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THE BIRDS OF SOUTHEASTERN EGYPT

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INTRODUCTION

The region in the extreme southeastern corner of Egypt, centred primarily around Gebel Elba, is unique for the country in that a substantial portion of the flora and fauna are of Afrotropical origin. This is in contrast to the rest of the country, particularly the Nile Delta and Valley, in which the biota is almost exclusively Palaearctic.

Ornithologically the Gebel Elba region is poorly known. Goodman (1984) reported on two separate bird collections made in the area by Dr. Harry Hoogstraal and his associates in 1954, 1964 and 1967 and Mr. Lewa El Negumi in 1938 and 1939. The Hoogstraal collection is housed in the Field Museum of Natural History, Chicago, and the El Negumi collection in the Giza Zoological Museum, Giza. See Goodman (1984) for more details on these collections and Kassas and Zahran (1971) for an ecological description of the area.

In the winter and spring of 1983 we visited southeastern Egypt to make a survey of the local avifauna and the observations and collections made are summarized in this paper. Goodman visited the area between Qift, Quseir, and south to Mersa el Alam from 30 January to 15 February 1983, and we jointly worked in the region between Mersa el Alam and Gebel Elba from 20 March to 2 April 1983 (Fig. 1). Our work at Gebel Elba was restricted to the northern approach, summit and outlying wadis. When our observations of any species were few or limited to a small geographical area they are presented individually under the heading "*Observations*"; but for those species recorded over most of the region this information is summarized in the "*Comments*" section. Only specimens and observations obtained in the vicinity of Quseir, south of the Qift-Quseir road, and south to the Gebel Elba area are included. This is slightly different from the region covered by Goodman (1984) in that we have expanded the northern limit from 25° N, just south of Mersa el Alam, to about 26° N. Since very little information is available on the birds of southeastern Egypt, we have made reference to literature and specimens from this region and other areas of the Red Sea mountains and coastal

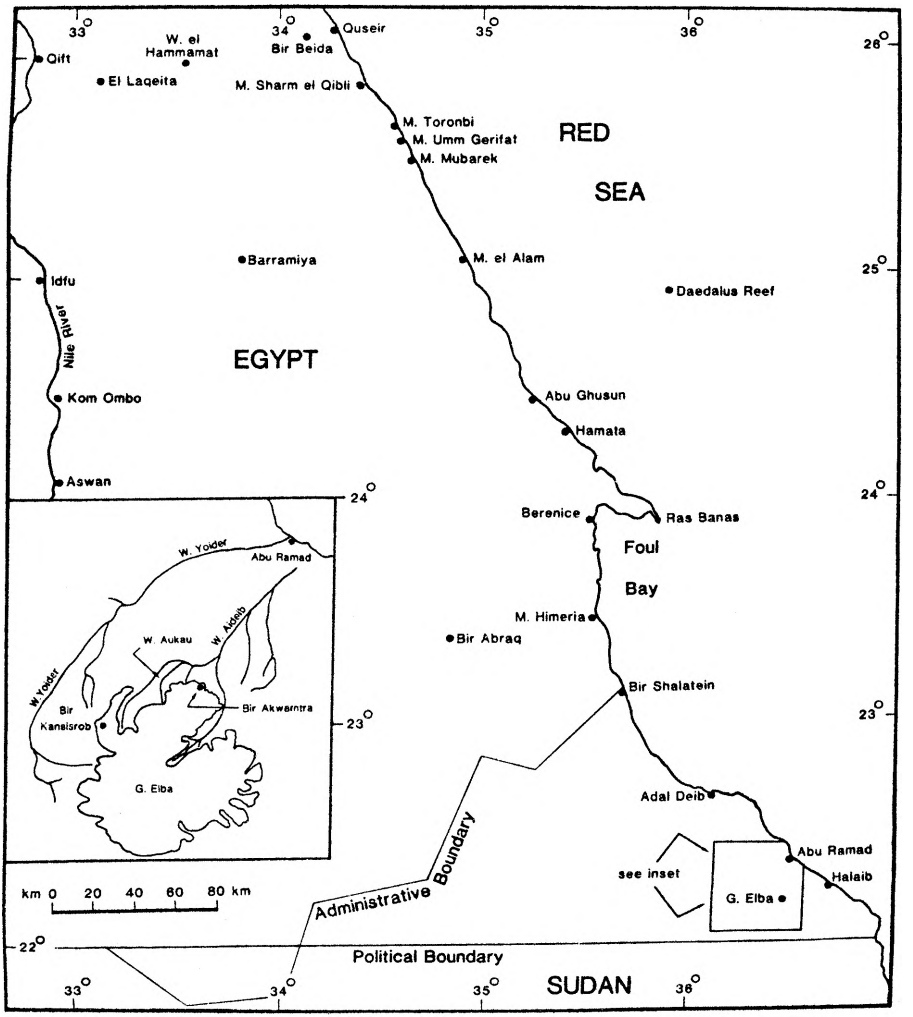

Fig. 1. Map of southeastern Egypt.

plain of Egypt and the Sudan, particularly when this information elucidates migrational patterns and/or breeding distributions. All our specimen material is deposited in The University of Michigan Museum of Zoology, Ann Arbor, and unless otherwise noted all were prepared as skeletons. Before most of the birds were skeletonized notes on plumage colouration and body measurements were made. The specimens are summarized in the "*Material*" section.

Since the writing of Goodman (1984) another portion of the El Negumi collection has been found in the Giza Zoological Museum. Also, a small collection prepared in the spring of 1943 near Bir Abraq by Dr. Abdel Magid has been

examined. All of this material was prepared as skins. It still has not been possible to examine and measure the El Negumi specimens prepared as life-like mounts and exhibited in the public portion of the museum. The new El Negumi and Abdel Magid specimens are also noted in the "*Material*" section.

The only other 20th-century bird collection from the region we are aware of, was made by G. Schrader in 1928 for R. Meinertzhagen. This material has been examined and is primarily housed in the British Museum (Natural History), Tring, but a few specimens are in the American Museum of Natural History, New York. Unfortunately, Meinertzhagen only briefly mentioned the Schrader material in his 1930 book, and we have made reference to this collection when appropriate.

The systematic order and English vernacular names generally follow Vaurie (1959, 1965) except for the generic allocations of the Ardeidae, which are after Payne (1979). All plumage measurements are in mm and weights in g. The wing measurement is the arc (flattened). The culmen and tail were measured in the standard manner. Unrecorded information and missing data are noted with "-".

Abbreviations: AMNH = American Museum of Natural History, New York; BMNH = British Museum (Natural History), Tring; FMNH = Field Museum of Natural History, Chicago, some of which are part of the Conover Collection (CC); HMBS = Hurghada Marine Biological Station, Hurghada; GZM = Giza Zoological Museum, Giza; UMMZ = The University of Michigan Museum of Zoology, Ann Arbor.

Definitions of Arabic geographical terms: Ain = spring; *Bir* = well or sometimes a spring; *Gebel* = large hill or mountain; *Gezira* = island; *Khor* = valley or dry stream bed; *Mersa* = protected bay; *Wadi* = valley or dry stream bed.

ANNOTATED LIST

Ostrich, *Struthio c. camelus.* — *Material.* Wadi Hareitra, 2 unsexed, UMMZ 206120-206121, 26 March 1983, found in decayed state. (Also see Goodman, 1984.) *Observation.* Wadi Hareitra, 1 female, 1 immature male, 26 March 1983. *Comments.* This species is a breeding resident in the large wadi systems of the area. Recent records from the country, with special reference to the Gebel Elba area, have been reviewed by Goodman *et al.* (1984).

Brown Booby, *Sula leucogaster.* — *Observation.* At sea, between Hamata and Gezira Showarit, 3, 1 April 1983. *Comments.* This species is a breeding resident on the islands in the northern and central Red Sea (Al-Hussaini, 1939; Abdel Magid, 1945; Moore and Balzarotti, 1983). Borman (1929) shot a female with well developed eggs in the ovary in early April 1926 off Zeitia. One was collected at sea in January 1896 off Ras Banas after it flew aboard a ship (Cholmley, 1897).

Striated Heron, *Ardeola (Butorides) striata.* — *Observation.* Gezira Showarit, 3, 1 April 1983. *Comments.* In the center of this island there is a low flooded area with mangrove (*Avicennia* sp.) in which five small, old and unused nests, presumably of this species, were found. It has been noted several times in the Hurghada-Safaga area (Nicoll, 1919; Bulman, 1944a; El Negumi *et al.*, 1950; Anonymous, 1981; Frazier *et al.*, 1984) and recently found breeding on Gezira Safaga (Sherif Baha el Din, pers. comm.). In the HMBS there are six immature specimens (uncatalogued), presumably taken in the Hurghada area, at least one of which was collected on 8 June 1945. An adult specimen (FMNH 284679) collected 16 km south of Safaga on 12 May 1968 is referable to the subspecies *brevipes.*

Cattle Egret, *Egretta i. ibis.* — *Material.* Halaib, 1 female, GZM A2180, 23 February 1938. *Observations.* Gezira Mahabis, 1, 1 April 1983, dead in Osprey nest. Bir Shalatein, 1, 22 March 1983, along coast. *Comments.* This species is a migrant and winter visitor to the area; however, the source breeding population is unknown. At least on occasion it crosses the Red Sea, for Elliott and Monk (1952) observed it off the Daedalus Reef and areas further south in mid-January 1946, and it has been reported at 22° 24' N, 37° 27' E, off Jidda, on 5 April 1960 (Tuck, 1961).

Reef Heron, *Egretta gularis schistacea.* — *Material.* Quseir, 1 immature female, 2 adult females, 1 immature male; GZM A2382, UMMZ 205696-205698; 13 December 1938, 12 February 1983, 3 February 1983 (two); wing: 284, 290, 286, 295; tail: 97, 102, 110, 103; exposed culmen: 87, 97, 103, 99; colour phase: mottled, pure white, pure white except a few black feathers on neck and back, grey with some white on throat; gonads: -, not enlarged (three); bursa: -, not present (two), 18 × 5 mm. Halaib, 1 adult male; GZM A2179; 24 February 1938; wing: 312; tail: 110; exposed culmen: 101; colour phase: pure white. (Also see Goodman, 1984.) *Comments.* This species was regularly observed singly or less commonly in groups of 2-10 and nests were noted in the coastal mangrove swamps along the Red Sea coast from Quseir to Abu Ramad. The ratio of the colour morphs white: mixed (includes some sub-adult birds): dark was 56:7:5. Al-Hussaini (1938) only observed white birds between 6 and 22 July 1937 near Hurghada. Along the Sudanese Red Sea coast dark phase birds out number white ones (Madden, 1927). On at least two occasions we noted mixed dark and white phase breeding pairs. Gizzards were saved from two Reef Herons collected along the coral reefs at Quseir and their contents were kindly identified by Dr. Reeve M. Bailey, The University of Michigan Museum of Zoology. UMMZ 205696 contained: 1 Eleotridae, circa 25 mm long; 1 *Salarias* sp. (Family Blennidae), 80 mm long; and 30+ small fry (perciform like) and UMMZ 205697 contained: 4 Gobiidae; 1 *Apogon taeviatus* (Family Apogonidae), circa 80 mm long; 1 *Sebastapistes oglinus* (Family Scorpaenidae); and 2 *Aphanius dispar* (Family Cyprinodontidae).

Great Egret, *Ardea (Egretta) alba.* — *Observation.* 57 km S. Quseir, 2, 2 February 1983. *Comments.* The large size, black feet and long, black-tipped yellow bill distinguish the bird we observed from other *Egretta* spp. that could

occur in the area. This species has been previously recorded along the Egyptian Red Sea coast but many of these observations are suspected of being of *E. gularis*: Jourdain and Lynes (1936) observed six in late February 1935 on islands off Hurghada, but they failed to observed the locally common Reef Heron. Borman (1929) noted it several times in the same area in early April 1926; however, his records are certainly questionable, for he also stated that after his visit "two young from a nest containing four Great White Egrets" were obtained for him from a nest on Gezira Ashrafi. These nestlings were almost without a doubt Reef Herons, a species which breeds in the area and which he failed to note at all, rather than Great White Egrets and thus, his records of white ardeids must be queried (also see Marchant, 1941). Tuck (1961) reported an observation of this species on 2 October 1960 at 25° N, 36° E in the Red Sea.

Grey Heron, *Ardea cinerea*. — *Observations.* Mersa Sharm el Qibli, 1, 12 February 1983. Mersa Toronbi, 1, 14 February 1983. 62 km S. Quseir, 1, 14 February 1983. 83 km S. Quseir, 2, 14 February 1983. Bir Shalatein, 1, 22 March 1983 and 1, 30 March 1983. *Comments.* This species is a migrant, winter visitor and perhaps rare summer breeding resident along the coast. Frazier *et al.* (1984) found on 27 May 1982 a pair nesting in the mangroves at Mersa Summa. We know of no other evidence for this species breeding in the Red Sea area (*contra* Cramp and Simmons, 1977 and others); although birds have been observed in July near Hurghada (Al-Hussaini, 1938; Searight, 1952) and 12 June at Port Sudan (Madden, 1927). A flock of 25 was noted near Quseir on 3 April 1964 (Kiepenheuer and Linsenmair, 1965). Some birds cross the Red Sea on migration (Bailey, 1966; Casement, 1977-78).

