern limit of breeding range remains unclear, and locally in parts of Thrace. More widespread on passage, normally in western two-thirds of Turkey.

**Southern Coastlands:** Demirkazik, 22 Aug 88.

**Ménétries's Warbler** *Sylvia mystacea*

Rather local and uncommon summer visitor to South-East, probably adjacent areas of East, and the Aras valley in extreme East. Recorded in spring in Central Plateau and Southern Coastlands.

**South-East:** 6-7, near Kilis, 21 Apr 87. 3, Kayacik, 8 May 89. Male, Yesilce, 9 May 89.

**East:** Male, Van, 14 May 90.

**Cyprus Warbler** *Sylvia melanothorax*

Vagrant, or perhaps regularly overshooting migrant.

**Southern Coastlands:** Female, Goksu Delta, 10 Apr 85, has not been mentioned previously in these reports. One, Goksu Delta, 10 Apr 87 (Kasperek 1990a). Records accepted by the German Rarities Committee. First and third records for Turkey; that previously published (Kasperek 1986b, Martins 1989) becomes second.

**Barred Warbler** *Sylvia nisoria*

Apparently local and uncommon summer visitor to all regions, although instances of breeding are rather few. Otherwise a moderately common passage migrant across Turkey; passage obscures breeding status and distribution.

**Black Sea Coastlands:** 106 km south of Ispir: 8 Jun 87; 2 Jun 89. 2 pairs near Borcka, 14 May 90. Melet Cayi, 16 May 90. Adult feeding young, Kizilirmak Delta 6 Jul 90.

**Central Plateau:** Up to 5 singing, Develi area, 13 May 90. 2 singing, Bogazkale, 14 May 91.

**South-East:** Birecik: 2, 17 May 88; 22 May 88; 28 May 89. Yesilce: 21 May 89; pair, 27 Jun 90; 2 Jun 91.

**Green Warbler** *Phylloscopus nitidus*

Locally common summer visitor to deciduous or mixed montane forest, recorded from at least four areas in Black Sea Coastlands as far west as Abant. No records from extensive parts of this region, but location of known sites suggests that distrib-



**Plate 1.** White-headed Duck *Oxyura leucocephala*, female, Kulu Gölü, June. (Robin Chittenden)



**Plate 2.** Marbled Teal *Marmaronetta angustirostris*, Goksu Delta, May. (Leo Boon)

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Plate 3. Red-tailed Wheatear *Oenanthe xanthopyrymna xanthopyrymna*, male, Yesilce/Isikli, June. (Robin Chittenden)



Plate 4. Green Warbler *Phylloscopus nitidus*, Sumela Monastery, June. (Robin Chittenden)

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**Plate 5.** Semi-collared Flycatcher *Ficedula semitorquata*, male, Nemrut Dagi, June. (Robin Chittenden)



**Plate 6.** Pale Rock Sparrow *Petronia brachydactyla*, Yesilce/Isikli, May. (Leo Boon)

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**Plate 7.** Yellow-throated Sparrow *Petronia xanthocollis*, male, Birecik, June. (Robin Chittenden)



**Plate 8.** Mongolian Trumpeter Finch *Bucanetes mongolicus*, male, Ishakpasa Sarayi, May. (Leo Boon)

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ution may be continuous throughout this area where suitable habitat exists. Confirmation required. Recorded in Southern Coastlands and East on passage. **Black Sea Coastlands:** 3, between Alacam and Vezirkopru, 12 Jun 87.

**Greenish Warbler** *Phylloscopus trochiloides*

Status uncertain, perhaps only vagrant. The second and third records for Turkey.

**Thrace:** Topkapi Palace, Istanbul, singing, 19 Jun 87, a description detailing the most important identification features supplied (EH *et al.*).

**Southern Coastlands:** Denizkent, Goksu Delta, singing, 6 Jun 91, full description supplied (VvdB, GMK, JvdW).

**Bonelli's Warbler** *Phylloscopus bonelli*

Local summer visitor in small numbers to hilly or mountainous areas in western Black Sea Coastlands, fringe of Central Plateau and extreme south-east, also at lower elevations in Western Anatolia. May be more widespread than records suggest. More widespread on passage when also recorded in Thrace.

**Black Sea Coastlands:** Singing, Sumela Monastery, 29 May 89.

**Western Anatolia:** 2, Erdek, 19 Jun 87. Fethiye, 24 Sep 89.

**Southern Coastlands:** Goksu Delta, 28 Apr 88. Antalya, 4 May 90. Belen: 14 Sep 88; 16 Sep 88. Cukurova: regularly recorded in Apr in small numbers.

**Central Plateau:** Eber Golu, 23 Apr 88.

**South-East:** Birecik: 4, 21 Apr 88; 4, 24 Apr 88; 7, 15 May 89; 17 May 89; 8 May 90. 2, between Halfeti and Birecik, 16 May 89. Halfeti, 7 May 90. Yesilce: 28 Sep 88; 14 May 89.

**East:** Between Erzurum and Tekman, 30 Aug 88.

**Firecrest** *Regulus ignicapillus*

Local and uncommon resident or partial migrant in small numbers in montane mixed and coniferous forest of Black Sea Coastlands, perhaps even more locally in Western Anatolia and Southern Coastlands. A little more widespread on passage and in winter, when also recorded in Thrace and Central Plateau. Probably some immigration in winter.

**Black Sea Coastlands:** Sumela Monastery: 4, 29 May 89; singing, 8 Jul 91. 3, singing, Kurtluhan Gecidi, 19 May 90. Abant Golu, 1 Jul 90.

**Western Anatolia:** Uludag: 3, 20 Jun 87; 2, 21 Sep 87; 2, 24 Sep 87; singing, 6-7 Jun 88; singing, 24 Apr 89; 3, 24 May 90. 4, Bafa Golu, 15 Nov 89.

**Southern Coastlands:** 2, Kocaaaliler, 31 Mar 91. Sutculer, 10 Apr 91. Near Tasucu, 4 May 91. 20 km north-west of Antalya, 14 Jan 91.

**Central Plateau:** Kizilcahamam: singing, 16 Jul 87; 23 Dec 90.

**Spotted Flycatcher** *Muscicapa striata*

Status uncertain. Apparently local and uncommon summer visitor to deciduous woodland in Black Sea Coastlands, Thrace, north Western Anatolia and Central Plateau, but perhaps more common and widely distributed. Fairly common or locally numerous on passage across Turkey. Passage obscures breeding status and distribution.

**Red-breasted Flycatcher** *Ficedula parva*

Scarce summer visitor to montane deciduous forests in Black Sea Coastlands; further records required to clarify range. Otherwise fairly widespread and locally common autumn passage migrant along Black Sea coast, generally uncommon or scarce elsewhere. Rare on spring passage across Turkey.

**Black Sea Coastlands:** Sumela: regularly recorded in small numbers including several instances of proven breeding. Ispir, 3 Jun 87. Kizilirmak Delta, 11 May 91.

**Southern Coastlands:** Silifke, 4 Jun 88.

**Central Plateau:** Kizilcahamam 30 Jul 88. Near Soganli: 3, 11 May 90; 12 May 90. Sultan marshes, 3 Nov 90.

**South-East:** Birecik, 22 Apr 88.

**Semi-collared Flycatcher** *Ficedula semitorquata*

Status unclear due to fact that this species was formerly considered a race of Collared Flycatcher *F. albicollis*. Apparently a scarce summer visitor locally distributed in parts of eastern Black Sea Coastlands and probably northern Thrace, East, Central Plateau and east Southern Coastlands. May be more widespread. May also occur on passage.

**Black Sea Coastlands:** Regularly recorded in small numbers at Ispir and at various localities between Ispir and Erzurum. Sivri Kaya, 12 Jun 87. Female with young, Refahiye, 28 Jun 90.

**Thrace:** 3, Forest of Belgrade, 23 May 91, breeding in nestboxes.

**Western Anatolia:** Manyas Golu, 24 Apr 89.

**Southern Coastlands:** Cukurova: 2, 17 Apr 88; 2, 19 Apr 88; 22 Apr 90; 23 Apr 90.

**Central Plateau:** Ivriz, 24 Apr 87.

**South-East:** Birecik: 20 Apr 87; 2, 14 Apr 88. Yesilce, 9 May 89.

**East:** Bingol, 23 Jun 90.

**Collared Flycatcher** *Ficedula albicollis*

Apparently a fairly common passage migrant, principally through the western two-thirds of Turkey. May occasionally over-summer in parts of northern Turkey, but no evidence of breeding.

**Bearded Tit** *Panurus biarmicus*

Local resident or partial migrant in all regions except South-East. Wanders outside breeding season across Turkey. Some immigration may occur.

**Black Sea Coastlands:** Kizilirmak Delta: 2, 7 Feb 91; 20, 14 Feb 91; 12 May 91.

**South-East:** Diyarbakir, 27 May 90.

**East:** Van marshes: 3, 4 Jun 87; 10-15, 19 Jun 87; 10, 25 Jul 87; 2, 14 May 90.

**Eastern Rock Nuthatch** *Sitta tephronota*

Local and uncommon resident in small numbers in South-East (and perhaps adjacent parts of Southern Coastlands) and East. Occurs together with Rock Nuthatch *S. neumayer* in at least some locations. Further clarification of range required.

**South-East:** Yesilce/Isikli: 22 Apr 87; 30, 27 May 87; 5, 30 May 87; 9, 4 Jun 87; 4, 23 Aug 87; 10, 15 Apr 88; 11, 11 May 88; 10, 26-27 Aug 88; 10, 8 Sep 88; 8, 27 May 89; 20, 7 Jun 90. 2, Caylarbasi, 18 Apr 87. Halfeti: 6, 31 May 87; 20, 1 Jun 87; 15, 6 Jun 87; 6, 21 Apr 88; 10, 10 May 88; 4, 16 May 89; 15, 7 May 90; 6, 11 Jun 90; 30, 18 Jun 90; 25, 30 May 91. Between Siirt and Van, 30 May 87. South of Tatvan, 7 Jun 87. 5, Catak, 28 Sep 88.

**East:** Near Van, 30-31 May 90. Tendurek Dagi, 1 Jun 90. 2, Tuzluca, 2 Jun 90. 8, east of Van, 20 Jun 90.

**Treecreeper** *Certhia familiaris*

Local, but perhaps not uncommon, resident in forested areas of Black Sea Coastlands, northern Thrace, north Western Anatolia and northern fringe of Central Plateau and East. Appears to overlap to some extent with Short-toed Treecreeper *C. brachydactyla*, though generally occurring at higher altitudes. Status within Taurus



mountains, where now reported in breeding season, requires attention. Confusion with Short-toed Treecreeper appears to be commonplace among observers.

**Black Sea Coastlands:** Borcka: 1-4 Sep 88; 5 Oct 89; 9 Oct 89. Yaylalar, 30 Jun 91. Sumela, 8 Jul 91. Sivri Kaya, 15 Jun 90. 5, Abant, 3 Jun 89. Demirkent Koy: 3, 6 Oct 89; 3, 11 Oct 89. Camliamac, 7 Oct 89.

**Western Anatolia:** Uludag, 12 Nov 89.

**Southern Coastlands:** Bucak, singing, 31 Mar 91.

**Central Plateau:** Kizilcahamam: 6 Jun 89; 23 Dec 90.

**East:** Malatya, singing, 21 May 89.

### **Isabelline Shrike** *Lanius isabellinus*

Vagrant.

**Black Sea Coastlands:** Male, Espiye, 16 May 91 (GMK), description supplied.

**Western Anatolia:** Manyas Golu, 6 Aug 87

(Kasperek 1990a).

**South-East:** Birecik, 16 May 87 (WS).

**East:** Between Dogubayzit and Adilcevaz, 28 Aug 88 (Kasperek 1990a). The seventh to tenth records for Turkey.

### **Long-tailed Shrike** *Lanius schach*

Vagrant.

**South-East:** First-year, Birecik, 24 Sep 87 (Golan and Shirihai in press). First record for Turkey.

### **Great Grey Shrike** *Lanius excubitor*

Scarce winter visitor to the western two-thirds of Turkey.

**Black Sea Coastlands:** 25 km west of Erzurum, 30 Sep 89 (LJD). Between Artvin and Demirkent 6 Oct 89 (LJD *et al.*).

**Thrace:** Kavak Delta, 31 Dec 89 (LJD, AMB).

**Southern Coastlands:** Between Tarsus and Mersin 17 Jan 87. South of Tefenni 27 Jan 87 (Dijksen & Wolf 1987).

**Central Plateau:** Delice, near Kirikkale 5 Jan 88 (Dijksen & Blomert 1988).

**East:** 20 km west of Ahlat, 20 Sep 89 (LJD, LvB). Near Tatvan, 20 Sep 89 (LvB, LJD).

### **Yellow-throated Sparrow** *Petronia xanthocollis*

Scarce and apparently local summer visitor to South-East. Range perhaps expanding.

**South-East:** Regularly recorded in Birecik area from 6 May to 16 July; many instances of recorded breeding, maximum count, 32, 6 May 89. Regularly recorded in Halfeti area from 7 May to 30 Jul; several instances of breeding noted.

**East:** 6, east of Van, 13 Jun 90.

### **Pale Rock Sparrow** *Petronia brachydactyla*

Local and usually rather uncommon summer visitor (occasionally in large numbers) to parts of South-East and immediately adjacent parts of Southern Coastlands and East. Found in both open grassland and on partly scrub-covered, rocky slopes, or in vineyards and other crops. Usually a late migrant, apparently in variable numbers. Evidence suggests that breeding range may vary, to some extent, with seasonal conditions and/or vagaries of apparently irruptive or semi-nomadic movements, although it is becoming apparent that a number of core areas are occupied in most, if not all years. Status and distribution require further clarification.

**Southern Coastlands:** 6-7, Ceyhan, 5 May 89 (EH *et al.*). 5, Camardi, 16 Jul 89 (GD).

**South-East:** Yesilce: 2, 27 May 87; 15-20, 4 Jun 87; 28 Apr 88; 3, 19 May 88; 4, 9 May 89; 15 May 89; 15, 21 May 89; 17, 27 May 89; 28 May 89; 5, 29 May 89; 8, 28 Jun 90. Halfeti: 2, 31 May 87; 3, 1 Jun 87; 5, 6 Jun 87; 8 Jun 88; 11, 7 May 89; 18 Jun 90; 2, 10 Jul 90; 24, 11 Jul 90. Birecik: 31 May 87; 8, 25 Aug 88; 2, 6 May 89; 10, 26 Jun 90. Between Birecik and Halfeti: 2, 6 May 89; 28 May 89. Idil: 3, 2 Jun 87; 6, 12 Jul 88; 10, 29 May 89; 30 May 89; 12 Jul 90. 2, south of Tatvan, 7 Jun 87. 2, near Urfa, 9 Jun 88. 2, Cizre, 29 May 89. 6, near Hakkari, 2 Aug 88.  
**East:** 9-10 singing, Van area, 21 Jun 90.

### **Siskin** *Carduelis spinus*

Resident or partial migrant in small numbers in montane forests in Black Sea Coastlands, north Western Anatolia, Central Plateau and Southern Coastlands.

Otherwise not uncommon on passage chiefly in western two-thirds of Turkey, wintering mainly in west and south. Locally found in quite large numbers.

