

Birds of Dera Ismail Khan District of North West Frontier Province in Pakistan

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The status and occurrence of 341 species encountered in the Dera Ismail Khan District from September 1988 to May 1998 are described. One of these, Redwing *Turdus iliacus*, is new for Pakistan, and probably for the Indian subcontinent. Thirty-three more species are new for the North West Frontier Province, including Eurasian Reed Warbler *Acrocephalus scirpaceus*, only the third definite record for Pakistan and the Indian subcontinent.

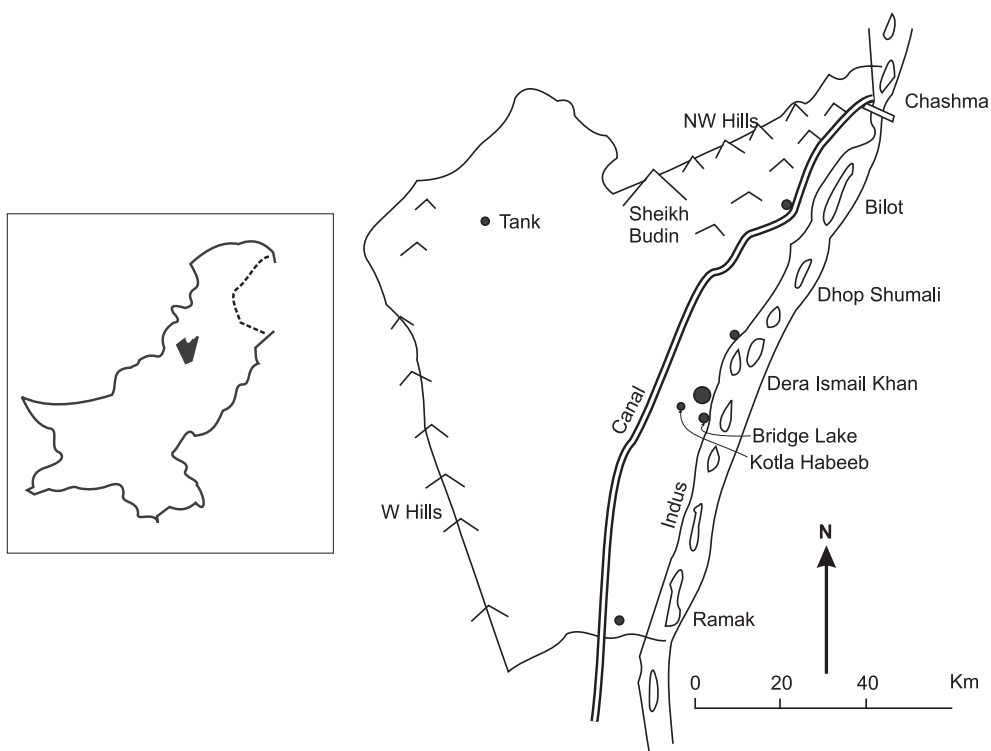
The town Dera Ismail Khan (31°49'N 70°57'E) is situated in the south-eastern part of North West Frontier Province in Pakistan. The area of the whole district is 4,004 km² and the population is c. 400,000. The population density is highest around the town and in irrigated areas, though signs of man's activities are clearly visible throughout the area.

The district is part of the alluvial Indus plains. The western and north-western borders run along the outer reaches of the Sulaiman range. The lowest point in the south-east corner is 157 m above sea level. The peak of Sheikh Budin in the north-west dominates the scenery with its height of 1,376 m.

The climate is dry tropical. Statistics for the town are not available but the district is situated in a temperature region with hot summer (mean temperature of the hottest month over 32°C) and mild winter (mean temperature of coldest month 10-21°C). The lowest temperature in winter is 0°C, the maximum in summer 48-49°C. Mean annual rainfall is 250 mm (Khan 1991).

The vegetation of the area is categorized as tropical thorn forest. It can be divided naturally in four clear-cut zones with very different characteristics. The easternmost is the river Indus with its sandbanks, floodplain and waterworks. Above the flood level is a 3-20 km wide strip of heavily populated, irrigated agricultural land, bordered to the west by a big irrigation canal. Behind the canal is less heavily populated but still more or less cultivated dry steppe. Barren mountains on the western and north-western borders of the district form the fourth zone.

Ornithologically the district is interesting in many ways. Firstly, its zoogeographical position on the border between the Palearctic and Indomalayan regions, with the fauna a mixture of both. Secondly, it is situated on one of the major migration routes of the world, the Indus flyway, and migrants and winter visitors form a very important part of the birdlife practically all of the year. Thirdly, the Indus is not only a flyway but it is also a major wetland that harbours a rich variety of species,



Map of Dera Ismail Khan District

both resident and migratory. It was exciting that the area had never been surveyed ornithologically - no British birdwatching officers were stationed there during the time of the British Raj, and it has not been visited by Pakistani ornithologists subsequently. T. J. Roberts passed through the area only once (pers. comm. 1994).

During ten years of residence I have been able to visit all four zones at all times of the year. Because of security problems, visits to the southernmost reaches of the river, the southern and south-western areas of dry steppe, and the western hills have been few.

LOCALITIES

- Dera Ismail Khan: the town itself, including the Cantonment.
- The Compound: on the outskirts of the town, an area of c. 8 ha where my residence was situated, consisted of fields, gardens, houses and a pond filled with sewage water.
- Chashma, Bridge Lake and Dhop Shumali: wetlands created by waterworks on the Indus. Chashma is the most important with extensive upstream headpond and seepage areas, having internationally important status.
- Kotla Habeeb: a small overgrown perennial watercourse in the midst of fields and some wasteland; unfortunately it has recently been largely destroyed.