Spoonbill, *Platalea l. leucorodia* and *archeri*. — *Material.* Quseir, 1 female; GZM A2386; 14 December 1938; wing: 364; tail: 108; culmen: 153. Mersa el Alam, 1 female; GZM A2394; 17 December 1938; wing: 331; tail: 103; culmen: 146. Wadi Gemal, 2 males, 1 immature female; GZM A2396, A2398, A2397; 19 December 1938; wing: 352 (worn), 370, 345; tail: 114, 112, 112; culmen: 179, 187, 178. Wadi Sukkari, 1 adult and 1 immature female; GZM A2392-A2393; 16 December 1983; wing: 337, 353; tail: 115, 107; culmen: 147, 145. Mersa Umm Gerifat, 1 female; UMMZ 205714; 14 February 1983; wing: 366; tail: 111; culmen: 185; ovary: not enlarged. *Comments.* This species was regularly observed in the area, particularly between Quseir and Mersa el Alam. On the basis of wing and bill measurements most of the above specimens are referable to the smaller form *archeri* of east Africa rather than Palaearctic migrants of nominate *leucorodia*. The wing of *archeri* (sexes combined) measures 330-360 and culmen 145-170 compared to 386-412 (394, n = 13) and 195-231 (213, n = 15) in males and 360-377 (370, n = 10) and 168-191 (182, n = 24) in females of *leucorodia* (Neumann, 1928; Brown *et al.*, 1982). It appears that *archeri* is a breeding resident in the mangroves along the southern Egyptian Red Sea coast or in part a winter visitor from the south, and nominate *leucorodia* is strictly a winter visitor from Eurasia.

Greater Flamingo, *Phoenicopterus ruber*. — *Material.* Bir Shalatein, 1, 22 March 1983, decomposed carcass on beach. *Comments.* We are only aware

of a few records of this species from the Egyptian coast (e.g. Marchant, 1941) and none during the winter; however, Cramp and Simmons (1977) show it wintering along the complete coast. Further south near Port Sudan it has been noted as "occasional" (Madden, 1927). The birds visiting northeast Africa appear to be primarily of Iranian and Russian origin rather than from east Africa (Cramp and Simmons, 1977; Meininger and Mullié, 1981 b).

Garganey, *Anas querquedula.* — *Material.* North of Halaib, 1 unsexed, partial specimen, GZM A2489, 2 January 1939, presumably found in decomposed state. *Comments.* This species has been noted several times along the Egyptian (Marchant, 1941) and Sudanese (Ticehurst, 1924) Red Sea coasts, the Gulf of Suez (Meinertzhagen, 1924) and the Suez Canal (Fischer, 1963). It apparently crosses the Red Sea with some regularity on migration (Bailey, 1966; Cheke, 1967).

Osprey, *Pandion haliaetus.* — *Material.* Quseir, 1 second year female, GZM A2385, 14 December 1938, wing: 444, tail: 180. Wadi Gemal, along coast, 1 female, GZM A2174, 10 March 1938, wing: 477, tail: 185. *Comments.* Osprey were regularly observed along the sea coast south of Quseir. A total of 27 nests was found of which at least 13 were inactive and 9 had eggs and/or young in them. On the islands off Hamata, visited on 1 April 1983 and where there are no known mammalian predators, Osprey often nest directly on the ground. On Gezira Showarit one nest had three chicks 25-32 days old and a second nest had two chicks 20-30 days old and one addled egg. On Gezira Siyul one nest was frequented by a pair of adults and had fresh fish remains and faeces around it as did two other nests and another had three chicks 20-30 days old. On Gezira Mahabis one nest, placed on top of a fisherman's lean-to, had two chicks 25-30 days old, a dead chick and the remains of a Coot, Cattle Egret and numerous fish heads.

Black Kite, *Milvus migrans.* — *Observations.* Abu Ramad, 100+, 25 March 1983, migrating north. Wadi Aukau, 2, 25 March 1983 and 1, 26 March 1983. *Comments.* The birds at Abu Ramad were observed about two hours after sunrise and were moving north directly along the coast in a dispersed flock. All passed within a ten-minute period. Substantial spring migratory movements of this species have been noted between 22 March and 6 April 1939 near Hurghada (Marchant, 1941), in late March 1982 near Safaga (Sørensen, 1983) and at Suez (Simmons, 1951). This species also crosses the Red Sea on migration: it has been noted off Port Sudan in the spring of 1916 and on 24 September 1920 (Ticehurst, 1924), on 4 April 1960 at 27° 07' N, 34° 19' E and on 21 April 1961 at 16° 25' N, 41° 14' E (Tuck, 1961, 1964). Black Kites are reputed to be residents in the Red Sea Province, Sudan (Cave and Macdonald, 1955).

Long-legged Buzzard, *Buteo rufinus.* — *Observations.* Wadi Umm Lasaf, 1, 2 February 1983. Wadi Yoider, three different groups of 3, 2 and 2 perching on ground or in trees, 25 March 1983. *Comments.* These observations could be of Eurasian nominate *rufinus* which commonly winters in the northern mountain regions of the Sudan (Cave and Macdonald, 1955) and/or of the North African breeding form *cirtensis.* The present breeding status of *cirtensis* in the Egyptian

Eastern Desert is unclear. Galal el Dine and Fouad (1939-40) noted "at Ain Sohna [= Sukhna] Buzzards were circling over their young in nests on the rock cliffs", which were presumably of this species. Horváth (1959) observed it near Bir Abbad on 29 October 1957.

Buzzard, *Buteo buteo.* — *Observations.* 34 km S. Quseir, 1, 2 April 1983. 17 km S. Abu Ghusun, 1, 2 April 1983. Gebel Elba, 30+, 27 March 1983, at approximately 1000 m altitude. *Comments.* The flock of over 30 was soaring north over the mountain on thermal currents. This species is a common migrant along the Red Sea coast. Sørensen (1983) observed 368, 2201 and 801 near Safaga on 21, 22 and 23 March 1982, respectively. Hutson (1944) noted that in the spring Buzzards pass along a "narrow front following the Red Sea Hills to Suez." A male specimen (BMNH 1965.M.1264) collected by Schrader at Gebel Elba on 30 April 1928 is referable to the form *vulpinus.* This species has been reported at sea on 14 October 1968 at 19° 21' N, 38° 12' E (Anonymous, 1969-70).

Steppe Eagle, *Aquila nipalensis.* — *Observations.* Wadi Aukau, 1, 26 March 1983. Wadi Aideib, 2, 26 March 1983. Gebel Elba, 30+, 27 March 1983. *Comments.* The birds noted on 27 March 1983 were moving over the summit of Gebel Elba (1437 m) in small groups. This species is a migrant through the area and substantial spring migratory movements have been noted in late March 1982 near Safaga (Sørensen, 1983).

Egyptian Vulture, *Neophron p. percnopterus.* — *Material.* See Goodman (1984). *Comments.* Egyptian Vultures were frequently met with south of Berenice. During our work in the Gebel Elba and Bir Shalatein areas the Bischari, the local Bedouin tribe, were slaughtering numerous goats and sheep for wedding festivities. The Egyptian Vultures were very tame and would readily gorge themselves on the offal from the slaughtered animals within a few meters of humans. Although we found no nests it has been previously described as a breeding resident (Goodman, 1984). However, Eurasian migrants also pass along the coast on spring passage (Simmons, 1951; Tregenza, 1958; Sørensen, 1983) and some of our observations were presumably of migrants. Near Bir Shalatein the ratio of adults:subadults:immatures was 11:1:2 and near Gebel Elba 22:9:8. Night roosts of 3-10 birds were regularly observed in trees at the base of Gebel Elba.

Lammergeyer, *Gypaetus barbatus meridionalis.* — *Material.* See Goodman (1984). *Observation.* North of Gebel Elba, 1 adult, 27 March 1983, at approximately 1000 m altitude. *Comments.* This species is almost without a doubt a breeding resident in the area, but to date no nest has been found. Tregenza (1951, 1955, 1958) listed numerous summer records from the central Red Sea mountains and (1951) noted that it was "reasonably certain that the Lammergeier breeds" in the area. A few Eurasian birds migrate through the area (Simmons, 1951). An immature taken on 27 February 1964 in Wadi Akwamtra is referable to the form *meridionalis* of Sinai, Arabia and east Africa (Goodman, 1984).

Lappet-faced Vulture, *Aegypius* (*Torgos*) *tracheliotus.* — *Material.* Wadi Shallal, 1 male, GZM A2468, 30 December 1938, wing: 710, tail: 327 (Also see Goodman, 1984.) *Observations.* 2 km S. Bir Shalatein, 1, 24 March 1983, feeding on remains of camel. Bir Shalatein, 1, 31 March 1983. *Comments.* Little information is available in the literature about the breeding distribution of this species in Egypt (Mullié and Meininger, 1985). It is probably an uncommon but widespread resident in the Eastern Desert south of Quseir. A nest was found in the top of an acacia near Gebel Elba (Ibrahim Helmy, pers. comm.).

Griffon Vulture, *Gyps fulvus.* — *Observations.* 44 km N. Bir Shalatein, 1, 31 March 1983. Abu Naam, 104 km S. Bir Shalatein, 1 immature, 24 March 1983. Wadi Aukau, 1 adult, 1 immature, 25 March 1983 and 2 adults and 1 immature, 28 March 1983. Gebel Elba, 6 and 2, 27 March 1983, at 1000 and 750 m altitude, respectively. *Comments.* The present breeding status of this species in the Gebel Elba area, or Egypt as a whole, is unclear (Mullié and Meininger, 1985). Cramp and Simmons (1980) show this species as a breeding resident in the central Red Sea mountains west of Hurghada. Cave and Macdonald (1955) considered it a fairly common resident along the Sudanese coastal plain. During the spring some Eurasian breeding birds leave the African wintering grounds via the Gulf of Suez (Simmons, 1951) by coming north along the Red Sea mountains (Tregenza, 1958). It is possible that our observations were of migrants and/or winter visitors rather than residents.

Rüppell's Vulture, *Gyps rueppellii.* — *Observation.* Gebel Elba, 1, 27 March 1983, at approximately 1000 m altitude. *Comments.* This species is a vagrant to the area. It has been previously recorded at Quseir in February 1928 (Meinertzhagen, 1930), further north near Safaga on 24 April 1933 (Greaves *in* Marchant, 1941) and two were purchased at Giza from a local Bedouin in August 1901 (Flower, 1933).

Hen Harrier, *Circus cyaneus.* — *Observation.* 120 km S. Bir Shalatein, 1 female, 24 March 1983. *Comments.* Few breeding Eurasian Hen Harriers move into east Africa for the winter (Cramp and Simmons, 1980), which would account for this species being an uncommon migrant along the Red Sea coast. At Eilat, in the Gulf of Aqaba, it is a rare migrant and during the spring passages of 1969-80 it was only recorded on 10 and 11 March 1977 (Christensen *et al.*, 1981). Bulman (1944a) found it scarce near Safaga in October 1942. Its status in the Sudan is unclear, but it may be a rare winter visitor in the north (Cave and Macdonald, 1955).

Pallid Harrier, *Circus macrourus.* — *Observations.* 60 km S. Quseir, 1 male, 2 April 1983. Hamata, 1 male, 21 March 1983. 9 km N. Abu Ramad, 1, 29 March 1983. Abu Ramad, 1 female, 29 March 1983. Bir Shalatein, 1 male, 30 March 1983. *Comments.* This species is a migrant and possibly a winter visitor to the southern Egyptian Red Sea coast. Schrader collected a female (BMNH 1965.M.1309) on 21 March 1928 at Gebel Elba. Madden (1930) found it very common throughout the winter along the coastal plain in the Red Sea Province, Sudan. It has been

reported crossing the Red Sea south of 22° 55' N, 36° 46' E on 26 March 1935 (Winterbottom, 1936) and in the central Red Sea on 11 April 1946 (Elliott and Monk, 1952).

Marsh Harrier, *Circus aeruginosus.* — *Observations.* 34 km S. Quseir, 1 female, 2 April 1983. 9 km N. Adal Deib, 1 male, 29 March 1983. 45 km N. Adal Deib, 1 male, 29 March 1983. *Comments.* As noted by other observers this species generally passes singly or in pairs on spring migration along the Red Sea coast (*e.g.* Marchant, 1941). The birds we observed were alone and flying a few meters above the ground directly along the coast. It has been recorded at Port Sudan on 13 April 1928 and at Khor Arbat on 12 May 1925 (Madden, 1930). Elliott and Monk (1952) observed one crossing the southern Red Sea on 12 April 1946.

Lanner Falcon, *Falco biarmicus tanypterus.* — *Material.* Wadi Wizr, 34 km S. Quseir, 1 female, UMMZ 205737, 2 February 1983, wing: 351, tail: 89, fat: heavy, ovary: 27 × 14, largest follicle 8 mm. *Comments.* Lanners were frequently noted along the road between Quseir and Bir Shalatein. A pair was observed engaged in courtship in Wadi Aukau on 27 March 1983. This species is a breeding resident in the Red Sea mountains and along the coastal plain (Marchant, 1941).

Sooty Falcon, *Falco concolor.* — *Observation.* Bir Shalatein, 1, 23 March 1983. *Comments.* The bird was observed at dusk flying over the Bischari settlement. This species nests on several of the islands off the coast (Brown *et al.*, 1982; Sherif Baha el Din, pers. comm.) and in the inland mountains (Tregenza, 1958; Ibrahim Helmy, pers. comm.). On Gezira Mahabis we found the feathers of several songbirds and a Quail below a perch that was probably a Sooty Falcon hack-site. This species has been recorded in the mid-Red Sea on 2 May 1956 at 18° 59' N, 38° 45' E, about 100 miles from land (Long, 1961).

Red-footed Falcon, *Falco vespertinus.* — *Observation.* Berenice, 1 adult male, 1 April 1983. *Comments.* This species is an uncommon migrant along the Red Sea coast, particularly during the spring. Al-Hussaini (1938) observed one in July 1937 at Hurghada. In the autumn it has been noted at Suez (Bijlsma, 1982), Ain Sukhna (Marchant, 1941), Safaga (Greaves *in* Marchant, 1941) and Hurghada (Kiepenheuer and Linsenmair, 1965). It has been recorded at sea on 22 August 1965 south of 22° 44' N, 36° 49' E (Tuck, 1966).