**Black Sea Coastlands:** Camlica: 15, 30 Apr 87; 2, 19 Sep 87. Savsat, 4 Jun 90. Sivri Kaya: 2, 11 Jun 87; 10, 25 Jul 87; 10, 2 Jun 88; 3 Jun 89; 6 Jun 90; 20, 20-21 Jul 90. Sumela: 19 Jul 87; 20 Jul 87; 3, 13 Jun 89; 8 Jul 91; 2, 6 Aug 91. 10, Aybasti, 17 Sep 91. 4, Abant Golu, 3 Jun 89. 4, Scruca Gecidi, 4 Oct 89. Artvin, 6 Oct 89. Camliamac, 8 Oct 89. 10, Sapanca Golu 4 Jan 88. 40, Kizilirmak Delta 3 Jan 89.

**Thrace:** Forest of Belgrade, 29 Apr 87. Korudag Gecidi, Kesan 1 Jan 87.

**Western Anatolia:** Uludag: 2, 18 Jun 87; 30, 17 Aug 87; 21 Sep 87; 150, 12 Nov 89. 5, Koycegiz Golu, 21 Jan 90. Kocacay Delta: 20, 3 Jan 90; 2, 30 May 91. 2, Dogusbelen, 29 Mar 88. Pammukkale, 28 Oct 87. 50, Acigol, 29-30 Oct 87. 10, Marmaris, 26 Mar 88.

**Southern Coastlands:** Recorded, south of Pozanti 12 Jan 87. Recorded, Tarsus Delta 17 Jan 87. 2, 20 km north of Manavgat, 31 Aug 88. 15, near Camardi, 18 Jul 89. 20, Bucak, 30 Mar 91. 5, 35 km north of Antalya, 9 Feb 91. Goksu Delta, 29 Apr 91. 2, Akseki, 29 May 91. 10, Kocaaliler, 31 Mar 91. 20, south of Isparta, 22 Dec 90.

**Central Plateau:** Kizilchamam: 28 Jul 87; 2, 6 Jun 89; 7, 22 Dec 90; 30, 23 Dec 90.

### **Redpoll** *Carduelis flammea*

Very rare and irregular winter visitor.

**Southern Coastlands:** Up to ten, Burdur Golu, 5 Dec 87 (GM).

### **Crossbill** *Loxia curvirostra*

Local but not uncommon resident in montane coniferous forest in parts of Black Sea Coastlands, northern areas of Western Anatolia and Central Plateau, and Southern Coastlands. Occurs more widely during irruptive movements. Some spring records from other parts of Turkey might refer to breeding birds.

**Black Sea Coastlands:** Sivri Kaya: 10, 2 Jun 88; 3, 20 Jul 90. Karadag, 28 Sep 91. 5, Ikizdere, 4 Jun 88. Artvin: 4 Sep 88; 6, 4 Jul 91. Goktas, 3 Oct 89. 14, Scruca Gecidi, 4 Oct 89. 15, west of Artvin, 10 Oct 89. 40, between Sumela and Macka, 21 Jun 90. Abant Golu, 1 Jul 90. 6, Sumela Monastery, 8 Jul 91. 4, Kabaca, 30 Sep 91. 3, Artvin Daglari, 1 Oct 91. 2, Demirkent Yaylasi, 1 Oct 91.

**Western Anatolia:** Uludag: 14, 18 Jun 87; many, 17 Aug 87; 21, 24 Sep 87; 8, 6 Jun 88; 7, 24 Apr 89; 2, 24 Jul 89. Dalyan, 2 Apr 88. Balya, 25 Apr 88. 6, Pamukkale, 8 Jul 89.

**Southern Coastlands:** regularly recorded at Akseki throughout the summer months; no instances of breeding reported. Between Uzumlu and Akseki, 25 May 89. Between Camardi and Pozanti, 4 May 89. Karatepe, near Osmaniye, 10 Jun 90.

**Central Plateau:** Kizilchamam: 15, 16 Jul 87; 28 Jul 87; common, 8-9 Jul 88; 15, 2 Jun 89; 50, 18 Jun 90; 6, 2 Jul 90; female and juvenile, 8 Aug 89 was only instance of proven breeding from this area. 2, Camlik Milli Parki, 27 Apr 89.

**Desert Finch** *Rhodospiza obsolata*

Local resident in small numbers in cultivated areas and arid country in South-East and immediately adjacent parts of the Southern Coastlands.

**Southern Coastlands:** 15, between Demirkazik and Adana, 3 Jun 87.

**South-East:** Small numbers regularly recorded from localities in Gaziantep area during 1987-91, including breeding record from Yesilce: pair at nest, 17 Jun 88. Regularly recorded during 1987-91 in Birecik area north to Halfeti (with maximum of 15), several breeding records from this area, with high counts at Birecik as follows; some hundreds, 10 Aug 88 (VD); 33, 28 May 89; 20, 16 Jul 91. 2, north of Ceylanpinar, 17 May 89.

**East:** Nemrut Dagı: 2, 16 Jul 90; 3, 17 Jul 90.

**Trumpeter Finch** *Bucanetes githagineus*

Status uncertain. Probably rare summer visitor, recorded from Southern Coastlands, South-East and East. Occurrence perhaps due more to nomadic rather than strictly seasonal movements. Has bred.

**Southern Coastlands:** Between Silifke and Mersin, 24 Apr 88 (CJC).

**South-East:** Between Birecik and Cizre, 17 May 89 (AWC, ME, GS). Birecik, 16-17 Jun 90 (TB, WS).

**East:** Nemrut Dagı, 17 Aug 87. 6, Tuzluca area, 6 Jun 87 (Krieger 1988).

**Mongolian Trumpeter Finch** *Bucanetes mongolicus*

A series of recent (and two old and poorly documented) records from extreme East suggest that the species is a local but well established presumed resident breeder. For a recent review of the species' status in Turkey see Barthel *et al.* (1992).

**East:** Two, either females or immatures, Ozalp, 9 Apr 88. At least 12, Soguksu, north of Caldiran, 18 Jun and 2 Jul 89. Dogubayazit: 2, 10 Jun 89; 3, 3 Aug 91. Pair feeding two young, south of Asagi Mutlu, north of Caldiran, 16 Jul 90.

**Yellowhammer** *Emberiza citrinella*

Status uncertain. Reported to have bred in north-west where perhaps resident in very small numbers, though confirmation required. Perhaps also resident, locally in north-east and south. Otherwise rather local and generally uncommon passage migrant across Turkey and winter visitor to western two-thirds.

**Black Sea Coastlands:** Many, between Corum and Samsun 6 Jan 87. Kizilirmak Delta: recorded, 7 Jan 87; 3, 4 Feb 91; 10 Feb 91. Male, Macka valley, 8 Jul 91. Esencay, 9 May 91.

**Thrace:** Kavak Delta 1 Jan 87. 3, between Edirne and Kesan, 31 Dec 89.

**Southern Coastlands:** Egridir Golu: recorded, 25 Jan 87; 15, 26 Jan 88. Recorded Salda and Corak Golu 28 Jan 87. 3, north of Tarsus, 17 Apr 88. Singing, Akseki, 29 May 91. 2, Cukurova, 17 Jan 90. Near Serik, 30 Nov 90.

**Central Plateau:** 10, between Yerkoy and Kirsehir 9 Jan 87.

**Cinereous Bunting** *Emberiza cineracea*

Local and scarce summer visitor to scrub-covered slopes in uplands in Western Anatolia, southern fringe of Central Plateau, Southern Coastlands, South-East and East. Recorded in spring on south coast. May be more widespread than records suggest. For a recent review of the species' status in Turkey and elsewhere see de Kniiff (1991).

**Southern Coastlands:** 3, Aladag area, 21 Aug 87. 30 km north of Manavgat, 30 Aug 88. Near Uzumlu, 15 Jun 90.

**South-East:** 2-3, Devegeçidi, 17 Apr 87. 3, 6 km north of Kilis, 21 Apr 87. 10 km north of Killis, 26 Apr 88. Regularly recorded from localities in Gaziantep area, maximum numbers

as follows: 30, 27 May 87; 30, 8 May 89; 30, 21 May 89; breeding recorded 10 Jun 90. Regularly recorded at Halfeti, maximum numbers as follows: 10, 10 May 88; 4, 1 Jun 91. Birecik: 29 May 87; 26 Aug 88; 11 Jun 90; 17 Jun 90. 3, between Sirmak and Uludere, 18 May 89.

East: Nemrut Dagi: 8 Jun 87; 3, 13 Jul 88; 4, 7-8 Aug 90. Cavustepe, 6 Jun 90.

### Grey-necked Bunting *Emberiza buchanani*

Local and uncommon summer visitor in small numbers to much of the eastern third of the country, except the extreme north-east. Found in dry, high altitude areas with sparse vegetation.

**Southern Coastlands:** Male, Bulduruc, near Demirkazik, 23 May 90 (PB, CJ).

## LIST OF OBSERVERS

Thanks are due to the following who contributed records for 1987-91

M.Ameels (1990)	C.J.Coldewey (1988)	N.Green (1989)
G.S.Andersen (1990)	D.Collins (1987)	B.J.Gregory (1987)
B.Anderson (1987)	T.Collins (1988)	G.Groh (1988)
M.Bakker (1990-91)	L.C.Cook (1987)	S.Grove (1990-91)
T.Bakker (1987 & 90)	G.M.Cresswell (1987)	A. & S.Hanby (1989)
S.Baris (1990-91)	G.A.Davidse (1989)	D.Harpley (1988)
T.Barker (1989)	M.Davies (1991)	P.Hill (1989-90)
L.C.van Beckhoven (1989 & 91)	L.Degnan (1989)	E.Hirschfeld (1987 & 89)
R.Beddard (1988)	V.Dierscke (1988)	I.Hodgson (1988)
P.Benstead (1990)	A.van Dijk (1991)	R.Hofland (1987-91)
S.Benn (1988)	L.J.Dijkse (1987-91)	J.R.Hough (1989)
V.van den Berk (1990-91)	H.Dineur (1990)	S.Howatt (1988)
P.A.Bertilsson (1987)	B.J.Dore (1989)	M.Huhta-Koivisto (1988)
R.G.Bjilsma (1990)	R.Drew (1990)	A.Hultfeldt (1987)
A.M.C.Blomert (1988-91)	P.J.Dubois (1987 & 90)	B.Jarvis (1988 & 90)
A.G.Blunt (1989)	H.Dufourny (1990)	C.Jeffs (1990)
C.&C.Bradshaw (1988)	J.Eames (1987 & 90)	C.Jobin (1987)
C.G.Bradshaw (1991)	M.Eilet (1989)	N.Jones (1990)
A.Broome (1989)	M.I.Eldridge (1990)	S.Karauz (1989-91)
A.Brown (1989)	A.W.Evans (1988)	G.M.Kirwan (1990-91)
M.Brown (1989)	M.Everett (1988)	B.Konings (1990)
S.de Bruin (1988)	J.den Exter	P.Lack (1989)
J.H.Burrell (1988)	J.Eyre (1988)	P.A.Lassey (1988)
C.W.Byers (1991)	M.Fanck (1989)	B.Leel (1989)
S.Carion (1990)	A.Forsten (1990-91)	K.Linders (1991)
I.Carter (1990)	J.Y.Fremont (1987)	S.M.Lister (1987)
M.Chavannon (1989)	T.Francis (1989)	N.Littlewood (1991)
M.Checker (1990)	D.G.W.Gilmore (1987)	T.R.Loader (1989)
R.H.Chittenden (1990)	D.Gosney (1987)	G.R.Lobley (1988)
A.W.Clarke (1989)	P.Greaves (1989)	S.Lowe (1989)
M.Cocker (1991)	I.Green (1987-89)	G.Magnin (1987-91)

D.Mairs (1991)	N.J.Osborne (1987)	D.Walker (1991)
B. & E.Marsh (1990)	U.G.Sorensen (1989)	J.Walton (1990)
C.McGuigan (1988)	P.Spencer (1989)	K.Warncke (1989)
N. & E.McMahon (1987)	W.Steenge (1987 & 90)	G. & H.Welch (1991)
A.Merritt (1988)	N.Stuiver (1990-91)	T.Wells (1988)
R.Moore (1988)	M.Telfer (1988)	S.West (1987)
C.N.Moorhouse (1987)	R.Thewlis (1990)	M.C.Williams (1987)
J.Mortemore (1989)	G.Tucker (1991)	N.Williams (1989)
K.Morton (1988-89)	M.Turton (1989)	P.Willoughby (1989)
J.Mottishaw (1989-90)	M.Ullmann (1987-88 & 90)	P.Wolf (1987)
R.Moyle (1989)	D.Unsal (1990)	D.J.Wood (1987)
E.M.Nicholson (1987)	T.Vain (1988)	T.Wyatt (1988)
H.Nickel (1988)	D.Vangeluwe (1990)	M.Yarar (1991)
T.Numminen (1990-91)	J.E.v.Vermeulen (1987)	J.Young (1989)
C.Osborne (1989)	R.Vos (1987, 1990-91)	

### ACKNOWLEDGEMENTS

The editors wish to thank Leo Boon and Robin Chittenden for the use of their excellent photographs.

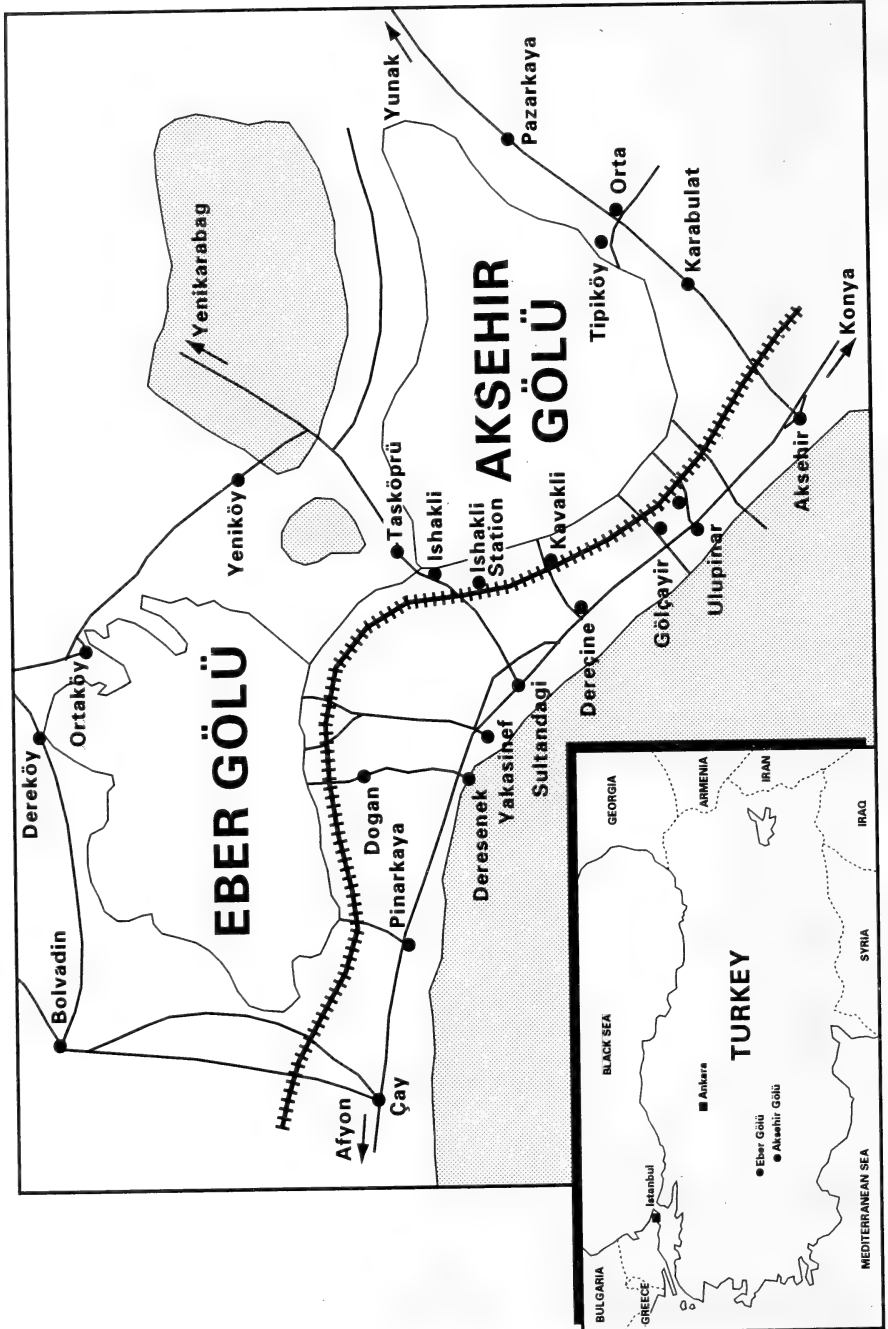
### REFERENCES

- AKCAKAYA, R. AND BILGIN, C. (1989) Turkiye Kuslari tur listesi (Aralik 1986). In Ertan, A., Kiliç, A. & Kasperek, M. (1989) *Turkiye'nin Onemli Kus Alanlari*. DHKD/ICBP, Istanbul.
- ANON. (1990) Western Palearctic News. *Birding World* 3 (9): 305-307.
- BARTHEL, P.H., HANOLDT, W., HUBATSCH, K., KOCH, H.-M., KONRAD, V. AND LANNERT, R. (1992) Der Mongolenpimel, *Bucanetes mongolicus* in der Westpalaarktis. *Limicola* 6: 265-286.
- BEAMAN, M. (1986). Turkey Bird Report 1976-81. *Sandgrouse* 8: 1-41.
- BERG, A.B.VAN DEN (1988) Grey-headed Woodpecker, *Picus canus*, in north-eastern Turkey. *Zool. in Middle East* 2: 12-15.
- BERG, A.B.VAN DEN, BISON, P. AND KASPAREK, M. (1988) Striated Scops Owl in Turkey. *Dutch Birding* 10: 161-166.
- BERG, A.B.VAN DEN AND BOSMAN, C.A.W. (1988) Paddyfield Warbler, *Acrocephalus agricola*, at Van Golu, eastern Turkey. *Zool. in Middle East* 2: 16-18.
- BERK, V.VAN DEN (1991) Impressions of autumn migration in mid-October along the Cukurova coast, near the Belen Pass, southern Turkey. *Orn. Soc. Middle East Bull.* 26: 16-19.
- BERK, V.VAN DEN AND HAVE, T.VAN DER (1990) *The Eastern Mediterranean Wader Project 1990*. Preliminary report. Zeist.
- BERK, V.VAN DEN, CRONAU, J.P. AND HAVE, T.M.VAN DER (1993) *Waterbirds in the Van Province, eastern Turkey, May 1989*. WIWO Report 34, Zeist.
- BERK, V.VAN DEN AND KASPAREK, M. (1988) The White-breasted Kingfisher, *Halcyon smyrensis*, in Turkey: On the occurrence of an endangered species. *Zool. in Middle East* 2: 19-25.
- BEZZEL, E. (1986). Lesser Sand Plover, *Charadrius mongolus*, in Turkey. *Zool. in Middle East* 1: 24-6.
- BRUIN, S.DE (1989) Spotted Sandpiper in Turkey in August 1988. *Dutch Birding* 11: 121-122.
- COCKER, M. AND TEMPLE LANG, J. (1991) A nest of the Caucasian Black Grouse *Tetrao mlokosiewiczi* in Turkey. *Sandgrouse* 13: 102-3.

- CRIVELLI, A., MITCHEV, T., CATSADORAKIS, G. AND POMAKOV, V. (1991) Preliminary results on the wintering of the Dalmatian Pelican, *Pelecanus crispus*, in Turkey. *Zool. in Middle East* 5: 11-20.
- DEPPE, H.-J. (1990) Beobachtungsnotizen zur Vogelwelt der Türkei. *Orn. Mitt.* 42: 257-8.
- DIJKSEN, L.J. (1991) *A summary of the biological and ecological importance of Akyatan Golu, Turkey, with recommendations for protection.* DHKD, Kus Bolumu Report 4, Istanbul.
- DIJKSEN, L.J. AND BLOMERT, A.M.C. (1988) *Mid-winter waterfowl census. Turkey January 1988.* WIWO Report 21, Zeist.
- DIJKSEN, L.J. AND BLOMERT, A.M.C. (1989) *Mid-winter waterfowl census. Turkey January 1989.* WIWO Report 31, Zeist.
- DIJKSEN, L.J. AND KASPAREK, M. (1985) *The Birds of Kizilirmak Delta. Birds of Turkey* 4. Heidelberg.
- DIJKSEN, L.J. AND KASPAREK, M. (1988) *The Birds of Acigol. Birds of Turkey.* Heidelberg.
- DIJKSEN, L.J. AND WOLF, P.VAN DER (1987) *Mid-winter waterfowl census Turkey. January 1987.* WIWO Report 18, Zeist.
- EAMES, J. (1989) Selected Bird Observations from Turkey: spring and summer 1987. *Orn. Soc. Middle East Bull.* 23: 6-13.
- EAMES, J. (1991) More selected bird observations from Turkey; spring and summer 1990. *Orn. Soc. Middle East Bull.* 27: 29-31.
- EYCKERMAN, R., LOUETTE, M. AND BECUWE, M. (1992) On the biometry of birds ringed in Turkey. *Zool. in Middle East* 6: 29-37.
- GOLAN, Y. AND SHIRIHAI, H. (in press) The first Long-tailed Shrikes, *Lanius schach* in Israel and Turkey. *Sandgrouse* 16:1.
- GORIUP, P.D. AND PARR, D. (1985) Results of the ICBP bustard survey in Turkey, 1981. *Bustard Studies* 2: 77-97.
- GREEN, A.J. AND ANSTEY, S. (1992) The status of the White-headed Duck *Oxyura leucocephala*. *Bird Conservation International* 2: 185-200.
- HAAS, C. (1990) First record of the Storm Petrel, *Hydrobates pelagicus*, in Turkey. *Zool. in Middle East* 4: 23-4.
- HAVE, T.M.VAN DER, BERK, V.VAN DEN, CRONAU, J.P. AND LANGEVELD, M.J. (1988) *South Turkey Project.* WIWO Report 22, Zeist.
- KASPAREK, M. (1985) *Die Sultansumpfe: Naturgeschichte eines Vogelparadieses in Anatolien.* Heidelberg.
- KASPAREK, M. (1986a) On the distribution and systematic position of the Barn Owl, *Tyto alba*, in Turkey and adjacent areas. *Zool. in Middle East* 1: 44-51.
- KASPAREK, M. (1986b) The Cyprus Warbler, *Sylvia melanothorax*, recorded in Turkey. *Zool. in Middle East* 1: 54-56.
- KASPAREK, M. (1986c) New records of the Red-tailed Wheatear, *Oenanthe xanthopyrmyna*, in Turkey. *Zool. Middle East* 1: 51-54.
- KASPAREK, M. (1988) *Der Bafasee: Natur und Geschichte in der türkischen Agais.* Heidelberg.
- KASPAREK, M. (1989a) Status and distribution of the Great Bustard and Little Bustard in Turkey. *Bustard Studies* 4: 80-113.
- KASPAREK, M. (1989b) Zum Durchzug und zur Brutverbreitung des Wendehalses (*Jynx torquilla*) in der Türkei. *Ökol. Vogel* 11: 251-256.
- KASPAREK, M. (1990a) Zum vorkommen einiger in der Türkei seltener Vogelarten. *Bonn. Zool. Beitr.* 41: 181-202.
- KASPAREK, M. (1990b) On the migration of the Whimbrel, *Numenius phaeopus*, in Turkey. *Zool. in Middle East* 4: 25-32.
- KASPAREK, M. (1992a) *Die Vögel der Türkei.* Kasperek, Heidelberg.
- KASPAREK, M. (1992b) Status of Sociable Plover, *Chettusia gregaria* and White-tailed Plover *C.leucura* in Turkey and the Middle East. *Sandgrouse* 14: 2-15.
- KASPAREK, M., BILGIN, C.C., AND AKIN, A. (1989) The Purple Gallinule, *Porphyrio porphyrio*,

- in the Eastern Mediterranean. *Zool. in Middle East* 3: 19-30.
- KILIÇ, A. (1988) The Eregli Marshes: A new nesting site for the Greater Flamingo, *Phoenicopterus ruber*, in Turkey. *Zool. in Middle East* 2: 39-42.
- KILIÇ, A. AND KASPAREK, M. (1990) *The Eregli Marshes: Assessment of their biological importance and recommendations for conservation*. Report to ICBP/WWF.
- KIRWAN, G. (1992a) A freshwater breeding record of Greater Flamingo, *Phoenicopterus ruber* in Turkey. *Sandgrouse* 14: 56-57.
- KIRWAN, G. (1992b) The migration of the Great Snipe, *Gallinago media*, through Turkey. *Zool. in Middle East* 7: 11-19.
- KIRWAN, G. (1992c) A record of Aquatic Warbler from Turkey. *Orn. Soc. Middle East Bull.* 28: 18-19.
- KIRWAN, G. (1993) *Birds of Hotamis Marshes. Birds of Turkey* 9, Kasperek, Heidelberg.
- KIRWAN, G. (1995) The breeding status and distribution of the White-headed Duck *Oxyura leucocephala* on the Central Plateau, Turkey. *Sandgrouse* 16ii: 2-11
- KNIFF, P.de (1991) Little-known West Palearctic birds: Cinereous Bunting. *Birding World* 4: 384-391.
- KRIEGER, H. (1988) The Trumpeter Finch, *Bucanetes githagineus*, in Turkey. *Zool. in Middle East* 2: 43-45.
- LENSINK, R. (1987) *Notes on the birds of some wetlands in northeast Greece and Turkey*. WIWO Report 19, Zeist.
- MAGNIN, G. (1988) *Falconry and hunting in Turkey during 1987*. ICBP Study Report 34, Cambridge.
- MAGNIN, G. (1991) A record of Brown Fish Owl, *Ketupa zeylonensis* from Turkey. *Sandgrouse* 13: 42-43.
- MARTINS, R.P. (1989) Turkey Bird Report 1982-86. *Sandgrouse* 11: 1-41.
- MARTINS, R.P. AND WEBB, R. (1991) Turkey Bird Report: a request for records and notes for contributors. *Orn. Soc. Middle East Bull.* 27:19-24.
- MEININGER, P.L., SCHEPERS, J. AND STUART, J.J. (1989) *Bird Observations from the Göksu Delta, Turkey, spring 1989*. DHKD report.
- MEININGER, P.L. AND SORENSEN, U.G. (1986) The occurrence of skuas (Stercorariidae) in the Middle East, with special reference to Egypt and the northern Red Sea. *Vogelwarte* 97: 139-145.
- OVAA, A. AND VOS, R. (1989) A second breeding site of the Purple Gallinule in southern Turkey. *Orn. Soc. Middle East Bull.* 25: 25-26.
- PETER, H. (1990) *Waldrappdämmerung am Euphrat*. Kasperek Verlag, Heidelberg.
- ROBEL, D. (1992) Nachweis der Falkenraubmowe, *Stercorarius longicaudus*, in der Türkei. *Beitr. Vogelkd.* 38: 355-356.
- ROOMEN, M.VAN & SCHEKKERMAN, H. (1989) The migration of waders and other waterbirds through inland wetlands in central Turkey, spring 1988. *Orn. Soc. Middle East Bull.* 23: 1-4.
- SCHEKKERMAN, H. AND ROOMEN, M.W.J. VAN (1993) *Migration of waterbirds through wetlands in Central Anatolia, spring 1988*. WIWO Report 32, Zeist.
- SCHEPERS, F.J., STUART, J., & MEININGER, P.L. (1989) *Breeding birds of the Göksu Delta, 1989*. DHKD preliminary report.
- TUCKER, N. (1989) A new raptor watchpoint at the Bosphorus. *Orn. Soc. Middle East Bull.* 22: 1-6.
- WINDEN, A.VAN, MOSTERT, K., RUITERS, P., SIKI, M., AND WAARD, H.de (1989) *Waders and waterfowl in spring 1988 at Eber Golu, Turkey*. WIWO Report 28, Zeist.

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# The ornithological importance of the Aksehir Gölü wetlands, Central Plateau, Turkey

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A BRIEF ornithological survey of Aksehir Gölü was conducted between 19-26 April and 3-8 May 1992, during the former period by Neil Aston and the authors, in the latter by the second author only. Two brief visits were also made to Eber Gölü as this lake is also poorly documented, treated as a separate IBA by Grimmett and Jones (1989). For reasons listed below it is probably best considered as part of a single unit, incorporating both this and Aksehir Lakes.

Aksehir Gölü (38°30'N, 31°28'E) is situated on the Aksehir/Eber plain of the Aksehir-Ilgın depression (Erol 1982, 1983). The largest settlement is the town of Aksehir. Roads from Ankara-Konya, Afyon and Isparta meet there; the main Istanbul-Konya-Adana railway passes close to the southern shore of the lake. The distance to Afyon, the nearest large town, is 90 km, and to Konya, the provincial capital, 130 km. The lake lies at approximately 990 m above sea level, at the south-western extremity of a large plain, which in turn forms the western-most edge of the central Anatolian plateau. The lake covers an area of approximately 35,300 ha (Ertan *et al.* 1989). The depth of the lake is not known by the authors, though it is deeper than Eber Gölü, which is approximately 5-6 m at its deepest point.

## TOPOGRAPHY AND GENERAL DESCRIPTION OF THE AREA

Both Aksehir Gölü and Eber Gölü are situated in a three-sided basin; to the south lie the Sultan mountains (Sultan Dağları), which consist largely of limestones and sandstones and whose highest point is 2531 m, and to the north the Emir mountains (Emir Dağları), which are of volcanic origin, and rise to 2295 m. To the east of Aksehir Gölü rise the Karakaya foothills (Karakaya Tepesi), a northerly extension of the Sultan mountains, in which Çavuşcu Gölü is located. The highest point is 1311m (Ertan *et al.* 1989).

The soils in the valley/basin are predominantly clay and sand, deposited from the Sultan mountains watershed (van Winden *et al.* 1989). Five streams flow into Aksehir Gölü from the south or south-east, but none from the Emir mountains to the north. The three streams from the south frequently dry up in summer. In addition a small river (Tasköprü Kanalı) connects Eber Gölü to Aksehir Gölü. A raised concrete watercourse has also been constructed by Devlet Su İşleri (State waterworks), following the course of this river, and then the western and northern shore of Aksehir Gölü, to bring water from Eber Gölü to feed irrigation projects to the north of the lakes. This project was scaled down considerably (by c. 80%) after work had begun. In common with Eber, Aksehir, in receiving the

bulk of its water supply from the south, experiences an evaporation surplus in the northern part of the lake. In consequence a fresh to salt-water gradient exists from south to north within the lake.