Kestrel, *Falco t. tinnunculus.* — *Material.* Halaib, 1 immature male, GZM A2173, 24 February 1938, wing: 245, tail: 167. (Also see Goodman, 1984.) *Observations.* Quseir, 1, 2 April 1983. 33 km S. Quseir, 1 male, 2 April 1983. 123 km W. Quseir, 1, 31 January 1983. 15 km N. Hamata, 1, 1 April 1983. Hamata, 1, 1 April 1983. Wadi Aukau, 1, 26 March 1983 and 2, 27 March 1983. *Comments.* This species is a regular winter visitor and migrant to the area. Other than the specimens noted by Goodman (1984) it was also collected at Gebel Elba by Schrader on 30 March 1928 (BMNH 1965.M.1616; also see Meinertzhagen, 1930). Marchant (1941) noted it at Hurghada between 17 March and 13 May 1939. Kestrels cross the Red Sea on migration; Elliott and Monk (1952) observed one

near the Daedalus Reef in mid-January 1946, where Ticehurst (1924) recorded one on 21 April 1913, and it has been noted on 6 March 1978 at sea near 26° 06' N, 35° 04' E (Casement, 1977-78).

Sand Partridge, *Ammoperdix heyi cholmleyi.* — *Material.* Bir Abraq, 1 male, GZM A2210, 21 February 1938, wing: 127, tail: 59. (Also see Goodman, 1984.) *Comments.* Breeding resident in the mountains and wadis of southeastern Egypt.

Quail, *Coturnix c. coturnix.* — *Material.* Gebel Elba, 2 females and 2 males, GZM A2213-A2216, 25 February 1938. (Also see Goodman, 1984.) *Observations.* 1 km N. Adal Deib, 1, 29 March 1983, in coastal scrub. Gezira Mahabis, remains of 1 at hawk hack-site (perhaps of Sooty Falcon), 1 April 1983. *Comments.* This species is a regular migrant along the Egyptian coast; although "Except for occasional large influxes... [it] is a distinctly uncommon bird in the Red Sea Province", Sudan (Madden, 1930). Dr. Joseph Hobbs found one in a weakened state on 21 February 1983 in the central Red Sea mountains, at the base of Gebel Shayeb el Banat (UMMZ 206132). During the spring Quail have been reported as abundant at Port Sudan, not noted near Quseir and Hurghada and only occasional at Safaga (Moreau, 1927-28). It has been recorded in the central Red Sea on 14 February and 11 September 1947 (Elliott and Monk, 1952); off Port Sudan on 2 September 1920 (Ticehurst, 1924) and on 5 November 1936 (Moreau, 1938); at the Daedalus Reef on 9 April 1936 (Bulman, 1944b); and on Gezira Ashrafi on 5 and 11 April 1921 (Meinertzhagen, 1924).

Crane, *Grus grus.* — *Observation.* 9 km S. Abu Ghusun, flock of 27, 20 March 1983. *Comments.* This species passes over the area on spring migration. Four flocks ranging from two to 50 individuals were observed at Hurghada between 2 March and 5 April 1939 (Marchant, 1941) and 30-50 birds in December 1947 at Port Sudan (Meinertzhagen, 1949). Apparently, there is some migrational movement directly across the Red Sea between Africa and the Arabian Peninsula (Cramp and Simmons, 1980).

Moorhen, *Gallinula chloropus.* — *Observation.* Bir Beida, 1, 2 February 1983, in water pool. *Comments.* This appears to be the first published record of this species from southeastern Egypt, although one was captured at Khor Arbat, Sudan, in early September 1982 (Nikolaus, 1983), and an immature female was taken at Suakin in October (van den Elzen and König, 1983). Meininger and Mullié (1981 b) noted one between Suez and Zafarana in January 1980. This species breeds in portions of the Nile Valley and Delta. It is possible that it might also breed in the reed-beds of Bir Beida, or the bird was simply a vagrant.

Coot, *Fulica atra.* — *Material.* Gezira Mahabis, 1 dead in Osprey nest, 1 April 1983. *Comments.* This species is a migrant and perhaps an irregular winter visitor to the area. Greaves (*in* Marchant, 1941) recorded it near Safaga and Tregenza (1958) found it during migration in central Red Sea mountain water pools.

Oystercatcher, *Haematopus o. ostralegus* or *longipes.* — *Material.* Halaib, 1 female, GZM A2472, 31 December 1938. *Observations.* Bir Shalatein, 5, 21 March 1983; 27, 22 March 1983; and 3, 30 March 1983. *Comments.* This species is a regular migrant and winter visitor to the Egyptian Red Sea coast: Cholmley (1897) shot one near Halaib on 23 January 1896; Madden (1927) found it fairly numerous at Halaib on 21 and 22 February 1927 and (1929) a few on 31 February 1928; Horváth (1959) observed 11 at Mersa el Alam on 1 November 1957; and Marchant (1941) noted flocks of 40-50 near Hurghada in January and February.

Ringed Plover, *Charadrius hiaticula tundrae.* — *Material.* Halaib, 1 unsexed, GZM A2199, 24 February 1938. *Observations.* Quseir, 2, 5 February 1983. Mersa Sharm el Qibli, 2, 14 February 1983. Hamata, 10, 21 March 1983. Bir Shalatein, 1, 21 March 1983 and 5, 22 March 1983. *Comments.* This species is a migrant and winter visitor to the area. It has been recorded at Hurghada between early September and late May (Marchant, 1941) and at Port Sudan in November, January and May (Madden, 1927).

Little Ringed Plover, *Charadrius dubius.* — *Observations.* Hamata, 5, 21 March 1983. Bir Shalatein, 1, 30 March 1983. *Comments.* At Hurghada Marchant (1941) noted it in early April 1939 and Al-Hussaini (1939) saw a pair in August 1938. Madden (1927) considered it a regular winter visitor in small numbers to the Sudanese Red Sea coast.

Kentish Plover, *Charadrius a. alexandrinus.* — *Material.* Halaib, 1 female, GZM A2425, 22 December 1938. Wadi Umm Gheig, 1 unsexed, GZM A2388, 15 December 1938. *Observations.* Quseir, 1, 5 February 1983. Hamata, 3, 31 March 1983. Bir Shalatein, 2, 21 March 1983; 3, 22 March 1983; and 5, 30 March 1983. Abu Ramad, 1, 24 March 1983. *Comments.* This species may breed from Hurghada south to about Mersa el Alam (Cramp and Simmons, 1983) and at Port Sudan (Cave and Macdonald, 1955), and if this is indeed the case, they presumably do so in the hiatus between these areas. It is a regular winter visitor to the area.

Greater Sand Plover, *Charadrius leschenaultii.* — *Material.* Quseir, 3 females, GZM A2379-A2381, 13 December 1938. Halaib, 1 unsexed, GZM A2203, 24 February 1938. *Comments.* Although we did not observe this species during our work in the area it appears to be a fairly regular migrant and winter visitor along the coast. A male (FMNH CC 25101) was taken on 18 July 1966, 16 km south of Quseir. At Hurghada Marchant (1941) noted it from November to late May, Al-Hussaini (1938, 1939) saw it in July and August, and Horváth (1959) observed 47 individuals on 5 November 1957. Four specimens (BMNH 1965.M.2909-2912) were taken in late December 1947 at Port Sudan, where it has also been recorded in May and June and presumably is a resident (Madden, 1927).

Grey Plover, *Pluvialis squatarola.* — *Material.* Halaib, 1 male, GZM A2016, 22 December 1938. *Observation.* Bir Shalatein, 1, 22 March 1983 and 2, 30 March 1983. *Comments.* The Grey Plover is a winter visitor along the complete Egyp-

tian Red Sea coast (Cramp and Simmons, 1983). Marchant (1941) considered it a regular migrant and a winter visitor to the Hurghada area, up until early June. Madden (1927) found it in the winter in small numbers at Suakin.

Spur-winged Plover, *Hoplopterus* (*Vanellus*) *spinosus.* — *Observation.* Mersa Himeira, 1, 21 March 1983. *Comments.* The bird was observed in a Bedouin settlement near some camels. As far as we can determine this species has not been reported in the literature further south along the Egyptian Red Sea coast than Hurghada, where a pair was observed between 2 and 20 March 1939 and at Safaga sometime between September and October 1933 (Marchant, 1941). Two were observed on 25 October 1926 and one on 5 October 1928 at Port Sudan (Madden, 1927, 1929). With our present information on the birds of the area, it is impossible to know whether some of the Middle Eastern breeding populations regularly migrate south to the Red Sea, if some Nile Valley and Delta birds move to the Red Sea during the winter or if this individual was simply a vagrant.

Turnstone, *Arenaria i. interpres.* — *Material.* Halaib, 2 males, 1 female and 1 unsexed; GZM A2408, A2410, A2409, A2204; 21 December 1938, 22 December 1938 (two), 24 February 1938, respectively. (Also see Goodman, 1984.) *Observations.* Mersa el Alam, 5, 20 March 1983. Gezira Showarit, 3, 1 April 1983. Bir Shalatein, 3, 21 March 1983; 2, 22 March 1983 and 5, 30 March 1983. *Comments.* This species probably winters from Suez (Meininger *et al.*, 1979) south along the Egyptian coast into the Sudan (Cramp and Simmons, 1983). In January 1896 Cholmley (1897) shot two at Berenice and noted this species at Halaib. Ticehurst (1924) noted that one hit the Sanganeb lighthouse, off Port Sudan, on 19 August 1920.

Little Stint, *Calidris minuta.* — *Observations.* Quseir, 3, 5 February 1983. Bir Shalatein, 1, 30 March 1983. *Comments.* At Hurghada Marchant (1941) noted that the largest concentration of migrants passed through between 12 and 28 May, but individuals were observed from late February to early June 1939. Al-Hussaini (1939) saw one there on 12 August 1938. It is a regular migrant and fairly common winter visitor to the Sudanese Red Sea coast (Madden, 1927).

Dunlin, *Calidris alpina* subsp. — *Material.* Halaib, 1 male and 1 female, GZM A2441, A2443, 25 December 1938. *Observation.* Bir Shalatein, 2, 22 March 1983. *Comments.* This species is a migrant and winter visitor along the Red Sea coast. Marchant (1941) considered it a winter visitor near Hurghada with stragglers remaining until 7 May, and Meininger *et al.* (1979) noted two on 10 February 1979 at Zafarana. It has been recorded in July near Port Sudan (Madden, 1927).

Sanderling, *Calidris alba.* — *Observations.* Hamata, 3, 31 March 1983. Bir Shalatein, 1, 22 March 1983 and 3, 30 March 1983. *Comments.* This species is a winter visitor and migrant to the area. Cholmley (1897) shot two on Gezira Siyul on 12 January 1896.

Spotted Redshank, *Tringa erythropus.* — *Observations.* Bir Shalatein, 2, 21 March 1983 and 7, 22 March 1983. 24 km S. Bir Shalatein, 1, 24 March 1983, in mangrove. *Comments.* The only published record we are aware of from the Egyptian eastern sea coast is a bird observed at Suez on 20 October 1943 (Meiklejohn, 1944). There are several records from the Sudanese coast (Madden, 1927, 1929), but Cave and Macdonald (1955) considered its occurrence in that area doubtful.

Redshank, *Tringa t. totanus.* — *Material.* Quseir, 4 females and 3 males; UMMZ 205810-205811, 205821, 205823, 205822, 205819-205820; 13 February 1983 (two), 3 February 1983 (three), 13 February 1983 (two); weight: 125, 138, 112, 131, 113, 113, 117: fat: little, heavy, little, moderate, little, moderate, little; all with well developed salt glands. Wadi Gemal, 1 male, GZM A2400, 20 December 1938. *Observations.* Quseir, 14, 3 February 1983 and 18, 5 February 1983. Mersa Sharm el Qibli, 1, 12 February 1983. Hamata, 1, 21 March 1983. Bir Shalatein, 4, 21 March 1983; 6, 22 March 1983; and 1, 30 March 1983. *Comments.* This species is a regular migrant and perhaps common winter visitor along the Red Sea coast. Marchant (1941) found it wintering in the Hurghada area as did Meininger *et al.* (1979) near Suez. All the above specimens are referable to nominate *totanus* as are birds taken at Suakin in June 1923 and October 1924 (Bowen, 1926). Horváth (1959) noted one bird between Mersa el Alam and Quseir on 2 November 1957 and shot a female in early November 1957 near Hurghada that he identified as nominate *totanus.* This species has been reported as common during the winter and on passage along the Sudanese Red Sea coast (Madden, 1927).

Green Sandpiper, *Tringa ochropus.* — *Observation.* Bir Shalatein, 4, 21 March 1983. *Comments.* The only other record of which we are aware for this species in the area is a group of eight observed on 14 August 1938 on Gezira Abu Minqar off Hurghada (Al-Hussaini, 1939). It has been recorded near Khor Arbat, Sudan, during the spring (Madden, 1927).

Wood Sandpiper, *Tringa glareola.* — *Observation.* Quseir, 1, 5 February 1983. *Comments.* To our knowledge the only other records from the Egyptian Red Sea coast are from Hurghada where one was recorded on 21 June 1939 (Marchant, 1941) and another on 30 September 1981 (Petersen and Sørensen, 1981). Meiklejohn (1944) observed one at Suez on 20 October 1943 and Butler (1909) noted it at Khor Arbat, Sudan, between 6 and 13 May 1908.

Common Sandpiper, *Tringa hypoleucos.* — *Observation.* Bir Shalatein, 1, 21 March 1983. *Comments.* Marchant (1941) noted that a few winter in the Hurghada area and that spring migrants pass through the region between 16 April and 20 May. It has also been recorded in July 1937 and August 1938 near Hurghada (Al-Hussaini, 1938, 1939). This species is common on passage, and a few winter along the Sudanese Red Sea coast (Madden, 1927).