Aksehir Gölü is a large, eutrophic brackish lake of tectonic origin (Env. Problems Foundation of Turkey 1989). The total perimeter is approximately 90 km. At present approximately 80% of the lake is open water; the overall size of the lake increases and decreases according to season, but is also subject to more dramatic long-term fluctuations. Only small reedbeds remain, with Common Reed *Phragmites australis* dominant, but these surround the lake, except in some areas of the north-eastern shoreline. These reedbeds are usually between 50-500 m wide; however, in the south-western corner of the lake, close to the villages of Ishakli and Tasköprü, more extensive reedbeds exist, up to 4 km in width. The shores of the lake are generally shallow, with few areas of muddy shoreline.

To the north, north-east and west of the lake the shores are largely barren, there are few trees, the agriculture of these areas is almost exclusively arable, restricted to some cereals, oil-seed rape and poppy. Even in these areas, few people continue to be pastoralists, and the number of sheep and goat flocks is decreasing. In the south and south-east, between the lake and and main E80 highway, silviculture predominates. Irrigated orchards have been planted virtually up to the lakeshore and cover much of the available land area. Small industry is also starting to appear, some business related to agricultural services. A small industrial estate close to Ishakli railway station includes packing and processing firms for fruit and vegetables. Bee keeping is also practised by many local people around the southern shores of the lake, providing them with a useful additional source of income.

Aksehir is an administrative centre in Konya province, with 55,000 inhabitants. To the south and east of the lake there are a number of villages; Atakent, Derecine, Gölçayir, Ishakli, Karabulut, Kavakli, Orta, Sultandagi, Tasköprü, Tipiköy, Ulupinar and Yeniköy. To the north and north-east there are many fewer settlements, only Pazarkaya, Yenikarabag and a very small unnamed hamlet midway along the northern shore line.

## ORNITHOLOGICAL HISTORY

All known bird recording activity at both Aksehir and Eber lakes is documented (Appendix I). Most records have been obtained from published sources, principally the Turkey Bird Report; however where possible reference has been made to the original observers.

It was not until the 1960's that the ornithological importance of this area was recognised. As is the case with many other important localities in Turkey much of the credit for this early exploration can be accorded to Dr Hans Kumerloeve (Kumerloeve 1964a, 1964b, 1970). Comparatively regular visits were made throughout the latter half of the 1960's and the first half of the next decade. However, ornithological observations decreased almost to nil during the second half of the 1970's and for the majority of the 1980's. It is only in the last few years that ornithological interest in the area has been rekindled; a waterbird survey

was conducted in April 1988 principally at Eber Gölü, but also visiting Aksehir Gölü and Karamik Batakligi (the latter just outside the study area is now largely drained); and in 1992 a short survey of breeding birds was undertaken by the authors at Aksehir on behalf of Dögal Hayati Koruma Dernegi and OSME. However, there are few winter observations from recent years, although in the late 1960's and early 1970's waterfowl on the lakes were counted regularly in this season for the International Waterfowl and Wetlands Bureau.

## ORNITHOLOGICAL IMPORTANCE

A short breeding bird survey was undertaken in 1992, when the authors visited the area from 19-26 April, and again between 3-8 May. Observations were made along all shores of the lake, with the exception of the north-eastern corner around the village of Pazarkaya. Transport was by private car or public dolmus and on foot. The main areas to be covered were identified and transect lines were established, prior to the main survey. Transects, or more occasionally, spot counts were performed by single, or less frequently two, observers after dawn and before dusk for approximately three hour periods, when bird activity was at a peak. In addition during the first survey period particular attention was paid to migrating passerines; a small census area was chosen in order to assess the relative number and variety of such migrants. In the second period the principal object was to establish the status of breeding birds, and to this end visits were also made to the foothills of the Sultan Daglari. In the time available it proved impossible to make any visits to the marshes by boat as had originally been planned.

To date 275 species of bird have been recorded at Aksehir Gölü and Eber Gölü; nine only at the latter. Of these 68 are confirmed breeders, although it is probable that the Great Cormorant *Phalacrocorax carbo* no longer breeds. In addition a further 56 species are strongly suspected to breed. These relatively high totals are due to the considerable biological diversity and importance of the area and are the result of rather few, but often intensive, ornithological visits. However, in comparison to other important wetlands, such as the Sultan Marshes (Kasperek 1985) and the Hotamis Marshes (pers. obs.) rather more attention has been paid to the passerine species which inhabit the surrounding hinterland of the Aksehir area. Furthermore a greater diversity of habitats occurs in the environs of these two lakes than at either of the other two wetlands mentioned.

Ertan *et al.* (1989) listed both Aksehir Gölü and Eber Gölü in their inventory of Important Bird Areas in Turkey. The authors consider that they should, in future, be considered as a single unit; as would be expected there is much movement for feeding, loafing and roosting between the two lakes, while many of the threats are interrelated and at times compounded by the situation at the adjacent site. This study, incorporating the results of the first breeding bird survey at either lake, elaborates and clarifies the ornithological knowledge presented by Grimmet and Jones (1989). The degree of human impact on the ecosystems is hard to ascertain, though increasing use of the surrounding steppe for arable

farming may have caused the decline of the Great Bustard *Otis tarda*.

Five species of bird listed as globally endangered (Collar and Andrew 1988) probably breed in the area; Pygmy Cormorant *Phalacrocorax pygmeus*, Dalmatian Pelican *Pelecanus crispus*, Marbled Teal *Marmoronetta angustirostris*, Lesser Kestrel *Falco naumanni*, and Great Bustard. In addition two others, White-headed Duck *Oxyura leucocephala* and White-tailed Eagle *Haliaeetus albicilla*, occur as passage migrants and winter visitors, although there are no recent records of the latter.

A further 83 species of international or national conservation importance (Porter 1991) have been recorded in the area, of which 16 have been proven to breed, and a further 16 probably breed.

Breeding species listed as vulnerable (Collar & Andrew 1988) or of special regional significance, include: Bittern *Botaurus stellarus* (probably a few pairs), Little Egret *Egretta garzetta* (150+ pairs), Great White Egret *Egretta alba* (10-20 pairs), Purple Heron *Ardea purpurea* (75 pairs), White Stork *Ciconia ciconia* (at least 8 pairs), Spur-winged Plover *Hoplopterus spinosus* (probably 30-50 pairs) and Moustached Warbler *Acrocephalus melanopogon* (probably 50+ pairs).

The lakes are not of special significance as staging areas for migrant waders. Only Ruff *Philomachus pugnax* were seen in any numbers. The shorelines of both are predominantly reed-lined, interspersed with small pools, and the narrow mud fringes preclude their use by many wader species, although they do attract reasonable numbers of Marsh *Tringa stagnatalis* and Wood Sandpipers *T. glareola*.

Although few wildfowl remain to breed or over-summer at Akşehir Gölü, duck numbers appear to remain higher at Eber Gölü. The area is most important for wildfowl during the winter months, though the lakes are difficult to cover due to their size and only a few stretches of open water are often available as both lakes are prone to freezing. The following maxima have been recorded at Akşehir (A) and Eber (E): White-fronted Goose *Anser albifrons* 29,575 (A), Greylag Goose *Anser anser* 10,000 (A), Wigeon *Anas penelope* 10,000 (E), Gadwall *Anas strepera* 7,500 (A), Pintail *Anas acuta* 2850 (A), 1420 (E), Red-crested Pochard *Netta rufina*, 576 (A) and Coot *Fulica atra* 28,412 (A), 10,000 (E).

The area is almost certainly one of the most important feeding and resting areas for passerine migrants in Central Anatolia. Some ringing activities have already been conducted at Eber Gölü (van Winden *et al.* 1989); however there is more extensive habitat at Akşehir which would be ideal for a more intensive study. The attraction of water surrounded by a relatively large greenbelt, particularly on the south side of Akşehir Gölü, compared to the generally denuded nature of the Anatolian landscape, acts as a magnet to migrating passerines. During inclement weather conditions large falls can occur with all available habitat being utilised, even grassy fields with only a few centimetres of vegetation (Bradshaw and Kirwan 1992).

## SELECTED SPECIES ACCOUNTS

**Red-necked Grebe** *Podiceps grisegena*. A summer visitor which has bred, most

records come from Eber Gölü: an undated male specimen, collected at Aksehir Gölü (Kumerloeve 1970); 4 at Aksehir Gölü on 22 Apr 65 (Kasperek *in litt.*); seen during the breeding season at Eber Gölü in 1966-67 (OST 1969), 3 at Eber Gölü on 8 Sep 68 (OST 1972), 1 at Eber Gölü on 12 May 70, 3 at Eber Gölü on 4 May 71 (OST 1975), and 1 at Eber Gölü on 25 May 75 (OST 1978), and 3 (plus some unfledged young) at Aksehir Gölü on 13 Jun 77 (Beaman 1986). The species is a rather local and uncommon visitor to wetlands on the Central Plateau and eastern Turkey and is apparently rarer in the west of its range.

**Pygmy Cormorant** *Phalacrocorax pygmeus*. Resident. Breeds in fair numbers (75+ pairs estimated in 1992 at Aksehir alone, and it is possible that a similar number breed at Eber). Maximum numbers at the latter locality include: 125 on 21 Apr 63 (Kumerloeve 1970), 131 on 15 Dec 70 (OST 1975) and 200 on 18-20 Apr 88 (van Winden *et al.* 1989). The maximum count at Aksehir Gölü was 177 on 21 Jan 71 (OST 1975). The population appears to be largely sedentary, remaining relatively stable throughout the year.

No single large colony was located during the survey. It appeared that the species generally consorted with various heron and egret species in forming rather loose colonial areas in several of the reedbed areas at Aksehir Gölü. Significant concentrations were discovered at the south-western end of the lake, close to the village of Tasköprü, along the southern shoreline, especially to the west of Yeniköy, and midway along the northern shoreline. Birds were frequently seen returning to their breeding sites at Aksehir from the direction of Eber in the evening, suggesting that the latter is an important feeding and loafing area.

**Dalmatian Pelican** *Pelecanus crispus*. Exact status uncertain. At least seven adults and one immature bird were present during the survey. Presumably breeds at Aksehir Gölü, making this only the sixth known breeding area for the species in Turkey. A suitable breeding locality on the northern shore of the lake was identified, although there was considerable disturbance to the birds in this area. There is a small hamlet less than 2 km to the east of the suspected nesting site, where reed culture and fishing are important activities. The birds were frequently seen circling over the area, indicating that they had been flushed from their nests due to human, or other, disturbance. The birds always returned to the presumed colony site some time later, never drifting off long distances as though on fishing trips. From our observations it was clear that the birds utilised Aksehir Gölü as their primary feeding area, presumably because there is a much greater extent of open water, and most observations were made within 2-3 km of the presumed colony. The only other area in which birds were observed was on the southern shore, between Gölçayir and Kavaklı, but it was considered that the reedbed here was too small, and too disturbed by fishermen and possibly hunters to support a colony.

Previously there have been a number of other records: 32 fishing in Aksehir Gölü on 15-16 May 64 (Kumerloeve 1970) and 1 there on 13 Jul 77 (Meininger and Dielissen); 5 at Eber Gölü on 18-21 Apr 67 (OST 1969); 3 at Eber Gölü on 10 May 69 (OST 1972); 24 at Eber Gölü on 25 May 75 (OST 1978).

**Bittern** *Botaurus stellaris*. There are only a few records from the area, however given the extent of suitable habitat it is likely that a few pairs may breed: 1 at Eber Gölü on 1 Sep 67 (OST 1969); 1 at Aksehir Gölü on 28 Nov 71 (OST 1975, Kasperek 1986); 2 heard booming at Aksehir Gölü on 10 Jun 87 (I.Green, Moorhouse and

West); 1 at Eber Gölü on 2-4 Apr 88 (van Winden *et al.* 1988); 2 at Akşehir Gölü on 21 Apr 92 (Aston *et al. in litt.*); 1 at Akşehir Gölü on 4 May 92 (Kirwan).

**Little Egret** *Egretta garzetta*. Resident, small numbers remaining to winter. Approximately 175 pairs breed, in 4-5 major colonies at Akşehir Gölü. Usually these are in close proximity to other species eg Grey Heron *Ardea cinerea* and Pygmy Cormorant and, in one instance, in a mixed colony with Great White Egret. There are many reports of this species from Eber Gölü, including 393 on 18-20 Apr 88 (van Winden *et al.* 1989); significant colonies may nest at this lake as well.

**White Stork** *Ciconia ciconia*. Breeds. Listed by van Winden *et al.* (1989) as a common nester around Eber Gölü, only a few were found in the vicinity of Akşehir Gölü; Ishaklı İstasyonu (2), Orta-Tipiköy (at least 4), Yeniköy (1), and Tasköprü (1). Few large flocks of passage birds have been noted, as the area does not lie on a principal migration route (Kasperek and Kiliç 1989).

**Glossy Ibis** *Plegadis falcinellus*. Apparently a relatively common breeding species, and passage migrant during April and the first week of May. The true size of the breeding population was masked by the large number of migrants. During the first full field period, 680 birds were present and in the second only 133. Nevertheless, a population of at least 50, and perhaps closer to 100, pairs is proposed for Akşehir Gölü. It is probable that similar numbers nest at Eber Gölü; the maximum count there was 1536 on 18-20 Apr 88 (van Winden *et al.* 1989), of which many were presumably on passage.

**Bean Goose** *Anser fabalis*. Vagrant. Few records for Turkey (Kasperek 1992a). 2 at Akşehir Gölü on 5 Apr 88 is the only record (van Winden *et al.* 1989).

**Marbled Teal** *Marmaronetta angustirostris*. Recorded only from Eber Gölü, a possible breeding area, as follows: 2 pairs plus a single on 8 May 67 (OST 1969); 1 on 4 May 71 (OST 1975) and 4 on 25 May 75 (OST 1978).

**White-headed Duck** *Oxyura leucocephala*. Irregular passage migrant. There is a distinct possibility that this species could breed in the area. 125 at Eber Gölü on 18 Apr 67 (OST 1969); 8 at Akşehir Gölü on 7-8 Aug 71 (OST 1975) and 4 at Eber Gölü on 8 Aug 71 (OST 1975).

**White-tailed Eagle** *Haliaeetus albicilla*. (Former ?) winter visitor and passage migrant. There are no recent records, in common with the general decline noted in this species in Turkey (Martins 1989). However, there is little winter bird-watching activity in the area. The records are as follows: 2 adults migrating north-west over Eber Gölü on 18 Apr 67 (OST 1969); adult at Eber Gölü on 9 May 69 (OST 1972); 2 at Akşehir Gölü on 14 Jan 72 and 1 there on 10 Jan 73 (OST 1975).

**Lesser Kestrel** *Falco naumanni*. Breeds. Noted by van Winden *et al.* (1989) as a common breeding bird in the villages surrounding Eber Gölü, unfortunately no precise figures are available. In 1992 small colonies or single pairs were noted in the following areas: Tasköprü, Ishaklı, Sultandagi and at a small unnamed hamlet on the northern shore of Akşehir Gölü.