Curlew, *Numenius arquata orientalis.* — *Material.* Wadi Umm Gheig, 1 female, GZM A2387, 15 December 1938. *Observations.* Quseir, 1, 5 February

1983. Gezira Siyul, 1, 1 April 1983. Hamata, 1, 21 March 1983 and 1, 31 March 1983. Bir Shalatein, 2, 21 March 1983; 1, 22 March 1983; and 1, 30 March 1983. *Comments.* This form is a regular migrant and winter visitor along the Egyptian and Sudanese Red Sea coasts. It has been noted between September and December 1942 at Safaga (Bulman, 1944a); from January to 14 June near Hurghada (Marchant, 1941); from 2 to 5 November 1957 between Hurghada and Quseir (Horváth, 1959); and in June 1923 and October 1924 at Suakin (Bowen, 1926). Horváth (1959) referred a female shot at Hurghada in early November 1957 to the subspecies *orientalis.*

Black-winged Stilt, *Himantopus himantopus.* — *Observation.* Gezira Siyul, 6, 1 April 1983, along coral reef. *Comments.* We know of no other published records of this species along the Egyptian Red Sea coast; although there is a specimen (HMBS uncatalogued) taken on 28 April 1944 presumably in the Hurghada area. It has been considered common between October and April along the Sudanese coast (Cave and Macdonald, 1955) and recorded at sea off Port Sudan on 12 September 1964 (Bailey, 1966).

Crab Plover, *Dromas ardeola.* — *Observations.* Bir Shalatein, 4, 21 March 1983; 155, 22 March 1983; and 180, 30 March 1983. *Comments.* Hitherto this species was thought to be only a straggler to Egypt (Cramp and Simmons, 1983); for the only published records were of single birds along the Suez Canal on 16 April 1958 (Fischer, 1963) and at Lake Manzala on 10 October 1943 (Meiklejohn, 1944), one shot near Bir Shalatein from a large flock in October 1946 (El Negumi *et al.*, 1950) and scattered records from the Nile Delta (Nicoll, 1919; Meinertzhagen, 1930). Frazier *et al.* (1984) recorded this species in 1982 on the following occasions: three on 13 May on Gezira Abu Minqar; three on 31 May on Gezira Mahabis; and a flock of 23 on 27 May 10 km south of Bir Shalatein. A Biscahrin from Bir Shalatein mentioned that ["the white bird with the odd shaped bill, black wings and that feeds in groups in the sea"] comes every year to the reefs near Bir Shalatein. This suggests that it is probably a regular winter visitor to the Bir Shalatein area. It has been recorded in late May 1928 at Halaib (Madden, 1929). Moore and Balzarotti (1983) observed it between mid-May and late June 1976 on the coast and islands near Suakin and found evidence that it might breed in that area.

Cream-coloured Courser, *Cursorius c. cursor.* — *Material.* North Quseir, 1 male, GZM A2195, 14 March 1938, wing: 154, tail: 58. Bir Abraq-Gebel Elba track, 1 male, GZM A2194, 23 February 1938, wing: 160, tail: 62. *Observation.* 67 km W. Barramiya, 1, 20 March 1983. *Comments.* This species is a migrant and winter visitor to the area and perhaps a breeding resident. Cholmley (1897) noticed it in the desert near Berenice on 7 January 1896. Tregenza (1951) found six birds at the end of July near Bir Mellaha, north of Hurghada, and noted that this species was met with all year in the Eastern Desert. On 2 October 1981 Petersen and Sørensen (1981) observed a juvenile on Gezira Giftun.

White-eyed Gull, *Larus leucophthalmus.* — *Material.* Quseir, 1 male, UMMZ 205862, 12 February 1983; wing: 337, tail: 120, testes: not enlarged, plumage:

throat white, some black and white mottling on neck. Gezira Siyul, 1 unsexed, UMMZ 206141, 1 April 1983, found dead on beach. Bir Shalatein, 1 unsexed, UMMZ 206139, 22 March 1983, found dead on beach. 30 km S. Bir Shalatein, 1 unsexed, UMMZ 206140, 23 March 1983, found dead on beach. Halaib, 3 females and 1 unsexed; GZM A2209, A2414-A2415, A2465; 24 February 1938, 22 December 1938 (2 females), 28 December 1938; wing: 311, 314, 287, 294; tail: 111, 116, 114, 119. *Observations.* Gezira Showarit, 4, 1 April 1983. Gezira Siyul, 1, 1 April 1983. Gezira Mahabis, 2, 1 April 1983. Berenice, 3, 21 March 1983. Bir Shalatein area, 30, 22 March 1983 and 10, 30 March 1983. Abu Ramad, 30+, 24 March 1983, 20+, 28 March 1983 and 10, 29 March 1983. *Comments.* This species is the characteristic gull of the southern Egyptian Red Sea, where it nests in colonies on islands off the coast. Near Hurghada egg laying begins in July (Abdel Magid, 1945). The birds near Abu Ramad were tame and allowed human approach to within 4-6 m before flying away.

Black-headed Gull, *Larus ridibundus.* — *Observations.* Quseir, 1, 3 February 1983. Bir Shalatein, 8, 21 March 1983. *Comments.* This species and *L. fuscus* are the most regular Palaearctic migrant gulls along the Egyptian eastern coast. Borman (1929) saw "a few" in early April 1926 at Hurghada, where Marchant (1941) saw one on 9 March 1939. Meininger *et al.* (1979) observed 20 at Zafarana on 10 February 1979. At Port Sudan it has been recorded in February and August (Madden, 1927). This species migrates well out to sea and has been noted at the Daedalus Reef on 8 May 1913 (Ticehurst, 1924).

Lesser Black-backed Gull, *Larus fuscus.* — *Observations.* Along coast S. Quseir, 1, 2 February 1983 and 1 and 3, 2 April 1983. Berenice, 4, 21 March 1983. Bir Shalatein, 13, 21 March 1983 and 1, 30 March 1983. *Comments.* At Hurghada "a large party" was observed in early April 1926 (Borman, 1929), and it was a noticeable migrant from 18 March to 15 May with stragglers until 17 June 1939 (Marchant, 1941). A male was collected at Suakin in June 1923 (Bowen, 1926) and a female at Port Sudan on 23 May 1908, where it was noted as fairly common (Butler, 1909). Bulman (1944b) recorded it at sea near the Daedalus Reef in late March and early April 1936. Tuck (1955) reported a concentration of this species moving up the Red Sea towards the Suez Canal in April 1955.

Caspian Tern, *Hydroprogne caspia.* — *Observations.* Quseir, 3, 5 February 1983. Mersa el Alam, 3, 2 April 1983. 55 km S. Mersa el Alam, 1, 2 April 1983. Hamata, 1, 21 March 1983 and 2, 31 March 1983. Gezira Showarit, 2, 1 April 1983. Gezira Siyul, 2, 1 April 1983. Gezira Mahabis, 5, 1 April 1983, nest with 1 egg. Bir Shalatein, 10, 22 March 1983 and 3, 30 March 1983. Abu Ramad, 1, 29 March 1983. *Comments.* This species is a breeding resident in the northern Red Sea and perhaps in areas further south. On Gezira Mahabis, in the vicinity of the nest with one egg noted above, we found about 15 fresh nest scrapes. In 1926 near Hurghada 20 pairs were beginning to nest on 8 April on Gezira Umm el Heimat, and a few pairs were found on 9 April on Gezira Abu Minqar (Borman, 1929). Caspian Terns are common winter visitors to the Sudanese Red Sea coast (Madden, 1927), and a female was taken in June 1923 at Suakin (Bowen, 1926).

Swift Tern, *Sterna bergi velox.* — *Material.* Halaib, 1 female and 1 male; GZM A2439, A2440; 25 December 1938. *Comments.* This species breeds in the Suakin and Mohammed Qol archipelagos, Sudan (Moore and Balzarotti, 1983), and most likely on some of the northern Red Sea islands (Marchant, 1941; El Negumi *et al.*, 1950). Abdel Magid (1945) found "Crested Terns" nesting off Hurghada in July 1943 which were presumably this species. Al-Hussaini (1938, 1939) observed it during July and August near Hurghada and Frazier *et al.* (1984) noted 10 birds on 30 May 1982 southeast of Ras Banas. It apparently leaves the northern Red Sea during the winter, although there are a few records at this season (Marchant, 1941; Anonymous, 1981). It has been taken at Port Sudan in late May 1908 (Butler, 1909).

White-cheeked Tern, *Sterna repressa.* — *Observations.* Bir Shalatein, 2, 21 March 1983; 30, 22 March 1983: and 4, 30 March 1983. Mersa Abu Naam, 2, 24 March 1983. *Comments.* This species is a breeding resident on islands in the northern Red Sea. Abdel Magid (1945) noted a few nests in July 1943 on Gezira Gubal, Al-Hussaini (1939) found it breeding in considerable numbers on Gezira Umm Qanar in late August 1938, and Petersen and Sørensen (1981) observed 200 adults and 20 nestlings on Gezira Giftun on 30 September 1981. A female collected by Al-Hussaini on 16 July 1937 at Hurghada (BMNH 1941.5.30.9130) had noted on the specimen label "ovary with well developed ova (very large)." Further, a young male (BMNH 1941.5.30.9131), capable of sustained flight, was collected on Gezira Fanadir, off Hurghada, on 22 July 1937. Along the southern Sudanese Red Sea coast they seem to nest earlier, for Moore and Balzarotti (1983) found colonies with eggs in May and June 1976 off Suakin.

Bridled Tern, *Sterna a. anaethetus.* — *Material.* Gezira Siyul, 1 unsexed, UMMZ 206142, 1 April 1983, found dead on beach. *Observation.* Bir Shalatein, 1, 21 March 1983. *Comments.* This species breeds on the Red Sea islands. On Gezira Umm Qanar, off Hurghada, Al-Hussaini (1939) noted it as abundant in August 1938 and apparently just finishing breeding. He found one fledgling but no eggs. On the Brothers Reef, approximately 80 km NE of Quseir, "thousands" were reported breeding in May and June (Ticehurst, 1924). In the Sudan it is a fairly common resident along the Red Sea coast (Cave and Macdonald, 1955; Moore and Balzarotti, 1983).

Little Tern, *Sterna albifrons.* — *Observation.* Bir Shalatein, 1, 30 March 1983. *Comments.* The subspecies *albifrons* is a breeding resident along the Egyptian Mediterranean Sea coast (Alexander, 1943; El Negumi *et al.*, 1950). It has been recorded at Suez between April and June (Maclaren, 1946), but is not regularly observed along the Egyptian Red Sea; northern records are most likely of nominate *albifrons.* The form *saundersi* of the southern Red Sea has been taken along the Sudanese coast as far north as Port Sudan (BMNH 1965.M.4225-4226; Butler, 1909; Madden, 1927), and it is probably a vagrant into Egyptian waters. Frazier *et al.* (1984) collected a dead tern on 27 May 1982 from an Osprey nest on an island off Mersa Summa that was identified as *saundersi.* Vaurie (1965) listed *saundersi* as occurring in the "Red Sea from about 23° N. Lat. south."

Lichtenstein's Sandgrouse, *Pterocles l. lichtensteinii.* — *Material.* Bir Abu Safa, 3 males and 3 females; GZM B1579-B1581; females uncatalogued; April 1943, 3 April 1943 (two males), April 1943 (three females); wing 176, 185, 177, 178, 173, 174; tail: 69, 75, 66, 67, 69, 67. (Also see Goodman, 1984.) *Observation.* Wadi Aukau, 8 to 10, 25 March 1983, in rocky area. *Comments.* This species is a resident in the area (Meinertzhagen, 1930). Cholmley (1897) observed it at Haddai, Sudan, just south of Gebel Elba. One adult and juvenile male were taken at Erkowit in September 1924 (Bowen, 1926) and a male at Khor Arbat on 16 May 1908 (Butler, 1909).

Spotted Sandgrouse, *Pterocles senegallus.* — *Material.* At km 62 Qift-Quseir road, 1 male, GZM A2376, 12 December 1938; wing: 193, tail: 116. Wadi el Matuli, 45 km E. Qift, 3 females and 2 males; UMMZ 205881-205882, 205885, 205883-205884; 31 January 1983 (all); wing: 191, 185, 194, 191, 194; tail: 106, 115, 113, 136, 121; weight: 221, 224, 299, 257, 289; fat: moderate, -, heavy, moderate, heavy; ovary: 22 × 11, largest follicle 5 mm; 22 × 10, largest follicle 5 mm; 34 × 12, largest follicle 8 mm, oviduct thickened; testes: L-10 × 4 R-8 × 4; L-7 × 3 R-5 × 3. *Observations.* 5-38 km E. Qift, groups of 50-80, 200, 210+, 30+ and 18, 31 January 1983. *Comments.* This species is a common sandgrouse in the central Red Sea mountains. Tregenza (1951) noted that it was a regular early morning visitor to the water pools in the mountains west of Hurghada. Marchant (1941) found it several times during the winter in the central Red Sea mountains.