**Purple Gallinule** *Porphyrio porphyrio*. Vagrant. There is an intriguing record of one bird at Aksehir Gölü on 12 Jul 77 (Beaman 1986). This is one of only a few published records (mostly on the Central Plateau) away from the present and two former breeding localities, all in the Southern Coastlands (Kasperek 1989b, 1992a; Kumerloeve 1961, 1970; Ovaa and Vos 1990). There is a record from the European side of the Bosphorus on 15 Jul 1893 of the western Mediterranean nominate race (all other Turkish records belong to the race *seistanicus*) listed by Kumerloeve (1961).

**Great Bustard** *Otis tarda*. A resident which presumably still breeds in the area, although its numbers have probably decreased. There are two records from just outside the study area: in the Bolvadin area Ainsworth (1842, in Kasperek 1989a) saw "flocks of bustards" on 11 Nov 1839, while Kumerloeve (1962, in Kasperek 1989a) noted a few birds between Bolvadin and Emirdag in June 1962. Between 1970-1986 there were a total of eight records from the Aksehir/Eber area, the maximum count being 30 birds at Eber Gölü on 14 Jan 72 (OST 1975, Kasperek 1989a).

We made two observations during the study period, both on the north side of Aksehir Gölü: 3 adult males on 21 Apr 92 flew in from the north and fed in an area of cereal crops and on 3 May 92 an immature male and adult female were feeding in cereal crops close to the lakeshore from late afternoon until dusk.

**Little Bustard** *Tetrax tetrax*. There are no records from the study area. Several records from the surrounding vicinity may indicate that the species should be searched for in the future. The species is now very rare in Turkey and its current status is uncertain (Kasperek 1989a). A dead specimen, considered to be a nearly fledged juvenile, was discovered at Karamikbatakligi on 12 Jul 69 (OST 1972); 5 were seen near Kütahya approximately 100 km north-west of Eber Gölü on 17 Jul 70 (OST 1975), while 2 females were seen to the south of Sivrihisar on 8 May 92 (Kirwan 1992).

**Sociable Plover** *Chettusia gregaria*. Vagrant or very scarce passage migrant. Two were with Lapwing *Vanellus vanellus*, at Eber Gölü on 3 Apr 88 (van Winden *et al.* 1989), the only record. A review of the species' status has recently been published (Kasperek 1992b).

**Slender-billed Curlew** *Numenius tenuirostris*. One record of 2 birds at Eber Gölü on 12 May 70 (OST 1975, Gretton 1991).

**Armenian Gull** *Larus (argentatus) armenicus*. The true status of this species in Turkey remains unclear and only three breeding colonies have been located. However, it seems probable that the (sub)species is more widespread in Turkey than previously thought, see discussion in Suter (1990). A record of 6 adults and 2nd year birds on 4 May 92 at Aksehir Gölü (Kirwan) would appear to be the western-most record in Turkey.

**Citrine Wagtail** *Motacilla citreola*. Passage migrant. All available records are listed: 1 male at Eber Gölü on 19 Apr 88 and another male there on 23 Apr 88 (van Winden *et al.* 1989). At Aksehir Gölü: 1 on 21 Apr 92, 7 on 22 Apr 92, and 1 on 4 May 92 (Aston, Bradshaw & Kirwan). The possibility of breeding should not be discounted. Breeding has been proven at a number of sites in the north-east and east (Kasperek

1992a) and has been suspected at a number of sites on the Central Plateau in recent years, including Eregli marshes, Kulu Gölü and Palas Gölü (for latter see Schekkerman and van Roomen 1993). The species is undergoing a westerly expansion in virtually all parts of its range (Cramp 1988).

**Barred Warbler** *Sylvia nisoria*. Breeds on the surrounding hillsides. There have been a number of records suggestive of breeding nearer the lakes. Confirmation was provided by the record of a pair and a lone female nest-building in scrub above Pinarkayaköyü, to the south of Eber Gölü on 6 May 92. Alarm calls were frequently uttered upon close approach by the observer and the male was actively defending territory against another unseen, singing male. Otherwise a relatively common migrant through the area in both spring and autumn. The exact breeding status and distribution of this species remains unclear (Kirwan and Martins 1995).

**Bearded Tit** *Panurus biarmicus*. Breeds in relatively large numbers. A population of between 150-200 pairs is estimated for Aksehir Gölü alone. However there are very few records for Eber Gölü. The species is also a relatively common winter visitor to the area.

**Crimson-winged Finch** *Rhodopechys sanguinea*. The species is a winter visitor to the area, but may also breed. The following observations have been made in the breeding season: 4 males and a female on hillsides to the west of Çay on 9 May 67, copulation was observed (OST 1969) and a pair display flighting above Pinarkayaköyü on the south side of Eber Gölü on 6 May 92 (Kirwan). The species' status on the Central Plateau remains unclear; since its first occurrence reported by Lehmann (1971), it would appear that this area is probably the western edge of the species' Turkish range. Note that breeding appears to take place at rather lower altitudes, down to 1000 m (Kasperek 1992a), on the Central Plateau, than further east.

**Cinereous Bunting** *Emberiza cineracea*. There is only one record of the subspecies *cineracea*, at Aksehir Gölü on 20 Apr 92 (Aston *et al. in litt.*). The range of the species within Turkey has recently been reviewed (de Knijff 1991), although the true distribution and status remains unclear (Kirwan and Martins 1995) and it may well be that the species could breed in the area.

Appendix II lists all bird species known to have occurred at the Aksehir and Eber lakes, and the surrounding hills up to 1500 m. Brief details on status are provided.

## THREATS TO THE AREA

In 1992 the Turkish Ministry of Culture designated Aksehir Gölü a natural SIT (a weak protection status), thus affording the area some protection.

### Reed-burning and cutting

Reed burning is widely practised in the area; on both visits to Eber Gölü large reed fires were blazing, visible at several km distance, and their position in the lake was undoubtedly causing considerable disturbance to breeding birds. It would appear that burning is practised to encourage reed regeneration, notice-



able in many areas which had previously been burnt, and in order to clear areas of marsh for agricultural development. This latter purpose would appear to be of secondary importance. The previously burnt areas are along the northern and north-western shores of Aksehir Gölü and are utilised by Little Egret, Glossy Ibis and Squacco Heron *Ardeola ralloides* as well as by passerine migrants. At Aksehir no fires were seen in close proximity to major colonies of waterbirds.

The nature and purpose of reed-cutting at Eber Gölü has already been described by van Winden *et al.* (1989). The local Kaymakam (prefect) forbid the cutting of reeds outside the autumn and winter periods (October-April). However, in both areas, reed is harvested after the beginning of the April deadline; freshly landed reed were seen on a number of occasions on the eastern shore of Aksehir Gölü. As at both Karamikbatakligi and Eber, reed-cutting is an important local economic activity which supplies the Çay paper factory. It also has valuable domestic uses e.g. roof-thatching, fencing, mats and other building uses. At Hotamis Marshes (Kirwan pers. obs.) reed-cutting, when properly managed and regulated, probably does not cause an undue threat to the breeding birds. Similarly reedfires, if limited to the winter period, can have a beneficial effect. The need for such management of reedmarshes, to maintain their ecological and biological importance for birds, has been stressed for West European wetlands (e.g. Fuller 1982). In a Turkish context, active management will yield both wildlife and economic benefits. Positive benefits can accrue by allowing some areas of marsh to undergo natural succession; dry reed areas are favoured by Bearded Tit for nesting (Bibby 1981, 1983) and by Reed Warbler *Acrocephalus scirpaceus* for feeding (Fuller 1982).

### Water Pollution

This topic has already been discussed in relation to Eber Gölü (van Winden *et al.* 1989). The dangers of pollution from fertilisers and agricultural pesticides are as great at Aksehir Gölü, as it is linked to Eber Gölü. Direct industrial pollution is perhaps less of a problem, although there are a number of factories along the south side of the lake. However indirect pollution, via Eber Gölü is significant. Waste comes from milk, meat, fish and sugar factories, as well as the Bolvadin alkaloid factory, which processes opium (the main agricultural crop of the region), codeine and morphine sulphates. The water quality of both lakes has recently been surveyed by the Environmental Foundation of Turkey. While exact details are not yet available, the results are known to indicate that both are heavily polluted. Dumping of domestic sewage may be a local problem around both lakes.

### Water Regime and Land Use Changes

The purpose of the water regulation system established at Eber Gölü is to supply an irrigation scheme close to Konya. Several raised concrete water-courses have been constructed by the State Waterworks for this purpose. Local irrigation schemes, on a much smaller scale, are assisting the development of land for arable farming around both lakes, as well as for fruit (citrus) and almond

orchards on the south side of Akşehir Gölü. Relatively few local people are now pastoralists. However, apart from the associated increase in agro-chemical pollution which has accompanied the switch from pastoralism to arable agriculture, this process appears to be having few adverse effects on the area's birdlife.

## Hunting

Eyckerman *et al.* (1992), Porter (*in litt.*) and van Winden *et al.* (1989) all reported the adverse effects of hunting in the area, especially at Eber Gölü. In 1992 only one hunter was seen, although his bag proved to be empty. More information is required on the present level of hunting during the winter period.

Fishing is an economic activity in the area. From our observations it was impossible to gauge whether fishing could be described as excessive in this area. Certainly fishermen come, sometimes in numbers exceeding 50-60 to the south-eastern corner of Akşehir Gölü alone, on a daily basis from as far away as Afyon.

## AKNOWLEDGEMENTS

Duncan Brooks, Rod Martins and Murat Yazar commented extensively upon an earlier draft of the text. Richard Porter and Jim Glover supplied details of their observations from the area, while Max Kasperek made an invaluable contribution to the record selection.

## REFERENCES

- AINSWORTH, W. F. (1842) *Travels and Researches in Asia Minor, Mesopotamia, Chaldea, and Armenia*. London.
- BALLANCE, D. K. (1958) Summer Observations on the birds of the Anatolian Plateau and Northwestern Cilicia. *Ibis* 100: 617-620.
- BEAMAN, M. (ed.) 1978. *Bird Report 1974-1975*. Ornithological Society of Turkey, Sandy.
- BEAMAN, M. (1986) Turkey Bird Report 1976-81. *Sandgrouse* 8: 1-41.
- BIBBY, C.J. (1981) Food supply and diet of the Bearded Tit. *Bird Study* 28 : 201-210.
- BIBBY, C.J. (1983) Studies of Bearded Tit. *Brit. Birds* 76: 549-563.
- BRADSHAW, C. G. AND KIRWAN, G. (1992) Impressions of spring passerine migration at Akşehir Gölü, Turkey. *Orn. Soc. Middle East Bull.* 29: 16-17.
- COLLAR, N.J. AND ANDREW, P. (1988) *Birds to Watch: the ICBP World checklist of threatened birds*. ICBP Tech Publ. 8, Cambridge.
- CRAMP, S. (ed.) (1988) *The Birds of the Western Palearctic* Vol 5. Oxford University Press.
- DE KNIJFF, P. (1991) Little-known West Palearctic birds : Cinereous Bunting. *Birding World* 4: 384-391.
- ENVIRONMENTAL PROBLEMS FOUNDATION OF TURKEY (ed.) (1989) *Wetlands of Turkey*. Environmental Problems Foundation of Turkey. Ankara.
- ERÖL, O. (1982). Türkei: Naturräumliche Gliederung. *Tübinger Atlas des Vorderen Orients* (TAVO), Karte AV112. Wiesbaden
- ERÖL, O. (1983). Türkei: Naturräumliche Gliederung. *Behefte zum Tübinger Atlas des Vorderen Orients, Reihe A Naturwissenschaften*, 13: 1-245. Wiesbaden.
- ERTAN, A., KILIÇ, A. AND KASPAREK, M. (1989). *Türkiye'nin Önemli Kus Alanlari*. DHKD/ICBP, Istanbul.
- EYCKERMAN, R., LOUETTE, M. AND BECUWE, M. (1992) On the biometry of birds ringed in Turkey. *Zool. Middle East* 6: 29-37.
- FULLER, R. J. (1982) *Bird Habitats in Britain*. T. & A.D. Poyser, Carlton.
- GRETTON, A. (1991) *The Ecology and Conservation of the Slender-billed Curlew* (Numenius tenuirostris). ICBP Monograph No.6, Cambridge.

- GRIMMETT, R. F. A. AND JONES, T. A. (1989) *Important Bird Areas in Europe*. ICBP Tech. Publ. 9, Cambridge.
- HARBARD, C. A., WALSH, T. A. AND FISHER D.J. (1976). *Report of an Ornithological Expedition to Turkey 8 July-1 October 1974*. Privately published.
- KASPAREK, M. (1985) *Die Sultanssumpfe - Naturgeschichte eines Vogelparadieses in Anatolien*. Heidelberg.
- KASPAREK, M. (1986) On the occurrence of Bittern, *Botaurus stellaris*, in Turkey. *Zool. Middle East* 1: 33-41.
- KASPAREK, M. (1989a) Status and distribution of the Great Bustard and Little Bustard in Turkey. *Bustard Studies* 4: 80-113.
- KASPAREK, M. (1989b) The Purple Gallinule, *Porphyrio porphyrio*, in the Eastern Mediterranean. *Zool. Middle East* 3: 19-30.
- KASPAREK, M. (1990) Zum Vorkommen einiger in der Türkei seltener Vögelarten. *Bonn Zool. Beitr.* 41 (3/4): 181-202.
- KASPAREK, M. (1992a) *Die Vögel der Türkei*. Heidelberg.
- KASPAREK, M. (1992b) Status of Sociable Plover (*Chettusia gregaria*) and White-tailed Plover (*Chettusia leucura*) in Turkey and the Middle East. *Sandgrouse* 14(1):2-15.
- KASPAREK, M. & KILIÇ, A. (1989) Zum Zug des Weissstorches *Ciconia ciconia* durch die Türkei. In Rheinwald, G., Ogden J. & Schulz, H. (Eds) *White Stork: Status and Conservation*. Proc. First International Stork Conservation Symp. Walsrode 14-19 October 1985. *Schriftenreihe des Dachverbandes Deutscher Avifaunisten* 10. Bonn.
- KIRWAN, G. (1992) Around the Region. *Orn. Soc. Middle East Bull.* 29: 35-48.
- KIRWAN, G. AND MARTIN, R. P. (1995) Turkey Bird Report 1987-91. *Sandgrouse* 16ii: 12-53.
- KUMERLOEVE, H. (1961) Zur Kenntnis der Avifauna Kleinasiens. *Bonn Zool. Beitr., Sonderheft* 1961: 1-318.
- KUMERLOEVE, H. (1962) Türkiye Kuslari uzerine yeni arastirmalar (Batak lik ve su kuslari haric). Weitere Untersuchungen über die türkische Vogelwelt (ausgenommen Sumpf- und Wasservogel). *Istanbul Univ. Fen. Fak. Mecm B* 27: 165-228.
- KUMERLOEVE, H. (1964a) Lachmoven und Schwarzhalstaucher als Brutnachbarn auf dem Aksehir Gölü im südwestlichen Zentralanatolien. *Falke* 11: 208-209.
- KUMERLOEVE, H. (1964b) Aksehir Gölü und Burdur Gölü: zwei kleinasiatische Seen von hoher Bedeutung für Sumpf- und Wasservogel. *Natur und Landschaft* 39: 162-163.
- KUMERLOEVE, H. (1967) Neue Beiträge zur Kenntnis der Avifauna von Nordost - bis Ost-Kleinasien. *Istanbul Univ. Fen. Fak. Mecm. B*; 35: 85-160.
- KUMERLOEVE, H. (1970) Zur Kenntnis der Avifauna Kleinasiens und der europäischer Türkei. *Istanbul Univ. Fen. Fak. Mecm. B*; 35: 85-160.
- LEHMANN, H. (1971) Der Rotflügelgimpel (*Rhodopechys sanguinea*), auf dem Hochplateau Zentral-Anatoliens. *Jahr. Ber. Naturw. Ver. Wuppertal* 24: 89-100.
- MARTIN, R.P. (1989) Turkey Bird Report 1982-86. *Sandgrouse* 11: 1-41.
- Ornithological Society of Turkey (OST) (1969) *Bird Report 1*. (1966-67). OST, Sandy.
- Ornithological Society of Turkey (OST) (1972) *Bird Report 2*. (1968-69). OST, Sandy.
- Ornithological Society of Turkey (OST) (1975) *Bird Report 3*. (1970-73). OST, Sandy.
- Ornithological Society of Turkey (OST) (1978) *Bird Report 4*. (1974-75). OST, Sandy.
- OVA, A. & VOS, R. (1990) A second breeding site of the Purple Gallinule in southern Turkey. *Orn. Soc. Middle East Bull.* 25: 25-26.
- PORTER, R.F. (1991) Priority Bird species in Turkey. *Orn. Soc. Middle East Bull.* 26: 1-8.
- SUTER, W. (1990) Comments on the breeding range of Armenian Gull, *Larus armenicus*. *Orn. Soc. Middle East Bull.* 25: 12-15.
- SZIJ, J. AND HOEKSTRA, H.H (1968). Report of the first IWRB Mission to Turkey. *IUCN Publ.* 12: 58-68 (Proc. Tech. Meeting on Wetland Conservation Turkey 1967).
- WINDEN, A. VAN, MOSTERT, K., RUITERS, R., SIKI, M. & DE WAARD, H. (1989) *Waders and Wildfowl in spring 1988 at Eber Gölü, Turkey*. WIWO Report 28, Zeist.