Coronetted Sandgrouse, *Pterocles c. coronatus.* — *Material.* 6.5 km W. Quseir, 1 female and 1 male (both skins in NAMRU-3 collection, Cairo); 4 February 1983; wing: 194, 210; tail: 80, 90; ovary: 19 × 7, largest follicle 4 mm; testes: L-14 × 10 R-10 × 8; 1 male and 1 female; UMMZ 205102-205103 (both skins); 4 February 1983, wing: 204, 185; tail: 92, 76; testes: L-10 × 5 R-8 × 5; ovary: 23 × 10, largest follicle 6 mm. 6 males and 4 females; UMMZ 205886-205887, 205889, 205892-205893, 205895, 205888, 205890-205891, 205894; 14 February 1983, 4 February 1983 (9 specimens); wing: 201, 193, 202, 194, 200, 203, 200, 191, 194, 194; tail: 86, 78, 91, 79, 86, 88, 79, 81, 81, 86; weight: 249 (205886 only); testes: not enlarged (two), L-10 × 6 R-9 × 5, L-10 × 5 R-8 × 5. L-12 × 7 R-10 × 5, L-12 × 8 R-10 × 6; ovary: not enlarged, 18 × 9 largest follicle 4 mm, 14 × 8 largest follicle 3 mm, 15 × 7 largest follicle 3 mm. Halaib, 1 male, GZM A2017, 22 December 1938, wing: 205, tail: 83. (Also see Goodman, 1984.) *Observations.* 6 km W. Quseir, 250+, 4 February 1983 and 30+, 14 February 1983. 21 km N. Adal Deib, 14 males and 4 females, 29 March 1983. 36 km N. Abu Ramad, 6 males, 29 March 1983. *Comments.* Until recently this species was not known from southeastern Egypt (Goodman and Watson, 1983). It appears to be a resident in the central and southern Egyptian Eastern Desert, mountains, coastal region and northern Sudan. It has been taken as far north as Wadi Umm Taghir, 35 km west of Safaga (Goodman and Watson, 1983). Birds from southeastern Egypt are larger on the average than those of nominate *coronatus* from the Western Desert. In males from southeastern Egypt (n = 9) the wing measures 194-210 (200.5) and tail 71-92 (83.3) compared to those from the Western Desert and eastern Libya (n = 7) 171-207 (191.0) and 70-85 (76.5). In females from

southeastern Egypt (n = 8) the wing measures 185-200 (193.9) and tail 69-81 (77.1) compared to those from the Western Desert and eastern Libya (n = 8) 173-190 (184.1) and 72-80 (75.8).

Rock Pigeon, *Columba livia schimperi.* — *Material.* Bir Abraq, 1 male, 1 female and 2 unsexed; GZM A2181-A2182, A2487-A2488; 22 February 1938 (sexed birds), 6 January 1939; wing: 210, 203, 205, 201; tail: 95, 96, 90, 91. *Observations.* Bir Beida, 1, 4 February 1983 and 2, 12 February 1983, all very shy. Wadi Aukau, 3, 26 March 1983, on cliff and 8, 27 March 1983. *Comments.* The individuals we observed were wary of humans and almost certainly not domestic. Some of the birds in Wadi Aukau were displaying and presumably they nest on the cliff faces. We follow Vaurie (1965) in treating the form *butleri* as a synonym of *schimperi.*

Pink-headed Turtle Dove, *Streptopelia roseogrisea arabica.* — *Material.* Wadi Aideib, 1 male, UMMZ 206147, 26 March 1983, wing: 167, tail: 102, weight: 153, testes: L-10 × 8 R-8 × 6. (Also see Goodman, 1984.) *Observations.* Wadi Aukau, 1, 25 March 1983 and 1, 27 March 1983 at approximately 800 m altitude. Wadi Aideib, 1, 28 March 1983. *Comments.* On the basis of gonad size, the collected specimen was presumably either in or approaching breeding condition. Schrader collected a female (BMNH 1965.M.7404) at Gebel Elba on 9 April 1928 (also see Meinertzhagen, 1930). Cholmley (1897) noted this species at Gebel Shallal in January 1896.

Turtle Dove, *Streptopelia turtur.* — *Observation.* Abu Ghusun, 1, 20 March 1983. *Comments.* This observation was most likely of a migrant rather than a local breeding bird. Turtle Doves have been noted at sea off Port Sudan on 26 September 1920 (Ticehurst, 1924) and on 11 September 1935 (Vincent *in* Moreau, 1938), at 23° 40' N, 36° 38' E on 19 April 1961 (Tuck, 1961), and at 24° 45' N, 36° E on 18 September 1975 (Casement, 1975-76).

Laughing Dove, *Streptopelia s. senegalensis.* — *Material.* Wadi Shallal, 1 male, 1 female and 1 unsexed; GZM A2422-A2423, A3091; 22 December 1938 (two), 13 January 1940; wing: 135, 134, 140; tail: 111, 108, 122. Gebel Elba, 1 male and 1 immature female; GZM A2188-A2189; 25 February 1938; wing: 136, 123; tail: 103, 91. Wadi Aideib, 1 female and 3 males; UMMZ 206144-206146, 206104; 25 March 1983 (two), 27 March 1983, 25 March 1983; wing: 134, 142, 137, 137; tail: 111, -, 110, 106; weight: 89, -, 94, 104; ovary: slightly enlarged; testes: L-10 × 8 R-8 × 5, enlarged, L-14 × 10 R-10 × 8. (Also see Goodman, 1984.) *Comments.* Laughing Doves were commonly observed in late March in Wadi Aukau and the general Gebel Elba area. Considering the gonad size of the collected specimens they were either breeding or about to commence.

Long-tailed or **Namaqua Dove,** *Oena c. capensis.* — *Material.* See Goodman and Watson (1983) and Goodman (1984). *Observations.* Wadi Aukau, 2, 28 March 1983. Wadi Kansisrob, 2, 28 March 1983. *Comments.* This species is a presumed breeding resident in the Gebel Elba area.

Short-eared Owl, *Asio f. flammeus.* — *Material.* Halaib, 1 unsexed, GZM A2171, 24 February 1938. (Also see Goodman, 1984.) *Comments.* This species is an occasional migrant and winter visitor to the area. Horváth (1959) observed one at Mersa el Alam on 1 November 1957. A female (BMNH 1965.M.5306) was taken at Port Sudan on 2 December 1947. Further north, near Hurghada, Short-eared Owls have been noted on several occasions (Al-Hussaini, 1939; Marchant, 1941). This species has been found at Sanganeb Light, 15 miles off Port Sudan in the spring of 1916, on 4 October 1920 (Ticehurst, 1924) and on 3 November 1936 (Moreau, 1938), and reported off Gezira Zabargad on 17 October 1977 (Casement, 1977-78).

Kingfisher, *Alcedo a. atthis.* — *Material.* Wadi Gemal, 1 male, GZM A2399, 19 December 1938. *Observations.* Quseir, 1, 3 February 1983 and 1, 5 February 1983. *Comments.* This species has been observed on numerous occasions along the Red Sea. The earliest "autumn" record seems to be 11 August 1938 at Hurghada (Al-Hussaini, 1939) and the latest spring record on 22 April 1939 also at Hurghada (Marchant, 1941). There are several reports from the Red Sea at Port Sudan (Madden, 1930).

Hoopoe, *Upupa epops.* — *Observations.* Berenice, 1, 21 March 1983. Bir Shalatein 1, 22 March 1983, along coast. 15 km N. Abal Deib, 1, 29 March 1983, in desert. *Comments.* In southeastern Egypt and the Sudanese Red Sea Province, this species is a migrant and perhaps occasional winter visitor (Madden, 1930). Apparently Hoopoes regularly cross the Red Sea, for Vincent (*in* Moreau, 1938) observed one on 11 September 1935 off Port Sudan, Elliott and Monk (1952) noted one on 14 February 1947 in the central Red Sea at approximately 23° N and another on 11 September 1947 off Port Sudan, and Bulman (1944b) listed several March and April 1936 records from the Daedalus Reef. Specimens of nominate *epops* have been taken along the Sudanese coast at Erkowit in August 1924 and at Sinkat in September 1924 (Bowen, 1926).

Sand Martin, *Riparia riparia.* — *Observations.* Mersa el Alam, several, 2 April 1983. Hamata, several, 21 March 1983 and 31 March 1983. Berenice, 20, 21 March 1983, flying north. Abu Ghusun, 2, 20 March 1983. 25 km S. Bir Shalatein, 40+, 23 March 1983, in desert flying north. Adal Deib, several, 24 March 1983. Wadi Aukau, 1, 25 March 1983 and 4+, 27 March 1983. *Comments.* This species is a regular migrant along the Red Sea coast and perhaps occasionally winters in the area, at least in the north (Marchant, 1941). There appears to be a pronounced migration directly across the Red Sea, for Bulman (1944b) noted two at the Daedalus Reef on 16 April 1936 and a mass die-off at Brothers Reef on an unspecified date.

Pale Crag Martin, *Ptyonoprogne* (*Hirundo*) *obsoleta.* — *Observations.* Wadi el Hammamat, 3, 31 January 1983. Bir Beida, 1, 1 February 1983; 2, 2 February 1983 and 5+, 4 February 1983. Wadi Aukau, at base of Gebel Elba, 3, 26 March 1983 and 10, 27 March 1983, at approximately 500 m altitude. *Comments.* This species is a breeding resident in the Red Sea mountains. Tregenza (1951) found

them regularly in the central area during the summer and noted them near the summit of Gebel Shayeb el Banat (2187 m). Horváth (1959) observed one on 31 October 1957 near Mersa el Alam. A female (BMNH 1965.M.8315) collected by Schrader at Gebel Elba on 20 March 1928 is referable to the form *arabica* (also, see Meinertzhagen, 1930). The subspecies *obsoleta* is thought to breed in the Egyptian Red Sea mountains and *arabica* further south in the Sudan. However, the area where *arabica* and *obsoleta* intergrade is unknown and may be north of or in the general Gebel Elba region. Since these populations appear to be partially migratory (Madden, 1930), their distribution outside of the breeding season may not reflect the breeding ranges of these subspecies.

Swallow, *Hirundo rustica.* — *Observations.* Mersa el Alam, 1, 2 April 1983. Hamata, several, 21 March 1983, in mixed flock with *R. riparia* and 1, 2 April 1983. Berenice, 1, 21 March 1983. Bir Shalatein, 30+, 21 March 1983, flying north. 43 km S. Bir Shalatein, 20+, 24 March 1983. Adal Deib, several, 24 March 1983. 9 km S. Abu Naam, 1, 24 March 1983, along coast. Wadi Aukau, 1, 25 March 1983 and 1, 27 March 1983. *Comments.* This species crosses the Eastern Desert, Red Sea mountains and Red Sea on a broad front during migration and appears to winter sporadically in the area. Meininger and Mullié (1981 a) observed 1 on 20 January 1980 in the desert between Qena and Safaga, and Madden (1930) found two on 19 February 1927 near Halaib. It has been noted as one of the most common spring migrants along the coast near Hurghada (Marchant, 1941). Ticehurst (1924) mentioned records from Sanganeb Light, off Port Sudan, on 11 October 1920 and the Daedalus Reef on 18 September 1913. Moreau (1938) also noted it on 3 October 1936 off Port Sudan. Bulman (1944 b) listed three scattered March and April 1936 records from the Daedalus Reef. A flock of 15-20 was observed on 17 July 1978 off Gezira Zabargad (Casement, 1977-78).

Red-rumped Swallow, *Hirundo daurica.* — *Observations.* Abu Ghusun, 1, 2 April 1983. Hamata, 21 March 1983, in mixed flock with *H. rustica* and *R. riparia.* Gebel Elba, 3 and 1, 27 March 1983 at approximately 750 and 1200 m altitude, respectively. *Comments.* This species is a migrant through the area. Spring records from the Egyptian eastern coast include birds at Suez on 6 April 1943 (Hutson, 1944), off Zeitia on 6 April 1926 (Borman, 1929) and at Safaga on 19 April 1933 (Greaves *in* Marchant, 1941).

Black-crowned Finch Lark, *Eremopterix nigriceps melanauchen.* — *Material.* Bir Shalatein, 1 male, UMMZ 206152, 24 March 1983, wing: 78, tail: 50, weight: 13.1, testes: enlarged. (Also see Goodman, 1984.) *Observations.* Bir Shalatein, 15, 23 March 1983, 1 male and 1 female. Adal Deib, 3 males and 2 females, 24 March 1983. 10 km S. Abu Naam, 1 male and 1 female, 24 March 1983, in desert. *Comments.* It was generally seen in the proximity of Bischari settlements. A female *Eremopterix* was observed soliciting food from a male at Bir Shalatein. Considering the gonad size of the collected male and behavioural interactions between pairs this species clearly breeds in the area. Cholmley (1897) obtained a male on 6 January 1896 at Berenice. The form *melanauchen* is a common breeding resident along the Sudanese Red Sea coast (Bowen, 1931) and six

specimens were collected at Port Sudan in early December 1947 (BMNH 1965.M.18793-18798; also see Meinertzhagen, 1949) and one on 25 May 1908 (Butler, 1909).

Desert Lark, *Ammomanes deserti.* — *Material.* 4 km E. El Laqeita, 1 female, UMMZ 206106 (skin), 31 January 1983, wing: 96, tail: 58, weight: 19.0, fat: none, skull: ossified, ovary: not enlarged. Wadi Ambagi, 1 male and 1 female, GZM A2077-A2078, 13 March 1938, wing: 104, 97, tail: 65, 60. Bir Abraq, 1 female, GZM A2079, 21 February 1938, wing: 100, tail: 63. 6.5 km SW Bir Shalatein, 2 males, UMMZ 206150-206151, 22 March 1983, wing: 89, 90, tail: 51, 50, weight: 16.7, 16.2, testes: enlarged (both). (Also see Goodman, 1984.) *Comments.* This species was extremely common along the coastal plain and inland mountain areas from Quseir south to Gebel Elba. It is presumably a breeding resident throughout these regions. Cholmley (1897) noticed a few in early January 1896 near Berenice. The Eastern Desert populations exhibit a range of plumage colouration which does not appear to be assorted geographically. Presumably, the El Laqeita specimen is referable to the form *isabellinus* or *borosi,* but the characters used to separate these subspecies are not clear. The form *samharensis* of the Sudanese Red Sea coastal plain may range further north into the Gebel Elba region.

Bar-tailed Desert Lark, *Ammomanes cincturus arenicolor.* — *Material.* Deep in Wadi Sharm el Qibli, 1 female, UMMZ 205900, 12 February 1983, wing: 89, tail: 50, weight: 18.7, ovary: greatly enlarged with two *corpus lutea* and one shelled egg in oviduct. Near Halaib, 1 unsexed, GZM A2407, 21 December 1938, wing: 92, tail: 54. *Comments.* This species is a breeding resident in southeastern Egypt, although its range is poorly known. Cholmley (1897) collected one near Berenice on 7 January 1896. It is a resident in the Port Sudan region (Cave and Macdonald, 1955).

Hoopoe Lark, *Alaemon a. alaudipes* ≲ *desertorum.* — *Material.* Wadi Shaab, 1 male and 1 female, GZM A2084-A2085, 23 February 1938, wing: 130, 115, tail: 93, 85. *Comments.* Hoopoe Larks were extremely common along the coastal plain from Bir Shalatein to Abu Ramad. They were frequently noted in completely barren desert. At Bir Shalatein on 23 March 1983 one bird in spotted plumage was observed being fed by an adult. Chapman (1921) found the species nesting near Port Sudan in mid-April. The Wadi Shaab specimens are intermediate in plumage colouration between nominate *alaudipes* and *desertorum.*

Short-toed Lark, *Calandrella cinerea* subsp. — *Material.* Bir Shalatein, 1 male, UMMZ 206153, 30 March 1983, weight: 22.2, testes: L-8 × 5 R-6 × 4. (Also see Goodman, 1984.) *Observations.* Mersa el Alam, 9, 20 March 1983. Bir Shalatein, 10, 23 March 1983 and 10, 30 March 1983. Adal Deib, 40+, 24 March 1983. *Comments.* This species is a common migrant and perhaps a winter visitor to the area. The subspecies *hermonensis* has been previously collected at Wadi Shaab (Goodman, 1984).

Tree Pipit, *Anthus t. trivialis.* — *Material.* Wadi Aukau, 1 male, UMMZ 206168, 27 March 1983, weight: 17.5, testes: not enlarged. *Comments.* Tree Pipits move along the Egyptian Red Sea coast on both passages. Along the Sudanese coast it is a common migrant and some winter near Port Sudan (Madden, 1930). In the spring it has been recorded at Abu Shaar on 8 April and at Hurghada on 11 April 1926 (Borman, 1929); at Hurghada between 9 and 26 April 1939 (Marchant, 1941); and at sea at the Daedalus Reef on 18 April 1913 (Ticehurst, 1924).

Red-throated Pipit, *Anthus cervinus.* — *Observations.* Bir Beida, 1, 2 February 1983. *Comments.* Hitherto the most southerly winter records from the Egyptian Red Sea area are from near Hurghada, where one was observed on 17 December 1939 at Mons Claudianus and one on 2 February 1940 at Hurghada (Marchant, 1941). This species is a regular migrant along the coast. It has been taken at Port Sudan on 29 December 1947 (BMNH 1965.M.9311).

Black-headed Wagtail, *Motacilla flava feldegg.* — *Material.* Barramiya, 1 male, UMMZ 206167, 21 March 1983, weight: 11.8, testes: slightly enlarged. Hamata, 1 male, UMMZ 206114 (skin), 1 April 1983, weight: 10.7, plumage: partially albinistic. Gebel Elba, 2 females, GZM A2218, A2086, 25 February 1938, 27 February 1938. Halaib, 2 males, GZM A2478-A2479, 1 January 1938, 1 January 1939. *Comments.* This species was not observed during our January and February work between Quseir and Mersa el Alam. However, from 20 March it was regularly noted from Mersa el Alam south to Gebel Elba up until our departure on 2 April. It was generally observed singly or in pairs. All of the collected material is referable to the form *feldegg.* It is striking to note that Butler (1909) obtained a specimen of this species at Khor Arbat, Sudan, on 12 May 1908 that he identified as the Egyptian breeding race *pygmaea.* This species has been noted crossing the Red Sea (Moreau, 1938; Tuck, 1961).

White Wagtail, *Motacilla a. alba.* — *Material.* Wadi Shallal, 1 unsexed, GZM A3083, 13 January 1940. Gebel Elba, 1 male, GZM A2088, 25 February 1938. Halaib, 3 males, GZM A2087, A2427-A2428, 24 February 1938, 23 December 1938 (two). *Comments.* White Wagtails were commonly observed along the coast, on the islands off Hamata, and in the mountains from Quseir to Gebel Elba. They are winter visitors to the area, south to at least Port Sudan (Madden, 1930). Near Bir Shalatein and Adal Deib this species was seen on the backs of camels and goats, presumably foraging for invertebrates. White Wagtails have been recorded at sea on 27 February 1971 at 22° 58' N, 36° 52' E (Casement, 1972-73), between late February and mid-April 1936 at the Daedalus lighthouse (Bulman, 1944b), and on 6 November 1960 at 25° 43' N, 35° 10' E (Tuck, 1961).

Masked Shrike, *Lanius nubicus.* — *Observation.* Mersa Himeira, 1, 21 March 1983. *Comments.* This species is a regular migrant along the Egyptian and Sudanese Red Sea coasts. It crosses the Red Sea on migration and has been noted at Sanganeb Reef, off Port Sudan, in the spring of 1916 and at Daedalus Reef on 3 and 14 April 1913 (Ticehurst, 1924) and on 10 April 1936 (Bulman, 1944b).

Great Grey Shrike, *Lanius excubitor aucheri.* — *Material.* Wadi Shaab, 1 female, GZM A2484, 4 January 1939, wing: 109, tail: 104. Wadi Aideib, 1 male, GZM A2454, 27 December 1938, wing: 109, tail: 105. Gebel Elba, 1 fledgling female, GZM A2105, 25 February 1938. (Also see Goodman, 1984.) *Observations.* 18 km S. Quseir, 1, 14 February 1983. 4 km N. Abu Ghusun, 1, 20 March 1983. Wadi Aukau, 1, 25 March 1983; 2, 26 March 1983; and 2, 27 March 1983. *Comments.* This form is a breeding resident in the Gebel Elba area. Cholmley (1897) obtained a "quite young specimen" at Suakin el Qadim on 19 January 1896 and Tregenza (1951) considered it a breeding resident in the central Egyptian Red Sea mountains. Horváth (1959) collected two at Bir Abbad on 29 October 1957 that he identified as the form *aucheri.*

Rosy-patched Shrike, *Tchagra c. cruenta.* — *Material.* See Goodman (1984). *Observations.* Wadi Aukau, 1 male, 26 March 1983; 4 males and 2 females, 27 March 1983; 1 pair, 28 March 1983. *Comments.* This species is a common resident in the Gebel Elba area which appears to be the northern limit of its range in Africa. In Wadi Aukau a female was observed carrying a fecal sac. In the evening and early morning the calls of duetting pairs could be heard in the upper portion of the wadis at the base of Gebel Elba. The members of a pair would perch near one another, generally on the same bush, and vocalize alternately in quick succession. As far as we can determine duetting has not been previously recorded in this species (Thorpe, 1972).

Brown-necked Raven, *Corvus r. ruficollis.* — *Material.* 17 km W. Quseir, 1 female (?), UMMZ 205902, 14 February 1983, wing: 376, tail: 191, fat: none, ovary (?): not enlarged. 3 km E. Gebel Beida, 1 male, UMMZ 205904, 1 February 1983, wing: 392, tail: 199, fat: none, testes: L-28 × 10 R-22 × 7. Gebel Elba, 1 fledgling, GZM A2062, 7 March 1938. Halaib, 4 unsexed; GZM A2063 and A2411-A2413; 24 February 1938, 21 December 1938 (three); wing: 372, 360, 360, 383; tail: 175, 165, 185, 190. (Also see Goodman, 1984.) *Comments.* This species was abundant along the coast, inland and in the mountains from Quseir to Abu Ramad where it is a breeding resident. However, near Gebel Elba it was less common than *C. rhipidurus* (see under that species) but on the basis of the fledgling specimen noted above, it breeds there. Large concentrations of up to 40 *ruficollis* were observed near army camps and settlements.

Fan-tailed Raven, *Corvus rhipidurus.* — *Material.* Wadi Kansisrob, 2 females and 1 male; GZM A2438, A2448, A2453; 24 December 1938, 26 December 1938, 27 December 1938; wing: 345, 351, 377; tail: 140, 134, 144. *Comments.* Fan-tailed Ravens were only observed in the immediate vicinity of Gebel Elba, where they were extremely common and tame. In the wadis of Aukau, Aideib and Kansisrob *rhipidurus* out numbered *ruficollis* 9 to 1. A similar situation exists in the northern Sudan where *rhipidurus* occurs primarily in the rocky mountains and *ruficollis* in the desert and semi-arid country (Wilson, 1981). Two nests were found at approximately 1000 m altitude, one had three eggs and the other could not be reached but had adults attending it. Schrader collected a male and female (AMNH 675391-675932) at Gebel Elba in early April 1928.

Common Bulbul, *Pycnonotus barbatus arsinoe.* — *Material.* Wadi Kansisrob, 1 male, GZM A2449, 26 December 1938, wing: 94, tail: 76. Gebel Elba, 1 unsexed and 1 male, GZM A2100-A2101, 26 February 1938, wing: 85, 94, tail: 76, 78. (Also see Goodman, 1984.) *Observation.* Wadi Aukau, 1, 26 March 1983. *Comments.* Schrader collected a female and two males (BMNH 1929.1.3.9-10, 1965.M.9665) at Gebel Elba in March and April 1928, which cannot be distinguished from *arsinoe* taken in the upper Egyptian Nile Valley. Records from the coastal area of northern Sudan include: observations in March 1896 near Gebel Erba (Cholmley, 1897), a female of *arsinoe* (BMNH 1965.M.9661) taken near Port Sudan on 1 January 1947 and another collected in April 1926 at Khor Hanoieit that was assigned to *arsinoe* by Bowen (1931). Further, van den Elzen and König (1983) identified a male and two females taken recently at Erkowit in October and November as *arsinoe,* and Butler (1909) found this species common near Port Sudan and Khor Arbat in May 1908. Since birds from the area cannot be subspecifically separated from *arsinoe* from the Nile Valley, from which they are disjunct by 450 km, they have either recently colonized the area, or there is regular genetic exchange between these populations, or the birds taken in southeastern Egypt were not residents but migrants.

Reed warbler, *Acrocephalus* sp. — *Observation.* Bir Beida, 1, 2 February 1983. *Comments. A. schoenobaenus, scirpaceus* and *arundinaceus* have been recorded in the Egyptian central Red Sea coastal area (Marchant, 1941) and these species plus *A. palustris* and *griseldis* have been ringed at Khor Arbat, Sudan (Nikolaus, 1983). It was not possible to identify the bird at Bir Beida.

Orphean Warbler, *Sylvia hortensis crassirostris.* — *Material.* Wadi Shallal, 1 male, GZM A2450, 28 December 1938. *Comments.* This species is a rare migrant to Egypt and hitherto had only been recorded along the Mediterranean Sea coast (Goodman and Watson, 1983), near Cairo (Heuglin, 1869), at Siwa (Mackintosh, 1941) and southeast of Suez (Meiklejohn, 1944). However, it is very common near Port Sudan between October and May (Butler, 1909; Meinertzhagen, 1949; Cave and Macdonald, 1955), and presumably its winter range may extend further north into the Gebel Elba region.

Lesser Whitethroat, *Sylvia c. curruca.* — *Material.* Gezira Showarit, 1 unsexed, UMMZ 206161, 1 April 1983, found dead on beach. Bir Abraq, 1 female, GZM A2018, 21 February 1938. Wadi Aukau, 1 male, UMMZ 206162, 27 March 1983, weight: 9.5. Gebel Elba, 1 male, 1 unsexed and 2 females; GZM A2110-A2112, A2019; 27 February 1938, 3 March 1938, 6 March 1938, 27 February 1938. *Observations.* Wadi Aukau, 1, 25 March 1983 and 4, 26 March 1983. Wadi Kansisrob, 1, 28 March 1983. Wadi Yoider, 4, 26 March 1983. *Comments.* This species is common on spring passage along the Egyptian and Sudanese Red Sea coasts and winters in the latter area (Marchant, 1941; Madden, 1930).

Desert Warbler, *Sylvia n. nana.* — *Material.* Halaib, 1 female, GZM A2404, 21 February 1938. *Comments.* This form is a common winter visitor to the Sudanese Red Sea coast (Cave and Macdonald, 1955) and arrives as early as mid-

Ocotber (Nikolaus, 1981). Four specimens (BMNH 1965.M.13946-13949: also see Meinertzhagen, 1949) were collected in early December 1947 at Port Sudan. It is possible that its winter range extends further north into the Gebel Elba area. Tregenza (1958) found one individual on 2 February in the central Red Sea mountains between Mons Claudianus and Wadi Semna and regarded this species as "probably resident in Eastern Desert, though no clear evidence of their breeding here." Other observations include two on 30 July 1947 at Bir Himeyr, northwest of Hurghada, and birds on 3 and 11 September 1947 in Wadi Negateir (Tregenza, 1951, 1955). This species migrates between Africa and Arabia across the Red Sea (Elliott and Monk, 1952).

Rüppell's Warbler, *Sylvia rueppelli.* — *Material.* Bir Abraq, 1 male, GZM A2115, 21 February 1938. Gebel Elba, 2 males, GZM A2113-A2114, 4 March 1938. *Comments.* Rüppell's Warbler is a regular spring migrant along the Egyptian and Sudanese Red Sea coasts, and perhaps a winter visitor to the latter (Greaves *in* Marchant, 1941; Madden, 1930).

Cyprus Warbler, *Sylvia (melanocephala) melanothorax.* — *Material.* Wadi Shallal, 1 unsexed [female (?) by plumage], GZM A2421, 22 December 1938. *Comments.* The only previous documentation of this species in Egypt was a male specimen (GZM 1449) taken on 1 March 1910 at Wadi Hof, south of Cairo (Nicoll, 1919). El Negumi *et al.* (1950) mentioned that he collected two specimens in December 1938 near Gebel Elba, but only the above single specimen was found in the GZM research collection. Recently Nikolaus (1981) noted Cyprus Warblers on three occasions in November 1980 near Erkowit.