## APPENDIX I

## Bird recording at Aksehir and Eber lakes

1839	11 Nov	W.F. Ainsworth (Ainsworth 1842, Kasperek 1989a).
1957	5 - 6 Jul	D.K. Ballance (Ballance 1958).
1962	24-25 Mar	(in Kumerloeve 1970)
	? Jun	H.Kumerloeve (Kumerloeve 1962, Kasperek 1989a).
1963	21-22 Apr	D. Ristow (in Kumerloeve 1970)
	28 Jul	(in Kumerloeve 1970)
1964	5-16 May	H. Kumerloeve (in Kumerloeve 1970)
1965	1 Mar	E. Herrlinger, A.M. von Tschirnhaus (in Kumerloeve 1970)
	18-22 Apr	(in Kumerloeve 1970)
	7- 8 May	H. Lehmann (in Kumerloeve 1970)
1966	27-29 May	(in OST 1969)
1967	1- 3 Feb	H.H. Hoekstra and J.Szjij (Szjij and Hoekstra 1968)
	25-27 Mar	H. Vierhaus and A. Bruch (in Kumerloeve 1970)
	17-21 Apr	(in OST 1969)
	4 May	K. Rothmann (in Kumerloeve 1970)
	6- 8 May	H. Lehmann and R. Mertens (in Kumerloeve 1970)
	9-10 May	(in OST 1969)
	15-16 May	(in OST 1969)
	1 Sep	(in OST 1969)
1968	7- 8 Feb	H.H. Hoekstra and A. Johnston (in OST 1972)
	8 Sep	A.R. Kitson and R.F. Porter (in OST 1972)
	10 Jan	R.F. Porter <i>et al.</i> (in OST 1972)
1969	11-12 Jan	F.J. Koning and H.H. Hoekstra (in OST 1972)
	5 May	(in OST 1972)
	9 May	R.J. Johns and A. Vittery (in OST 1972)
	5 Aug	(in OST 1972)
	30 Aug	Cambridge Ringing Expedition (in OST 1972)
	17-18 Aug	L.J. Dijksten and F.J. Koning (in OST 1972)
1970	20-22 Jan	L.J. Dijksten and F.J. Koning (in OST 1975)
	12-13 May	D.L. Clugston <i>et al.</i> (in OST 1975)
	30 Jun	(in OST 1975)
	6 Dec	(in OST 1975)
	13-17 Dec	L.J. Dijksten and F.J. Koning (in OST 1975)
1971	21 Jan	L.J. Dijksten and F.J. Koning (in OST 1975)
	4 May	R.W. Forrester and R.A. Jeffrey (in OST 1975)
	3-9 Aug	(in OST 1975)
	28-29 Nov	L.J. Dijksten, F.J. Koning and J. Walmsley (in OST 1975)
1972	13-14 Jan	L.J. Dijksten, F.J. Koning and J. Walmsley (in OST 1975)
	16 Mar	K. Bucher <i>et al.</i> (in Kasperek 1989a)
	9 Apr	(in OST 1975)
	8 May	observers unknown
	31 May	(in OST 1975)
	17-18 Jul	J. Phillipona (in OST 1975)
	2 Aug	(in OST 1975)
1973	10-12 Jan	L.J. Dijksten and F.J. Koning (in OST 1975)
	12 Apr	(in OST 1975)
	2 - 6 Aug	(Eyckerman <i>et al.</i> 1992)
1974	23-24 Feb	L.J. Dijksten and F.J. Koning (in OST 1975)
	28-29 Apr	(Harbard <i>et al.</i> 1976)

1975	3 - 4 May	K. Breek and H. Gelderblom (in OST 1978)
	25 May	(in OST 1978)
	3 Jun	(in OST 1978)
	29 Aug	observers unknown
1976	26 Jul	(Beaman 1986)
	19 Sep	(Beaman 1986)
1977	12-14 Jul	P.L. Meininger and B. Dielissen (in Beaman 1986)
	19 Aug	(Beaman 1986)
1978	8 Mar	(Beaman 1986)
1979	27 May	M.J. Inskip
1981	29 Apr	N. Koch
1983	14 May	E. Kieft
	2 Jun	observers unknown
	11 Oct	J. Phillipona
	3 - 4 Nov	F. de Roder
1984	8 May	K. Handke and P. Kalmud
	25 Sep	L.C. van Beckhoven, L.J. Dijkse, A. Kiliç and M. Kasperek
	11 Oct	D.J. Wood
1985	2 Jun	F. Grimmer and G. Scholl
1986	18 Jan	L.J. Dijkse and F. Koning
	11 May	Dansk Ornitologisk Forenings
	25 Jun	M. Kasperek and E.U.M. Raddatz (in Martins 1989)
	4 - 5 Sep	R.G. Bijlsma & F. de Roder (in Martins 1989)
1987	12 May	Wolftrail Tours
	10-11 Jun	I.A. Green, N. Moorhouse and S. West
	4 & 8 Dec	G. Magnin
1988	4-23 Apr	(van Winden <i>et al.</i> 1989)
1989	4 Jul	T. Barker, D. Richardson and R. Slack
1990	30 Jan	K. Boyla, G. Magnin and M. Yasar
	14-16 May	Wolftrail Tours
1991	13-14 Sep	G.M. Kirwan, G. Welch and H. Welch
1992	22 Jan	L.J. Dijkse
	19-26 Apr	N. Aston, C.G. Bradshaw and G.M. Kirwan
	3 - 8 May	G.M. Kirwan
1993	7 May	J. Glover and C. Skinner

## APPENDIX II

## List of species recorded at Aksehir and Eber Lakes

The following species list has been compiled largely from observations published in the Turkey Bird Report between 1966-86 (OST 1969, 1972, 1975, 1978, Beaman 1986, Martins 1989), from some unpublished trip lists and our own observations. In addition much use has been made of Kumerloeve (1970) and van Winden *et al.* (1989) for Eber Gölü. No attempt has been made to make an exhaustive study of the available literature: it has not been possible to examine the large body of pre-1986 source material from which the Turkey Bird Reports have been compiled. Unpublished records, particularly from the period since 1987, are especially sought. These should be submitted to the authors at the address below.

Readers should bear in mind when reviewing the material presented here that the status of the majority of the species is still incompletely known or even almost unknown. Hence only the broadest comments on this subject are made and some species are treated as 'status uncertain'. Nevertheless such a list will hopefully provide an initial guideline and a spur to future fieldwork in the locality.

## Abbreviations

r = present throughout year, b = confirmed breeding (i.e. nest building or unfledged young observed etc), b? = possible breeding species (i.e. species for which the frequency of observations in the nesting season would indicate breeding, and for which this area falls within their known breeding range), sv = summer visitor without breeding, pm = passage migrant, wv = winter visitor, v = vagrant (for such species the reference is quoted in parentheses). Species for which records are only available from Eber Gölü are indicated by (\*).

Little Grebe <i>Tachybaptus ruficollis</i>	r, b
Great Crested Grebe <i>Podiceps cristatus</i>	r, b
Red-necked Grebe <i>Podiceps grisegena</i>	b, sv
Black-necked Grebe <i>Podiceps nigricollis</i>	b
Pygmy Cormorant <i>Phalacrocorax pygmeus</i>	r, b
Cormorant <i>Phalacrocorax carbo</i>	sv, former b (Kumerloeve 1970)
White Pelican <i>Pelecanus onocrotalus</i>	sv, pm
Dalmatian Pelican <i>Pelecanus crispus</i>	b?
Bittern <i>Botaurus stellaris</i>	r, b?
Little Bittern <i>Ixobrychus minutus</i>	b
Night Heron <i>Nycticorax nycticorax</i>	b
Squacco Heron <i>Ardeola ralloides</i>	b
Little Egret <i>Egretta garzetta</i>	r, b
Great White Egret <i>Egretta alba</i>	b?
Grey Heron <i>Ardea cinerea</i>	b
Purple Heron <i>Ardea purpurea</i>	b
(*) Black Stork <i>Ciconia nigra</i>	pm
White Stork <i>Ciconia ciconia</i>	b, pm
Glossy Ibis <i>Plegadis falcinellus</i>	b, pm
Spoonbill <i>Platalea leucorodia</i>	sv
Greater Flamingo <i>Phoenicopterus ruber</i>	r, sv
Bean Goose <i>Anser fabalis</i>	v (van Winden <i>et al.</i> 1989)
White-fronted Goose <i>Anser albifrons</i>	wv, pm
Greylag Goose <i>Anser anser</i>	b?
Mute Swan <i>Cygnus olor</i>	wv
Ruddy Shelduck <i>Tadorna ferruginea</i>	r, wv
Shelduck <i>Tadorna tadorna</i>	sv
Wigeon <i>Anas penelope</i>	wv
Gadwall <i>Anas strepera</i>	r, wv

Teal <i>Anas crecca</i>	wv
Pintail <i>Anas acuta</i>	r, wv
Garganey <i>Anas querquedula</i>	pm
Shoveler <i>Anas clypeata</i>	wv
Marbled Teal <i>Marmaronetta angustirostris</i>	b? (see OST 1969,1975, 1978)
Red-crested Pochard <i>Netta rufina</i>	r, b?, wv
Pochard <i>Aythya ferina</i>	wv
Ferruginous Duck <i>Aythya nyroca</i>	sv, b?, wv
Tufted Duck <i>Aythya fuligula</i>	r, b?, wv
Smew <i>Mergus albellus</i>	wv
Red-breasted Merganser <i>Mergus serrator</i>	v (OST 1975)
White-headed Duck <i>Oxyura leucocephala</i>	pm
Honey Buzzard <i>Pernis apivorus</i>	pm
(*) Black Kite <i>Milvus migrans</i>	r
White-tailed Eagle <i>Haliaeetus albicilla</i>	pm, wv
Lammergeier <i>Gypaetus barbatus</i>	status uncertain
Griffon Vulture <i>Gyps fulvus</i>	pm?
Egyptian Vulture <i>Nophron percnopterus</i>	status uncertain
Short-toed Eagle <i>Circaetus gallicus</i>	b?, pm
Marsh Harrier <i>Circus aeruginosus</i>	b, pm, wv
Hen Harrier <i>Circus cyaneus</i>	wv, pm
Pallid Harrier <i>Circus macrourus</i>	pm
Montagu's Harrier <i>Circus pygargus</i>	b?, pm
Goshawk <i>Accipiter gentilis</i>	status uncertain, may breed
Sparrowhawk <i>Accipiter nisus</i>	b?, pm
Levant Sparrowhawk <i>Accipiter brevipes</i>	pm
Buzzard <i>Buteo buteo</i>	pm
Long-legged Buzzard <i>Buteo rufinus</i>	b, pm
Lesser Spotted Eagle <i>Aquila pomarina</i>	pm
Spotted Eagle <i>Aquila clanga</i>	wv
Imperial Eagle <i>Aquila heliaca</i>	wv?
Golden Eagle <i>Aquila chrysaetos</i>	status uncertain
Booted Eagle <i>Hieraaetus pennatus</i>	pm
Bonelli's Eagle <i>Hieraaetus fasciatus</i>	status uncertain (Kumerloeve 1970, Aston, Bradshaw & Kirwan unpubl.)
Osprey <i>Pandion haliaetus</i>	pm
Lesser Kestrel <i>Falco naumanni</i>	b
Kestrel <i>Falco tinnunculus</i>	status uncertain
Red-footed Falcon <i>Falco vespertinus</i>	pm
Merlin <i>Falco columbarius</i>	wv, pm
Hobby <i>Falco subbuteo</i>	b?, pm
Eleonora's Falcon <i>Falco eleonora</i>	v
Saker <i>Falco cherrug</i>	status uncertain
Peregrine <i>Falco peregrinus</i>	pm, wv