Chiffchaff, *Phylloscopus c. collybita* ≲ *abietinus.* — *Material.* Bir Beida, 1 female, UMMZ 205917, 2 February 1983, weight: 4.8, fat: little. 7 km W. Quseir, 1 female and 2 males; UMMZ 205906, 205919-205920; 4 February 1983; weight: 5.5, 5.5, 5.2; fat: little (two), none. Deep in Wadi Sharm el Qibli, 1 male (?), UMMZ 205916, 12 February 1983, weight: 5.3, fat: little. Wadi Ambagi, 2 males, GZM A2383-A2384, 14 December 1938. Wadi Shallal, 1 unsexed, GZM A3084, 13 January 1940. Gebel Elba, 1 female, GZM A2104, 25 February 1938. *Observations.* Bir Beida, 20+, 4 February 1983. Deep in Wadi Sharm el Qibli, 2, 12 February 1983. Hamata, 1, 21 March 1983. *Comments.* This species is a common migrant and winter visitor along the Egyptian and Sudanese Red Sea coasts. It has been recorded at Port Sudan in December (BMNH 1965.M.14173; also see Meinertzhagen, 1949) and January (Madden, 1930; Cave and Macdonald, 1955). Bulman (1944b) listed three records at the Daedalus Reef from late February to mid-March 1936.

Whinchat, *Saxicola rubetra.* — *Observation.* Bir Beida, 1 male, 2 February 1983. *Comments.* The Whinchat is a regular migrant along the coast, but this appears to be the first wintering record for southeastern Egypt. It apparently migrates across the Red Sea and has been noted at Daedalus Reef on 19, 26 and 27 April 1936 (Bulman, 1944b), and just arriving at Port Sudan on 11 September 1947 (Elliott and Monk, 1952).

Wheatear, *Oenanthe o. oenanthe.* — *Material.* Wadi Aideib, 1 male, UMMZ 206166, 25 March 1983, weight: 19.5. *Observations.* 4 km N. Mersa el Alam, 1, 2 April 1983. 25 km S. Bir Shalatein, 10, 22 March 1983; 1, 23 March 1983. *Comments.* This species is a common migrant along the Egyptian and Sudanese Red Sea coasts (Meinertzhagen, 1930; Marchant, 1941) and winters in the latter area (Madden, 1930). A female (BMNH 1965.M.11837) was collected by Schrader on 30 March 1928 at Gebel Elba. Casement (1976-77) reported a female was observed on 21 October 1975 at sea near 25° 30' N, 35° 27' E.

Pied Wheatear, *Oenanthe p. pleschanka.* — *Material.* "Eastern Desert", 1 male, GZM A2043, 21 December 1938. *Observations.* Mersa Mubarek, 1 male, 2 April 1983. Berenice, 1 male, 31 March 1983. *Comments.* The Pied Wheatear is an uncommon migrant and winter visitor to the area. The only previous record that we know of for this species along the Egyptian Red Sea coast is one observed at Safaga on 25 April 1933 (Greaves *in* Marchant, 1941). Cave and Macdonald (1955) considered it a common winter visitor to the Sudan, mainly in the north and northeast. Migrants also apparently cross the Red Sea (Elliott and Monk, 1952).

Mourning Wheatear, *Oenanthe l. lugens.* — *Material.* Qena-Quseir Road, 1 male, GZM A2375, 12 December 1938, wing: 99, tail: 62. 4 km W. Quseir, 1 female, UMMZ 205925, 2 February 1983, wing: 93, tail: 59, weight: 27.3, fat: none, ovary: not enlarged. Deep in Wadi Sharm el Qibli, 1 male, UMMZ 205923, wing: 96, tail: 61, weight: 26.9, fat: heavy, testes: not enlarged. Wadi Sukkari: 1 male, GZM uncatalogued, 16 December 1938, wing: 91, tail: 61. *Comments.* All of our observations of this species were in the vicinity of Quseir, up to 41 km west and 75 km south, except for one bird on 25 March 1983 in Wadi Aukau. It was observed in early January 1896 near Berenice (Cholmley, 1897). The Mourning Wheatear is a resident in the central Egyptian Red Sea mountains and coastal plain (Tregenza, 1951, 1955; Goodman, unpubl.) and is a winter visitor to the Sudan Red Sea Province (Cave and Macdonald, 1955).

Desert Wheatear, *Oenanthe d. deserti* ≤ *atrogularis.* — *Material.* Wadi Shallal, 1 male, GZM A3085, 13 January 1940, wing: 90, tail: 53. Wadi Kansisrob, 1 male and 1 female, GZM A2430-A2431, 23 December 1983, wing: 92, 87, tail: 59, 56. Mersa Sharm el Qibli, 1 male, UMMZ 205933, 12 February 1983, wing: 94, tail: 59, weight: 15.3, fat: little, testes: not enlarged. (Also see Goodman, 1984.) *Comments.* Desert Wheatears were observed regularly during our work in the area from Quseir south to Gebel Elba. It was more common along the coastal plain than in the inland desert areas. The breeding status of this species in the Eastern Desert is unclear, and until documentation is available it should be considered a winter visitor. Cholmley (1897) found it in early January 1896 near Berenice and collected one on 19 January 1896 at Suakin el Qadim. Tregenza (1951) who spent two summers traveling in the central Egyptian Red Sea mountains did not notice this species during that period; however, Al-Hussaini (1939) found it common near Hurghada in August 1938. Three specimens (BMNH 1965.M.11928-11930) taken at Port Sudan on 7 December 1947 are referable to

nominate *deserti*. This species has been recorded out to sea at the Daedalus Reef on 1 September 1913 (Ticehurst, 1924) and appears to cross the Red Sea on migration.

Red-tailed Wheatear, *Oenanthe x. xanthoprymna*. — *Material*. "Red Sea coast", 1 male, GZM A2389, 15 December 1938. Gebel Elba, 1 unsexed and 1 female, GZM A2159-A2160, 3 March 1938. *Observation*. Wadi Aukau, 1 male, 26 March 1983, singing on top of rock perch. *Comments*. This species appears to be an irregular winter visitor or migrant to the southern Egyptian Red Sea mountains and coast. Cave and Macdonald (1955) noted it as fairly common along the Sudanese Red Sea coast between October and March. Meinertzhagen (1949) recorded the form *chrysopygia* near Port Sudan in December 1947, but Red Sea coastal records from Egypt and the Sudan are of nominate *xanthoprymna* (Vaurie, 1959). This species has been recorded irregularly elsewhere in Egypt during the non-breeding season.

Isabelline Wheatear, *Oenanthe isabellina*. — *Material*. Gebel Elba, 1 female, GZM A2153, 25 February 1938. 6 km E. Quseir, 1 female, UMMZ 205931, 12 February 1983, weight: 33.5, fat: heavy. *Observations*. 18 km S. Quseir, 1, 14 February 1983. 6 km N. Mersa Mubarek, 1, 14 February 1983. 53 km W. Barramiya, 2, 20 March 1983. Wadi Aideib, 1, 28 March 1983. Wadi Aukau, 1, 26 March 1983 and 2, 27 March 1983. *Comments*. The Isabelline Wheatear is a migrant and winter visitor to the coastal plain and less commonly to inland desert areas. It has been taken on 6 December 1947 at Port Sudan (BMNH 1965.M.11735) and in August 1924 at Erkowit (Bowen, 1931) and crosses the Red Sea on migration (Moreau, 1938; Tuck, 1961).

Hooded Wheatear, *Oenanthe monacha*. — *Comments*. This species was noted only in the Quseir area, from 89 km west to 59 km south, except for two observed about 15 km south of Mersa el Alam. It is presumably a breeding resident in these regions. Horváth (1959) noted a female on 29 October 1957 at Bir Abbad. The most southerly known Egyptian record is one recorded in the desert near Berenice in January 1896 (Cholmley, 1897). It is rare in northeastern Sudan (Cave and Macdonald, 1955).

White-crowned Black Wheatear, *Oenanthe l. leucopyga*. — *Material*. Bir Abraq, 2 males and 1 female; GZM A2161, A2163, A2162; 21 February 1938, 22 February 1938, 21 February 1938; wing: 111, 104, 96; tail: 70, 66, 62; crown: white (both males), black. Wadi Umm Rus, 1 male, GZM A2390, no date, wing: 102, tail: 63, crown: black with a few white feathers. Gebel Shallal, 1 immature male, GZM A2164, 3 March 1938, wing: 103, tail: 67, crown: brown with some black. Gebel Elba, 1 male, GZM A2446, 25 December 1938, wing: 97, tail: 59, crown: black with some white. Wadi Kansisrob, 1 female, GZM A2435, 23 December 1938, wing: 96, tail: 60, crown: black. Wadi el Hammamat, 1 male, UMMZ 206116 (skin), 31 January 1983, wing: 103, tail: 60, weight: 24.5, fat: none, skull: ossified, crown: black with some white. (Also see Goodman, 1984.) *Comments*. This species is a common resident in southeastern Egypt, particularly

near human habitation and in rocky areas. To the north near Hurghada it has been considered "rather scarce" (Marchant, 1941), but Tregenza (1951, 1955, 1958) mentioned numerous summer records from the central Red Sea mountains. In the northern Sudanese Red Sea mountains it is abundant (Madden, 1930).

Blackstart, *Cercomela melanura lypura.* — *Material.* Wadi Kansisrob, 1 unsexed and 1 male, GZM A2493, A2494, 23 December 1938, 26 December 1938, wing: 78, 72, tail: 60, 56. Gebel Elba, 1 male, GZM A2244, 25 February 1938, wing: 74, tail: 53. *Comments.* This species is presumably a breeding resident in the Gebel Elba region, although we failed to find it during our visit, and it might strictly be a summer resident. Three birds (BMNH 1965.M.11351-11353) were collected by Schrader in late March and early April 1928 near Gebel Elba (also see Meinertzhagen, 1930). Along the northern Sudan coast it is a common resident (Cave and Macdonald, 1955). Butler (1909) found fledglings in early May 1908 at Khor Arbat, Sudan.

Rufous Bush Robin, *Cercotrichas galactotes.* — *Observations.* Wadi Aukau, 1, 26 March 1983. Wadi Yoider, 2, 26 March 1983. *Comments.* This species is presumably a migrant and winter visitor to the area. If it indeed breeds in the Gebel Elba region, the local form could be nominate *galactotes, minor* or intergrades. It has been recorded at Safaga in late April 1933 (Greaves *in* Marchant, 1941); at Port Sudan on 26 June 1928 (Madden, 1930); at Khor Arbat in August and September 1982 (Nikolaus, 1983); and out to sea at the Daedalus Reef on 3 May 1936 (Bulman, 1944b). A male collected at Khor Arbat, Sudan, on 13 May 1908 was breeding (Butler, 1909).

Blue Rock Thrush, *Monticola s. solitarius.* — *Material.* Wadi Kansisrob, 1 male, GZM A2436, 23 December 1938. Gebel Elba, 1 male, GZM uncatalogued, 2 March 1938. *Comments.* The Blue Rock Thrush may be a winter visitor to the Gebel Elba region for it has been recorded as not uncommon to the south near Port Sudan during this period (Madden, 1930). The only other published record that we are aware of for this species along the Egyptian eastern coast is one noted on 7 April 1943, 50 miles south of Suez (Hutson, 1944).

Redstart, *Phoenicurus phoenicurus.* — *Observation.* Bir Beida, several, 2 February 1983. *Comments.* This species is a regular migrant along the Red Sea coast. Except for one noted in February 1928 near Halaib (Madden, 1930), the Bir Beida observation appears to be the only other winter record from southeastern Egypt. During the autumn migration of 1982, Nikolaus (1983) ringed both nominate *phoenicurus* and *samamisicus* at Khor Arbat, Sudan. Some birds migrate across the Red Sea (Moreau, 1938; Bulman, 1944b; Tuck, 1961).

Bluethroat, *Luscinia s. svecica.* — *Material.* Bir Beida, 1 male, UMMZ 205937, 2 February 1983, weight: 13.2, fat: none, testes: not enlarged. *Observation.* Wadi Aukau, 1, 27 March 1983. *Comments.* This species is not uncommon on passage along the Red Sea coast. The only other winter records from the Egyptian Red Sea coast that we are aware of is a bird noted on 19 December 1940 near Hurghada

(Marchant, 1941) and a few at Quseir in late February (Meinertzhagen, 1930). The species has been recorded at sea near 25° 43' N, 35° 10' E on 6 November 1960 (Tuck, 1961).

Fulvous Babbler, *Turdoides fulvus acaciae.* — *Material.* Wadi Aideib, 1 immature male, UMMZ 206155, 25 March 1983, wing: 97, tail: 124, weight: 49, bursa: present, mouth parts: yellow, testes: slightly enlarged. (Also see Goodman, 1984.) *Comments.* All of our observations of this species were limited to Wadi Aukau and Wadi Aideib where it was a common breeding resident. One nest near our camp in Wadi Aukau was attended by three birds, one of which was an immature on the basis of its yellow mouth parts (gape and lining). The terrain was open and the birds active enough that we were able to watch the movements of these three birds and determine all were bringing food to the nest. Before the young fledged, the nest was plundered by a Fan-tailed Raven and all the nestlings eaten. Five other nests were discovered and brief observations at each indicated that four nests had three birds feeding the young (all of which had one attendant with yellow mouth parts) and one had four birds feeding the young (two attendants with yellow mouth parts). The phenomenon of helpers at the nest has been documented in other members of this genus (Grimes, 1976; Zahavi, 1976), but this appears to be the first description of this behaviour for *fulvus.*

This species was very vocal and all of the attendants at any one nest frequently called to one another. Presumed territorial encounters between the attendants of different nest were noted and generally were accompanied by rapid chatter calls. The birds nesting near our camp frequently raided food left out in the open, particularly the morning bread dough.

Near Port Sudan Butler (1909) collected a female on 9 May 1908 which had a well developed egg in the reproductive tract and obtained a clutch of five eggs on 24 May 1908.