Chukar <i>Alectoris chukar</i>	r, b?
Grey Partridge <i>Perdix perdix</i>	r
Quail <i>Coturnix coturnix</i>	pm
Water Rail <i>Rallus aquaticus</i>	r, b?
Spotted Crake <i>Porzana porzana</i>	pm
Little Crake <i>Porzana parva</i>	pm
Baillon's Crake <i>Porzana pusilla</i>	pm
Corncrake <i>Crex crex</i>	pm
Moorhen <i>Gallinula chloropus</i>	b
Purple Gallinule <i>Porphyrio porphyrio</i>	v (Beaman 1986)
Coot <i>Fulica atra</i>	r, b, wv
Crane <i>Grus grus</i>	pm, wv
Great Bustard <i>Otis tarda</i>	r, b?
Black-winged Stilt <i>Himantopus himantopus</i>	b
Avocet <i>Recurvirostra avosetta</i>	b?
Stone Curlew <i>Burhinus oedicnemus</i>	status uncertain
Collared Pratincole <i>Glareola pratincola</i>	b?
Black-winged Pratincole <i>Glareola nordmanni</i>	pm
Little Ringed Plover <i>Charadrius dubius</i>	pm, b?
Ringed Plover <i>Charadrius hiaticula</i>	pm
Kentish Plover <i>Charadrius alexandrinus</i>	pm
(*) Greater Sand Plover <i>Charadrius leschenaultii</i>	pm
Dotterel <i>Charadrius morinellus</i>	pm
Golden Plover <i>Pluvialis apricaria</i>	pm, wv
Grey Plover <i>Pluvialis squatarola</i>	pm
Spur-winged Plover <i>Hoplopterus spinosus</i>	b?
(*) Sociable Plover <i>Chettusia gregaria</i>	v (van Winden 1989)
Lapwing <i>Vanellus vanellus</i>	b?, wv
Knot <i>Calidris canutus</i>	v (Breek & Gelderblom unpubl., Kasperek 1990)
Sanderling <i>Calidris alba</i>	pm
Little Stint <i>Calidris minutus</i>	pm
Temminck's Stint <i>Calidris temminckii</i>	pm
Curlew Sandpiper <i>Calidris ferruginea</i>	pm
Dunlin <i>Calidris alpina</i>	pm
Ruff <i>Philomachus pugnax</i>	pm, wv
Jack Snipe <i>Lymnocyptes minimus</i>	wv
Snipe <i>Gallinago gallinago</i>	wv, pm
Great Snipe <i>Gallinago media</i>	wv, pm (see OST 1969, 1972, van Winden 1989)
Black-tailed Godwit <i>Limosa limosa</i>	pm, wv
Whimbrel <i>Numenius phaeopus</i>	pm
(*) Slender-billed Curlew <i>Numenius tenuirostris</i>	v (OST 1975, Gretton 1991)
Curlew <i>Numenius arquata</i>	pm, wv
Spotted Redshank <i>Tringa erythropus</i>	pm



Redshank <i>Tringa totanus</i>	b?, pm, wv
Marsh Sandpiper <i>Tringa stagnatalis</i>	pm, wv
Greenshank <i>Tringa nebularia</i>	pm
Green Sandpiper <i>Tringa ochropus</i>	pm, wv
Wood Sandpiper <i>Tringa glareola</i>	pm
Terek Sandpiper <i>Xenus cinereus</i>	pm
Common Sandpiper <i>Actitis hypoleucos</i>	pm
Mediterranean Gull <i>Larus melanocephalus</i>	sv
Little Gull <i>Larus minutus</i>	pm
Black-headed Gull <i>Larus ridibundus</i>	r, b?, wv
Slender-billed Gull <i>Larus genei</i>	sv
(*) Common Gull <i>Larus canus</i>	perhaps only v (OST 1969)
(*) Lesser Black-backed Gull <i>Larus fuscus</i>	v (OST 1969, van Winden 1989).
Yellow-legged Gull <i>Larus argentatus</i>	r
Armenian Gull <i>Larus (argentatus) armenicus</i>	status uncertain
Gull-billed Tern <i>Gelochelidon nilotica</i>	sv, pm
Caspian Tern <i>Sterna caspia</i>	sv
Common Tern <i>Sterna hirundo</i>	b
Little Tern <i>Sterna albifrons</i>	pm
Whiskered Tern <i>Chlidonias hybridus</i>	b, pm
Black Tern <i>Chlidonias niger</i>	pm
White-winged Black Tern <i>Chlidonias leucopterus</i>	pm
Black-bellied Sandgrouse <i>Pterocles orientalis</i>	status uncertain
Rock Dove <i>Columba livia</i>	r, b?
Stock Dove <i>Columba oenas</i>	wv
Collared Dove <i>Streptopelia decaocto</i>	r, b
Turtle Dove <i>Streptopelia turtur</i>	pm
Cuckoo <i>Cuculus canorus</i>	b?, pm
Great Spotted Cuckoo <i>Clamator glandarius</i>	b?
Scops Owl <i>Otus scops</i>	b?
Eagle Owl <i>Bubo bubo</i>	b?
Little Owl <i>Athene noctua</i>	r, b
Long-eared Owl <i>Asio otus</i>	b?, wv
Nightjar <i>Caprimulgus europaeus</i>	b?
Swift <i>Apus apus</i>	b, pm
Kingfisher <i>Alcedo atthis</i>	b
Bee-eater <i>Merops apiaster</i>	pm
Roller <i>Coracias garrulus</i>	b, pm
Hoopoe <i>Upupa epops</i>	b, pm
Wryneck <i>Jynx torquilla</i>	pm
Great Spotted Woodpecker <i>Dendrocopus major</i>	status uncertain, one record, identification perhaps suspect
Syrian Woodpecker <i>Dendrocopus syriacus</i>	b
Lesser Spotted Woodpecker <i>Dendrocopus minor</i>	b?
Calandra Lark <i>Melanocorypha calandra</i>	r, b

Bimaculated Lark <i>Melanocorypha bimaculata</i>	pm?
Short-toed Lark <i>Calandrella brachydactyla</i>	b, pm
Lesser Short-toed Lark <i>Calandrella rufescens</i>	b, pm
Crested Lark <i>Galerida cristata</i>	r, b
Woodlark <i>Lullula arborea</i>	b, sv
Shore Lark <i>Eremophila alpestris</i>	status uncertain
Sand Martin <i>Riparia riparia</i>	pm
Swallow <i>Hirundo rustica</i>	b, pm
Red-rumped Swallow <i>Hirundo daurica</i>	pm
House Martin <i>Delichon urbica</i>	b?, pm
Tawny Pipit <i>Anthus campestris</i>	pm
Tree Pipit <i>Anthus trivialis</i>	pm
Meadow Pipit <i>Anthus pratensis</i>	pm, wv
Red-throated Pipit <i>Anthus cervinus</i>	pm
Water Pipit <i>Anthus spinoletta</i>	pm, wv
Yellow Wagtail <i>Motacilla flava</i>	b, pm
Citrine Wagtail <i>Motacilla citreola</i>	pm
Grey Wagtail <i>Motacilla cinerea</i>	pm
White Wagtail <i>Motacilla alba</i>	b, pm
Dipper <i>Cinclus cinclus</i>	r
Wren <i>Troglodytes troglodytes</i>	r, b?
Robin <i>Erithacus rubecula</i>	pm
Thrush Nightingale <i>Luscinia luscinia</i>	pm
Nightingale <i>Luscinia megarhynchos</i>	b?, pm
Bluethroat <i>Luscinia svecica</i>	pm
White-throated Robin <i>Irania gutturalis</i>	b
Black Redstart <i>Phoenicurus ochruros</i>	b?
Redstart <i>Phoenicurus phoenicurus</i>	pm
Whinchat <i>Saxicola rubetra</i>	pm
Stonechat <i>Saxicola torquata</i>	b
Isabelline Wheatear <i>Oenanthe isabellina</i>	b, pm
Wheatear <i>Oenanthe oenanthe</i>	b, pm
Black-eared Wheatear <i>Oenanthe hispanica</i>	b?, pm
Finsch's Wheatear <i>Oenanthe finschii</i>	b?
Rock Thrush <i>Monticola saxatilis</i>	sv
Blue Rock Thrush <i>Monticola solitarius</i>	r, b?
Ring Ouzel <i>Turdus torquatus</i>	pm
Blackbird <i>Turdus merula</i>	r, b
Fieldfare <i>Turdus pilaris</i>	pm, wv
Song Thrush <i>Turdus philomelos</i>	r, pm
Redwing <i>Turdus iliacus</i>	wv (Kumerloeve 1970)
Mistle Thrush <i>Turdus viscivorus</i>	b?, pm, wv
Fan-tailed Warbler <i>Cisticola juncidis</i>	v (Beaman 1986)
River Warbler <i>Locustella fluviatilis</i>	pm
Savi's Warbler <i>Locustella luscinioides</i>	b?

Moustached Warbler <i>Acrocephalus melanopogon</i>	b?
Sedge Warbler <i>Acrocephalus schoenobaenus</i>	b, pm
Reed Warbler <i>Acrocephalus scirpaceus</i>	b, pm
Marsh Warbler <i>Acrocephalus palustris</i>	pm
Great Reed Warbler <i>Acrocephalus arundinaceus</i>	b, pm
Olivaceous Warbler <i>Hippolais pallida</i>	b?, pm
Icterine Warbler <i>Hippolais icterina</i>	pm
Sardinian Warbler <i>Sylvia melanocephala</i>	pm
Rüppell's Warbler <i>Sylvia rueppelli</i>	b?
Orphean Warbler <i>Sylvia hortensis</i>	b?, pm
Barred Warbler <i>Sylvia nisoria</i>	b, pm
Lesser Whitethroat <i>Sylvia curruca</i>	b?, pm
Whitethroat <i>Sylvia communis</i>	b?, pm
Garden Warbler <i>Sylvia borin</i>	pm
Blackcap <i>Sylvia atricapilla</i>	pm
(*) Bonelli's Warbler <i>Phylloscopus bonelli</i>	pm
Wood Warbler <i>Phylloscopus sibilatrix</i>	pm
Chiffchaff <i>Phylloscopus collybita</i>	pm
Willow Warbler <i>Phylloscopus trochilus</i>	pm
Spotted Flycatcher <i>Muscicapa striata</i>	pm
Collared Flycatcher <i>Ficedula albicollis</i>	pm
Pied Flycatcher <i>Ficedula hypoleuca</i>	pm
Bearded Tit <i>Panurus biarmicus</i>	b, wv
Long-tailed Tit <i>Aegithalos caudatus</i>	b
Coal Tit <i>Parus ater</i>	b?
Sombre Tit <i>Parus lugubris</i>	status uncertain
Blue Tit <i>Parus caeruleus</i>	b?
Nuthatch <i>Sitta europaea</i>	status uncertain
Rock Nuthatch <i>Sitta neumayer</i>	r, b
Penduline Tit <i>Remiz pendulinus</i>	b, pm
Golden Oriole <i>Oriolus oriolus</i>	b?, pm
Red-backed Shrike <i>Lanius collurio</i>	b?, pm
Lesser Grey Shrike <i>Lanius minor</i>	pm
Great Grey Shrike <i>Lanius excubitor</i>	wv
Woodchat Shrike <i>Lanius senator</i>	pm
Jay <i>Garrulus glandarius</i>	r, b
Magpie <i>Pica pica</i>	r, b
Chough <i>Pyrrhocorax pyrrhocorax</i>	r, b?
Raven <i>Corvus corax</i>	status uncertain
Jackdaw <i>Corvus monedula</i>	r, b, wv
Rook <i>Corvus frugilegus</i>	r, b, wv
Hooded Crow <i>Corvus corone cornix</i>	r, b
Starling <i>Sturnus vulgaris</i>	r, b, wv
(*) Rose-coloured Starling <i>Sturnus roseus</i>	status uncertain
House Sparrow <i>Passer domesticus</i>	r, b

Spanish Sparrow <i>Passer hispaniolensis</i>	b
Tree Sparrow <i>Passer montanus</i>	b
Rock Sparrow <i>Petronia petronia</i>	r, b?
Chaffinch <i>Fringilla coelebs</i>	r, b?, wv
Red-fronted Serin <i>Serinus pusillus</i>	status uncertain
Serin <i>Serinus serinus</i>	b?
Greenfinch <i>Carduelis chloris</i>	b
Goldfinch <i>Carduelis carduelis</i>	b
Siskin <i>Carduelis spinus</i>	pm, wv
Linnet <i>Carduelis cannabina</i>	r, b, wv
Twite <i>Carduelis flavirostris</i>	wv
Crimson-winged Finch <i>Rhodopechys sanguinea</i>	b?, wv
Hawfinch <i>Coccothraustes coccothraustes</i>	pm
Rock Bunting <i>Emberiza cia</i>	r, b
Cinereous Bunting <i>Emberiza cineracea</i>	status uncertain
Ortolan Bunting <i>Emberiza hortulana</i>	b, pm
Cretzschmar's Bunting <i>Emberiza caesia</i>	b?
Reed Bunting <i>Emberiza schoeniclus</i>	r, b?
Black-headed Bunting <i>Emberiza melanocephala</i>	b, pm
Corn Bunting <i>Miliaria calandra</i>	r, b

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# The severe 1991-1992 winter and its effect on Graceful Warbler (*Prinia gracilis*) and other resident breeding birds in the Göksu Delta, Turkey

VINCENT VAN DEN BERK

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**Summary** The Göksu Delta, southern Turkey, was censused for breeding birds in 1989, 1991 and 1992. The exceptionally severe 1991-1992 winter occurred during this period. Although coverage, number of observers and methods were not completely uniform each year, a comparison of data was thought possible for presumed resident breeders. Black Francolin *Francolinus francolinus*, and probably Purple Gallinule *Porphrio porphrio*, did not suffer from the cold. Graceful Warbler *Prinia gracilis* decreased by about 80%, whereas Fan-tailed Warbler *Cisticola juncidis* almost disappeared. The impact on Barn Owl *Tyto alba*, White-breasted Kingfisher *Halcyon smyrnensis*, Moustached Warbler *Acrocephalus melanopogon* and Bearded Tit *Panurus biamicus* could not be established, but the latter two species were probably unaffected.

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THE 1991-1992 winter in the Eastern Mediterranean was exceptionally severe. Severe winter weather can cause increased mortality amongst birds and influence the size of breeding populations in the following breeding season. Such a relationship has been described for several resident breeding birds in north-western Europe (Williamson 1975). In the Göksu Delta, southern coastlands of Turkey, breeding birds were censused in three years: 1989, 1991 and 1992. Data presented here illustrate some of the severe winter effects on Mediterranean resident breeding birds.

## STUDY AREA

The Göksu Delta (15,000 ha) is located on the Turkish south coast some 80 km west of Mersin. The land above 2 m asl, about 40% of the area, is irrigated and farmed intensively. Below 2 m asl, one finds a belt of farmland where wheat is grown in rotation with rice, grading into grazed saltmarshes, wetlands, dunes and beaches. Most wetlands, in total over 2,000 ha, are located west of the Göksu River. The most important one is Akgöl (1,200 ha), a perennial eutrophic freshwater lake with a rich marsh vegetation. The Göksu Delta is of outstanding ornithological importance year round. The 330 species recorded in the delta is the highest number for any site in Turkey. For a comprehensive description of the area, see DHKD (1992).

## CENSUS METHODS

In 1989, most attention was given to Akgöl, but population sizes for the entire delta were estimated. Bird territories at Akgöl were mapped in small study plots and along transects between 8 April and 14 May. A selection of breeding birds was censused systematically in larger areas. Additional records until mid-July were included (Schepers *et al.* 1989).

In 1991, breeding bird data were gathered in three ways:

1. Systematic census of all breeding birds in five characteristic terrestrial habitat plots, total area 640 ha. Four plots were chosen in (semi-)natural habitats below the 2 m asl contour line. One plot was intended to be characteristic for irrigated farmland in the land above 2 m asl. The plots were visited four times between 19 April and 22 May. The visits were made from one hour before to three or four hours after sunrise.
2. Systematic census of a selection of breeders in large areas or the entire delta from April to mid-July, cf 1989.
3. Additional records on breeding birds from transect counts during other field activities, like the regular waterfowl counts and from random field visits. These were usually not early morning visits.

Coverage in both years was not uniform and census plots were different. A large number of observers, a longer period in the field, better mobility and knowledge of bird sites gave generally more accurate results in 1991 compared with 1989. Better coverage was thought to be the main reason for differences in numbers and distribution that occurred for the selection of breeding birds in the larger areas and population estimates for the entire delta.

In 1992 census work was restricted to colonial birds and few other species, including the resident breeders. As it became apparent that some resident breeders had almost disappeared, four 1991 plots and one transect, for which data could be compared, were resurveyed for these species during three visits between late May and late June (Table 1).

**Table 1.** Four plots censused systematically on four visits in April and May 1991 were resurveyed for Graceful Warbler and Fan-tailed Warbler on three visits in April and May 1992. Seven counts in 1991 and 5 in 1992, from June to September, in one transect were used to compare Fan-tailed Warbler numbers in one transect.

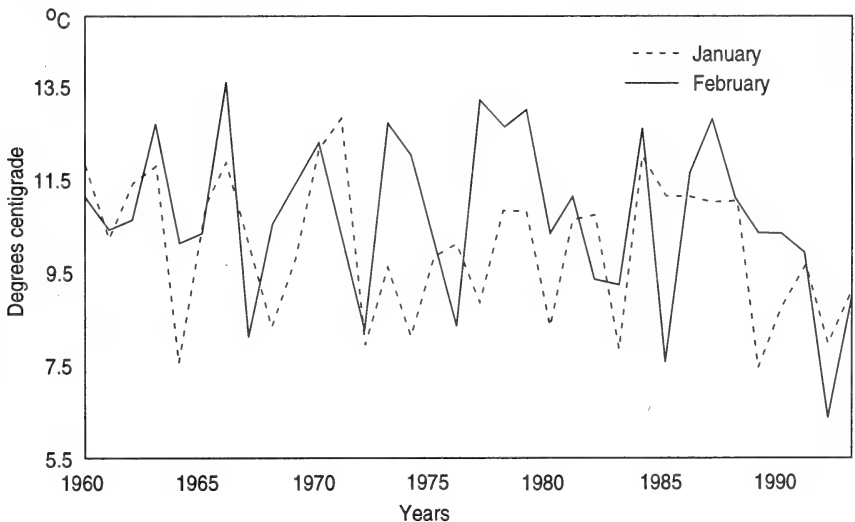
	Dominant habitat	Size	Territories recorded			
			Graceful Warbler		Fan-tailed Warbler	
			1991	1992	1991	1992
Plot 1	reeds, bushes ( <i>dunes</i> )	90 ha	8	1-2	2	0
Plot 2	reeds, bushes ( <i>dunes, saltmarsh</i> )	130 ha	9	1	1	0
Plot 3	tamarisk ( <i>dunes, saltmarsh</i> )	110 ha	19	4	0	0
Plot 4	orchards, reeds ( <i>farmland</i> )	80 ha	14	5	1	0
<b>Total</b>		<b>(410 ha)</b>	<b>50</b>	<b>11-12</b>	<b>4</b>	<b>0</b>
Transect	rice paddies	1100 m	-	-	4	1

## WEATHER CONDITIONS OF 1991 – 1992 WINTER

Silifke, on the edge of the delta plain, has a well-equipped meteorological station. Most climatic parameters measured at this station fit within the normal Mediterranean winter pattern, the mean annual air temperature in winter being around 10°C. A local peculiarity of the region is the frequent occurrence of very strong winds, usually in winter. On average, wind speeds of 40 km/hr or more occur during 138 days of the year. Such winds come from the mountains to the north and bring dry cold air onto the plain.

The 1991/92 winter was exceptionally severe in the eastern Mediterranean and Middle East. Throughout Turkey, temperatures were well below average, especially in February when a large number of low pressure centres existed along a corridor from the area around Cyprus towards the Caspian Sea (BDMI 1992, Kirvar 1994). This general pattern of a prolonged duration of cold weather also applied to the Göksu Delta. Figure 1 shows the average temperatures for January and February measured in Silifke for the period 1960-1993. The February average temperature in 1992 was the lowest since recording started in 1933 and the January average was the fifth coldest. The typical local windy conditions exacerbated the cold effect, but relative chill temperatures were not available. Although storm frequency in winter 1991/92 was below average, conditions on the open plain are probably more extreme than those measured at the meteorological station situated in a town. There were days when ice covered pools and sheltered parts of Akgöl, often sufficiently strong to support roosting waterfowl. The vegetation remaining on the plain appeared parched and yellow and was flattened by the mountain winds. On several occasions the plain was lightly covered with snow, but this melted during daytime.

Figure 1. Average temperatures for January and February 1960-1993, measured in Silifke.



## SELECTION OF RESIDENT BREEDERS

In order to ascertain whether winter weather affects breeding bird population sizes significantly, three factors ought to be examined. Firstly, there should be general stability in habitat availability, water management and weather conditions in the breeding season. The only major difference in circumstances between the 1989, 1991 and 1992 breeding seasons was a prolonged winter, which caused wheat and barley to ripen some weeks later in 1992 and thus delayed the timing of harvest. Consequently, the follow-up cultivation of rice, for which large areas of farmland and saltmarshes are flooded, started a few weeks later than usual. Rice farming necessitates large quantities of irrigation water, influencing relative humidity locally and the water levels in the main wetlands of the delta. During the rice farming season, water levels are highest. This difference in timing is of major importance for some breeding species. Herons, and Night Herons *Nycticorax nycticorax* in particular, need the vast rice paddy complexes in the right condition at the right time when raising their young. Species such as Black-winged Stilt *Himantopus himantopus*, Common Tern *Sterna hirundo* and Little Tern *Sterna albifrons* start to nest on the low islands at Akgöl in spring. Most islands are flooded when the rice farming season starts. A delay of some weeks in the peak irrigation demand as in 1992 might have had a negative impact on the breeding success of herons, but was profitable for the island breeding species. It was not thought to be a significant factor affecting the occurrence of resident bird species under consideration here.

Secondly, breeding bird census results and population estimates between years must be available and comparable. Quantitative assessments were available for a few species, but qualitative impressions are given for others.

The third criterion is to identify resident breeding species in order to exclude unknown factors from areas outside the delta. The Göksu Delta supports 31 possible resident species (DHKD 1992). Fifteen of these are probably partial migrants and another eight are not restricted to the delta plain. They have breeding ranges that extend into the foothills for where no census data were available. The remaining eight are assumed to be resident breeders, largely restricted to the plain, and for which more or less comparable data exist. Numbers of three species are probably swollen during part of the year by immigration from elsewhere. They are discussed below and summarised in Table 2.

## SPECIES ACCOUNTS

### **Black Francolin** *Francolinus francolinus*

The distribution pattern and numbers in 1989 and 1991 are thought to be of the same order. In 1991 the entire delta was searched systematically for this species and 30 territories were located. This species is not evenly distributed over the plain, but occurs concentrated in disparate groups. Some might have been missed in parts of the infrequently visited farmland. The population was estimated to be about 30-40 territorial calling males. There were no records from



outside the delta, though suitable habitat extends into the hills between Tasucu and Silifke (van der Winden and van den Berk in prep.). In 1992 all known Black Francolin areas were checked and the distribution pattern was similar to 1991. Numbers were assessed in a distinct area of the dunes between Akgöl and Tasucu Bay and in both years ten males were recorded. The severe winter did not appear to affect this species.

### **Purple Gallinule** *Porphyrio porphyrio*

In 1989 a minimum of 60 territories was located at Akgöl, the main breeding location in the delta. The population was estimated to be about 50-70 pairs. The species was also observed in marshes near the Göksu River mouth. This census was not repeated in 1991 or 1992, although the species was extremely common. The influence of the severe winter on the breeding population is not exactly known, but no dramatic decline was apparent.

### **Barn Owl** *Tyto alba*

Population estimates are based on accidental observations. In 1989, two pairs were present in Tasucu and the delta population was estimated to be two to five pairs. In 1991, six pairs were noted, all in settlements and holiday resorts under construction. The delta population was conservatively estimated to be about 12 pairs. Distribution was probably not confined to the delta, and the Barn Owl is definitely more common along the south coast than previously thought (Kasperek 1986). In 1992, one pair in Tasucu was still present, but a known breeding site in Hurma was not occupied. The anecdotal local population figures do not allow a conclusion as to whether the Barn Owl was affected by the exceptional cold. The species may undergo spectacular crashes over the course of a winter when sustained snow cover restricts food availability. This condition did not occur in the Göksu Delta. An indication that other parts of the southern coastland regions were affected was that several dead birds were found outside the Göksu Delta, the most striking record being 15 road casualties on 55 km of the E5 Highway just east of Adana on 30 January 1992. These birds may have been forced out of their original range along the south coast due to starvation.

### **White-breasted Kingfisher** *Halcyon smyrnensis*

Nests and additional territorial pairs were systematically searched for in the entire delta in 1989 and 1991. In both years, five nests were found in the banks of the Göksu River between Silifke and Kurtulus. Three more territories were recorded in the farmland east of the river. The population was estimated to be eight to ten pairs. In 1991 the number and distribution of territories was the same and the population estimate remained eight to ten pairs. In 1992 three nests were located along the river and another one in the bank of an abandoned meander east of the river. The species may have decreased, but the lower number might also have been caused by reduced search effort in 1992.

**Fan-tailed Warbler** *Cisticola juncidis*

Described as chiefly sedentary but dispersive, and strictly sedentary in Mediterranean regions such as the Camargue, France (Cramp 1992). In the Göksu Delta, resident status must be considered provisional as winter records are scarce. No apparent increase in numbers was observed during spring and autumn migration periods. Vigorous song was heard from early April into early September. In spring, habitat requirements and distribution are largely similar to those of Graceful Warbler *Prinia gracilis*. During the rice growing season in 1991, the Fan-tailed Warbler started to occupy the rice paddy complexes suggesting an influx of new birds. By late summer, territorial birds seemed to be more numerous than in spring of that year. Distribution and densities in 1989 and 1991 were fairly similar. Based on 32 territories around Akgöl and an interpretation of plot counts, transect counts and non-systematic records, the population was estimated to be about 70-105 pairs. In 1992 this species was scarce. The presumed crash is illustrated in Table 1. They almost disappeared in the resurveyed plots and transect, suggesting a considerable decline.

**Graceful Warbler** *Prinia gracilis*

The distribution patterns in 1989 and 1991 were similar. In 1991 the population was estimated to be about 400-600 pairs. This was based on general knowledge of the distribution of this species and on quantitative assessments of territorial birds in the five census plots and several transect counts during April and May which were extrapolated for the entire delta. Recently fledged young were observed from early April to late August, indicating multiple brooding and thus the potential for numbers to rise during the course of the summer. Population sizes should be considered as minimum estimates. In 1991 this species was restricted to the plain (van der Winden and van den Berk in prep.). It was particularly common on the landward side of reedy wetlands, along drainage canals, abandoned river channels, the Göksu River and the tamarisk zone near the river mouth. Breeding also occurred in wheat fields. The species favoured dense vegetation close to the water edge. On the whole, it was not found around settlements.

In spring 1992, it was clear that numbers were much reduced. Four of the five plots from 1991 were resurveyed and produced 12 territorial pairs compared to 50 pairs in the previous spring (Table 1). Combined with other data on numbers and distribution elsewhere in the delta, the total population was estimated to be about 80-100 pairs, suggesting a decrease of about 80%.

The counts in 1989, 1991 and 1992 suggest that regular occurrences of prolonged relatively cold winters might be an important limiting factor in the range of this species.

**Moustached Warbler** *Acrocephalus melanopogon*

Presumed to be a resident breeder in areas such as the Göksu Delta (Cramp 1992). In 1989 and 1991 about 50 territories were counted. At least 30 territories were found in the Akgöl area, another 10-20 mainly east of the Göksu River

mouth. The probability of finding this species is low. The birds are confined to the inward side of the lake where dense reeds merge into *Scirpus littoralis* and open water. Such habitats can only be censused properly from the lake itself. The delta population in both years was conservatively estimated as between 50-200 pairs. There were only three records from the winter 1991/92 and no evidence of passage. In the 1992 breeding season no systematic data were collected on this species. From records of territorial birds during boat trips on the lake and from the south shore of Akgöl where reeds are thin, it was thought that there were no obvious signs of a decline. This is surprising. One would expect a severe winter to affect insectivorous resident species. If the breeding population was not affected, this might suggest that it is (partly) migratory. Do winter records refer to winter visitors?

### Bearded Tit *Panurus biarmicus*

Presumed to be a resident or partial migrant in Turkey and apparently sedentary in southern Turkey (Cramp and Perrins 1993). In 1989 and 1991 this species was surveyed in all wetlands. The population was mainly confined to Akgöl (four localities) and estimated at about 20 pairs. From August onwards, they were recorded in *Phragmites* and *Typha* marshes throughout the delta. Groups of about 50 birds were seen between late August and late October. Numbers reached a peak between late September and mid October suggesting passage. There were few sightings in winter when this species is inconspicuous; they either remained concealed in the dense vegetation around wetland or moved away. No systematic census was conducted in 1992, but regular surveys around Akgöl indicated that the population did not crash.

**Table 2.** The effect of the severe 1991-1992 winter on some resident breeding species on the Göksu Delta.

Species	Decrease	Unknown possible decrease	Stable	Probably stable
Black Francolin			●	
Purple Gallinule				●
Barn Owl		●		
White-breasted Kingfisher		●		
Fan-tailed Warbler	●			
Graceful Warbler	●			
Moustached Warbler				●
Bearded Tit				●

## ACKNOWLEDGEMENTS

The bird data were collected during the feasibility study of the Göksu Delta Project between late March 1991 and July 1992. This project is run by the Turkish Society for the Protection of Nature (DHKD). The project was supported by the Station Biologiques de la Tour de Valat, France and the Netherlands Ministry of Agriculture, Nature Management and Fisheries. The breeding bird census in 1991 was undertaken by Mark Bakker, Guy Kirwan (on behalf of OSME), Naomi Stuiver, René Vos and Jan van der Winden. The director of the Meteorological Station in Silifke, Mr. Sadi Ölmez, kindly provided meteorological information. Jan van der Winden helped in improving an earlier draft of this paper.

## REFERENCES

- BDMI (1992) *Aylık Meteoroloji Bülteni, Subat, sayı 127*. T.C. Basbakanlık Devlet Meteoroloji İşleri Genel Müdürlüğü, Ankara.
- CRAMP, S. (ed.) (1992) *The Birds of the Western Palearctic* Vol. 6. Oxford University Press.
- CRAMP, S. AND PERRINS, C.M. (eds.) (1993) *The Birds of the Western Palearctic*. Vol. 7. Oxford.
- DHKD (1992) *Towards Integrated Management in the Göksu Delta, a Protected Special Area in Turkey*. Feasibility Report, September 1992, DHKD, Istanbul, Turkey. 272 pp.
- KASPAREK, M. (1986) On the distribution and systematic position of the Barn Owl, *Tyto alba*, in Turkey and adjacent areas. *Zool. in the Middle East* 1: 44-51.
- KIRVAR, E. (1994) February 1992 - an exceptionally wintry month in south-east Turkey. *Weather* 49: 114-123.
- SCHEPERS, F.J., STUART, J.J. AND MEININGER, P.L. (1989) *Breeding birds of the Göksu Delta 1989*. Preliminary Report. DHKD.
- WILLIAMSON, K. (1975) Birds and climatic change. *Bird Study* 22: 143-164.
- WINDEN, J. VAN DER AND BERK, V. VAN DEN (in prep.) Breeding birds of the Taurus foothills bordering the Göksu Delta, South Turkey.

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