Shining Sunbird, *Nectarinia h. habessinica.* — *Material.* Wadi Aideib, 1 immature male, 1 adult male, UMMZ 206170-206171, 25 March 1983, 26 March 1983, wing: 53, 63, tail: 38, 45, weight: 9.9, 10.9, testes: not enlarged, L-8 × 6 R-7 × 5. (Also see Goodman, 1984.) *Observations.* Wadi Aukau, 2 males, 3 females, 25 March 1983; 1 adult male, 26 March 1983; 1 immature male, 27 March 1983; and 4, 27 March 1983. Bir Kansisrob, 3 males, 2 females and 1 old nest, 28 March 1983. *Comments.* This species is a common resident in the Gebel Elba area. A total of eight adult male specimens from the Gebel Elba region have been examined (in BMNH, FMNH, GZM and UMMZ) and they measure as follows: wing 63-71 (66.0), tail 39-45 (42.3). Adult males of nominate *habessinica* taken in Eritrea (Eilat, Eritrea type locality), northern Ethiopia and coastal Sudan (wing 64-68 (66.2), n = 20; tail 44-48 (46.4), n = 20; Williams, 1955) have similar wing lengths, but longer tails than Gebel Elba birds.

Golden Sparrow, *Passer luteus.* — *Material.* See Goodman (1984). *Observation.* Wadi Kansisrob, flock of 20+, 28 March 1983. *Comments.* The only

previous record for this species in Egypt was of two adult males taken in Wadi Adwamtra on 16 February 1964 (Goodman and Watson, 1983). In the Sudan it is generally found in the inland areas and along the Nile south of 18° N Lat. (Cave and Macdonald, 1955), but it has been recorded several times along the Red Sea coast (Bowen, 1931).

Spanish Sparrow, *Passer h. hispaniolensis.* — *Material.* Quseir, 3 males and 1 female, GZM A2066-A2068, A2076, 13 March 1938. Bir Abraq, 1 male, GZM A2486, 6 January 1939. Halaib, 2 males, GZM A2480-A2481, January 1939. *Comments.* The only published records that we are aware of for this species from the Egyptian Red Sea coast are from the Safaga-Hurghada area where Horváth (1959) observed 70 between 3 and 5 November 1957 and Marchant (1941) noted a flock of up to 20 individuals between 7 January and 2 February 1940. The collected material was probably of birds wintering in the area.

Trumpeter Finch, *Rhodopechys githaginea.* — *Observations.* 41 km W. Quseir, 15, 31 January 1983. 62 km W. Quseir, 18, 31 January 1983. Wadi el Hammamat, 20, 31 January 1983. 10 km W. Wadi el Hammamat, 25, 31 January 1983. *Comments.* This species is a common resident of the central Egyptian Red Sea mountains and Eastern Desert. In the non-breeding season it is often found in flocks in these areas (Marchant, 1941; Tregenza, 1951).

Cretzschmar's Bunting, *Emberiza caesia.* — *Material.* See Goodman (1984). *Observation.* Wadi Kansisrob, 6, 28 March 1983. *Comments.* In Egypt and the Sudanese Red Sea Province this species is a winter visitor and common on passage, especially during the spring (Meinertzhagen, 1930; Madden, 1930). Three specimens were collected 12 miles south of Port Sudan on 1 January 1948 (BMNH 1965.M.16276-16278; also see Meinertzhagen, 1949). It migrates across the Red Sea to the Arabian Peninsula for it has been noted frequently between late February and early April 1936 at the Daedalus Reef (Bulman, 1944b) and on 1 March 1964 about 50 miles west of Jidda (Bailey, 1966).

MIGRATION ACROSS THE RED SEA

Our knowledge of bird migration across the Red Sea is almost exclusively based on eclectic observations made from ships and lighthouses at sea. Some of the available literature on the topic, particularly records published in the *Sea Swallow,* the journal of the Royal Naval Bird Watching Society (United Kingdom), are from captains and sailors who generally are unable to devote substantial periods of time to bird watching during a single voyage. Further, because of visibility, sea conditions, and lack of experience of some observers, birds are occasionally identified generically, *e.g.* large dark bird, and others are certainly misidentified. These points are not meant to detract from the utility of these records, which is considerable, but only to emphasize that the information is limited and by no means comparable to records on land. A quantitative artifact is also introduced by the

relative movements of the migrational front across the sea in an east-west direction and the ships' movements in a north-south direction. This problem is discussed further in Moreau (1938). Thus, our present knowledge of bird migration across the Red Sea is only an approximation of the true number of birds and species using this route, but for many species it appears to be a regular pathway.

One can pose the question why do some birds migrate across the potentially hazardous Red Sea, rather than taking a safer overland route? For species wintering along the southern Egyptian or Sudanese Red Sea coasts and breeding from eastern Europe east into western Asia a considerable distance can be saved by crossing the Red Sea. The following scenario illustrates this point. An important wintering area for *Sylvia n. nana,* which breeds in part in the Caspian region and northern Iran (Vaurie, 1959), is along the Sudanese Red Sea coast (Cave and Macdonald, 1955; Nikolaus, 1981). In the spring when this species returns to the breeding grounds it can take, for example, two different routes: 1) north along the western edge of the Red Sea to Suez, then across the Sinai to the Gaza Strip, north along the Mediterranean Sea coast to Syria and then due east to the southern Caspian region or 2) directly along a diagonal across the Red Sea, Arabian Peninsula, Persian Gulf and Iran to the southern Caspian region. The distances of these routes are approximately 3500 km and 2400 km, respectively. Thus, the second pathway is about two-thirds the distance of the first. However, the straight, over water route is certainly more perilous than the less direct one. Several cases of mass bird mortality have been recorded in the Red Sea (Moreau, 1938; Bulman 1944b), and birds that successfully make this crossing must still negotiate the desert regions of Arabia and Iran, plus the Persian Gulf.

The direct route seems to be a common strategy. All the migratory forms noted in the annotated list herein that have been recorded at sea have breeding populations in the Palearctic region east of 45° E Long. There are several migratory species which are uncommon or unrecorded along the Egyptian Red Sea coast except for near Gebel Elba, but which are common near Port Sudan (e.g. *Sylvia hortensis crassirostris, S. n. nana,* and *Monticola s. solitarius*). This is further evidence that some species which nest in portions of the Middle East and western Asia take the direct route to and from the wintering grounds across the Persian Gulf, Arabian Peninsula, and Red Sea and thus bypass most of the Egyptian Red Sea coast. Several large and presumably conspicuous species which winter in or migrate through southeastern Egypt and breed from the Caucasus east into Asia are absent from the list of known trans-Red Sea migrants. These include, for example, *Platalea leucorodia* and *Aquila nipalensis.* The explanation for this may simply be a lack of observers in the appropriate places or perhaps the height at which these birds migrate. The important point in this regard is that our knowledge of trans-Red Sea migration is at best incomplete, and it is premature to synthesize the available information into general patterns. Only a considerable amount of work on both sides of the Red Sea in combination with ringing studies will elucidate the extent and pathways different species use while crossing the Red Sea on migration.

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SUMMARY

The only previous work dealing exclusively with the birds of southeastern Egypt was recently published by Goodman (1984). Southeastern Egypt is defined as 26° N Lat. to the north, the Sudanese border to the south, the Red Sea coast to the east and 33° E Long. to the west (but also including the Qift-Quseir road). We were able to visit this region from 30 January to 15 February 1983 and 20 March to 2 April 1983 and can greatly supplement material presented in Goodman's previous work. In these two papers 124 species have been recorded in the area (115 presented herein) of which 54 are known or presumed breeding residents (49 presented herein). Information on trans-Red Sea migration is also summarized.

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APPENDIX

GAZETTEER OF LOCALITIES MENTIONED IN TEXT

Locality	Governorate	N. Lat. (°)	N. Lat. (')	E. Long. (°)	E. Long. (')
Egyptian localities					
Abu Ghusun	RSG[1]	24	26	35	12
Abu Ramad	SGAA	22	21	36	27
Abu Shaar	RSG	27	22	33	37
Adal Deib	SGAA	22	41	36	05
Ain Sukhna	RSG	29	35	32	30
Barramiya	RSG	25	04	33	47
Berenice	RSG	23	58	35	22
Bir Abbad	RSG	25	02	33	04
Bir Abraq	RSG	23	25	34	48
Bir Abu Safa	RSG	23	18	34	48
Bir Beida	RSG	26	05	34	07
Bir Himeyr	RSG	27	25	33	25
Bir Mellaha	RSG	27	34	33	27
Bir Shalatein	SGAA	23	08	35	36
Brothers Reef		26	20	34	53
Daedalus Reef		24	55	35	51
El Laqeita	RSG	25	53	33	07
Gebel Beida	RSG	26	00	35	17
Gebel Elba	SGAA	22	11	36	21
Gebel Shallal (Shellal)	SGAA	22	01	36	31
Gebel Shayeb el Banat	RSG	26	59	33	29
Gezira Abu Minqar	RSG	27	13	33	52
Gezira Ashrafi	RSG	27	46	33	41
Gezira Fanadir	RSG	27	18	33	49
Gezira Giftun	RSG	27	13	33	56
Gezira Gubal	RSG	27	40	33	47
Gezira Mahabis	RSG	24	19	35	23
Gezira Safaga	RSG	26	45	33	59
Gezira Showarit	RSG	24	22	35	23
Gezira Siyul	RSG	24	23	35	23
Gezira Umm el Heimat	RSG	27	42	33	37

Locality	Governorate	N. Lat. (°)	N. Lat. (')	E. Long. (°)	E. Long. (')
Gezira Umm Qanar	RSG	27	12	33	54
Gezira Zabargad (St. Johns)		23	37	36	12
Halaib	SGAA	22	13	36	38
Hamata	RSG	24	17	35	21
Hurghada(Ghardaqa)	RSG	27	14	33	50
Mersa Abu Naam	SGAA	22	30	36	19
Mersa el Alam	RSG	25	04	34	54
Mersa Himeira	RSG	23	30	35	29
Mersa Mubarek	RSG	25	31	34	39
Mersa Sharm el Qibli	RSG	25	50	34	26
Mersa Summa	SGAA	22	53	35	44
Mersa Toronbi	RSG	25	39	34	35
Mersa Umm Gerifat	RSG	25	36	34	36
Mons Claudianus	RSG	26	41	33	30
Qena	Qena	26	10	32	43
Qift	Qena	26	00	32	49
Quseir	RSG	26	06	34	17
Ras Banas	RSG	23	54	35	48
Safaga	RSG	26	44	33	56
Suakin el Qadim	SGAA	22	19	36	29
Wadi Aideib	SGAA	22	15	36	26
Wadi Akwamtra	SGAA	22	13	36	18
Wadi Ambagi		not located			
Wadi Aukau	SGAA	22	15	36	22
Wadi el Hammamat	RSG	25	58	33	33
Wadi el Matuli	RSG	25	57	32	55
Wadi Gemal	RSG	24	40	35	06
Wadi Hareitra	SGAA	22	05	36	07
Wadi Hodein	RSG	23	04	35	30
Wadi Kansisrob (Kansathrope)	SGAA	22	15	36	22
Wadi Negateir	RSG	26	41	32	51
Wadi Semna	RSG	26	27	33	35
Wadi Shaab	SGAA	22	48	35	33
Wadi Shallal (Shellal)	SGAA	22	01	36	30
Wadi Sharm el Qibli	RSG	25	50	34	25
Wadi Sukkari	RSG	25	03	34	49

Locality	Governorate	N. Lat. (°)	N. Lat. (')	E. Long. (°)	E. Long. (')
Wadi Umm Gheig	RSG	25	44	34	33
Wadi Umm Lasaf	RSG	25	34	34	28
Wadi Umm Rus	RSG	25	28	34	35
Wadi Umm Taghir	RSG	26	41	33	46
Wadi Wizr	RSG	25	47	34	29
Wadi Yoider	SGAA	22	17	36	18
Zafarana	RSG	27	54	30	49
Zeitia	RSG	27	52	33	39
Sudanese localities					
Erkowit		18	49	37	01
Gebel Erba		19	41	35	50
Haddai		21	51	35	23
Khor Arbat		19	48	37	03
Khor Hanoieit		not located			
Mohammed Qol		20	53	37	09
Port Sudan		19	38	37	07
Sanganeb Reef		19	45	37	25
Sinkat		18	55	36	48
Suakin		19	08	37	17

(1) RSG = Red Sea Governorate; SGAA = Sudan Government Administration Area, which is within the political boundaries of Egypt but under the legal administration of the Sudanese Government.

SAMENVATTING

Het enige tot nog toe gepubliceerde werk dat uitsluitend de avifauna van zuidoost-Egypte behandelt is dat van Goodman (1984). De term zuidoost-Egypte wordt hier gebruikt voor het gebied begrepen tussen 26° N in het noorden, de Soedanese grens in het zuiden, de kust van de Rode Zee in het oosten en 33° O in het westen, de weg Qift-Quseir inbegrepen. De auteurs bezochten deze streek van 30 januari tot 15 februari en van 20 maart tot 2 april 1983 en geven belangrijke aanvullingen bij het werk van Goodman. In de twee bijdragen samen werden 124 soorten gevonden in de streek (115 in dit artikel) waarvan 54 bekende of vermoede broedende standvogels (49 in dit artikel). Verder werden een aantal gegevens bijeengebracht betreffende de vogeltrek over de Rode Zee.

RÉSUMÉ

Le seul travail précédent traitant exclusivement des oiseaux du sud-est de l'Egypte a été récemment publié par Goodman (1984). Le sud-est de l'Egypte est délimité au nord par 26° de lat N, au sud par la frontière du Soudan, par la mer Rouge à l'est et par 33° E (y compris la route de Qift-Quseir). Les auteurs ont eu l'occasion de visiter cette région du 30 janvier au 15 février 1983 et du 20 mars au 2 avril 1983 et ont pu fournir un supplément important au matériel présenté dans le travail de Goodman. Dans les deux articles, un total de 124 espèces a été recensé dans cette région (115 décrites dans cet article) dont 54 étaient connues ou présumées résidents nicheurs (49 décrites ici). Des informations sur la migration à travers la mer Rouge y sont également résumées.

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