SYSTEMATIC LIST

In the case of species living in a restricted habitat, characterization of their status is given regarding that particular habitat, e.g. a wetland species can be described as common, although it only occurs by the river.

Terms used for describing status are as follows, given in descending order: abundant, very common, common, not uncommon, uncommon, rare, very rare.

There are some species for which no status is given as the data collected were felt to be inadequate. They are mainly species that occur only in the western hills, or those with their main population apparently concentrated in the inadequately covered south-western plains.

Abbreviations used:

(Br) proof of breeding found. In most cases this refers to nests found with eggs or chicks. With nidifugous species chicks seen and in some cases parent(s) carrying food or faeces to/from a hole or one particular spot.

* species not previously reported from North West Frontier Province, based on Roberts (1991-1992).

SEE-SEE PARTRIDGE *Ammoperdix griseogularis* Locally common resident but has disappeared from some places. The best count was 44 birds in eight flocks above Bilot on 1 December 1990. Much sought after by hunters.

CHUKAR *Alectoris chukar* Seen only in the western hills, where two birds on 6 February 1993.

BLACK FRANCOLIN *Francolinus francolinus* Rare. Most sightings may refer to escapes. Single birds, probably of wild origin, occasionally seen/heard on Bridge Lake. According to a local hunter still existed around Ramak in fairly good numbers.

GREY FRANCOLIN *Francolinus pondicerianus* Locally not uncommon. Scattered ones and twos here and there in the western plains, some probably escapes. Mainly survived at the foot of the north-western Hills. Commonly hunted.

COMMON QUAIL *Coturnix coturnix* Common migrant, 12 February-10 June and 9 September-28 October. Caught with nets in large numbers by local people.

*LESSER WHISTLING-DUCK *Dendrocygna javanica* (Br) Regular in summer on best wetlands. Sightings 25 April-27 October, but mainly in May-August.

GREYLAG GOOSE *Anser anser* Rare migrant/winter visitor. Nine sightings of flocks of 3-22 birds, 13 November-9 April.

BAR-HEADED GOOSE *Anser indicus* Regular but rare winter visitor on the river, 9 November-24 March.

RUDDY SHELDUCK *Tadorna ferruginea* Common winter visitor on the river, 10 October-5 May. Once in summer: one on 9 June 1997, on Bridge Lake.

COMMON SHELDUCK *Tadorna tadorna* Very rare straggler. Five birds were seen on Chashma on 28 December 1988.

COTTON PYGMY-GOOSE *Nettapus coromandelianus* Irregular and uncommon visitor. Most sightings were in October-November. The biggest gathering was c. 30 birds on Chashma on 16 February 1993. After 1993, one sighting only: two birds on Dhop Shumali on 12 March 1998.

GADWALL *Anas strepera* Common winter visitor from October-March, 19 August-20 April.

EURASIAN WIGEON *Anas penelope* Common winter visitor in October-March, 10 August-30 May.

MALLARD *Anas platyrhynchos* Common winter visitor from end October-March, 14 September-25 April.

NORTHERN SHOVELER *Anas clypeata* Common winter visitor from October-March, 23 August-18 May. A flock of seven birds on Chashma on 4 June 1993 was the only sighting of any dabbling duck during summer.

NORTHERN PINTAIL *Anas acuta* Common winter visitor from October-March, 26 August-15 April.

GARGANEY *Anas querquedula* Common migrant, 7 March-23 May, and 3 August-17 October.

COMMON TEAL *Anas crecca* Common winter visitor from end September-March. Sightings 23 August-12 April.

*MARBLED DUCK *Marmaronetta angustirostris* Rare spring migrant. Five sightings of 1-3 birds on Bridge Lake, 11 February-12 April.

RED-CRESTED POCHARD *Rhodonessa rufina* Common winter visitor in January-February but numbers fluctuated. Sightings 30 November-2 April.

COMMON POCHARD *Aythya ferina* Common winter visitor in October-March. Sightings 6 October-25 April.

- Twice seen in summer: c. 20 on 14 June 1996 on Chashma, two on 22 June 1996 on Bridge Lake.
- FERRUGINOUS POCHARD *Aythya nyroca* Uncommon winter visitor, 8 November-9 April. The biggest gathering was 30 birds on 9 January 1990 on Chashma. Recorded less frequently in recent years.
- TUFTED DUCK *Aythya fuligula* Common winter visitor from the latter half of October-March. Sightings 14 September-25 April. In 1996 one wounded male was seen on Chashma up to 14 June.
- GREATER SCAUP *Aythya marila* Very rare migrant. One male with two females on 9 April 1989 on Bridge Lake. Roberts (1991-1992) reported seven sightings.
- EURASIAN WRYNECK *Fynx torquilla* Uncommon migrant, irregular in winter. In spring there was a peak in March, and the last sighting was on 23 April. In autumn the first was on 30 August, but there was no peak and it was generally less common than in spring.
- YELLOW-CROWNED WOODPECKER *Dendrocopos mahrattensis* (Br) Very local resident. Seen mainly on the Compound and in Dera Ismail Khan Cantonment, rarely elsewhere.
- SIND WOODPECKER *Dendrocopos assimilis* Very rare. Seen twice: on 9 October 1990 on the north-western plains and on 23 October 1990, by Bridge Lake.
- BLACK-RUMPED FLAMEBACK *Dinopium benghalense* (Br) Very local resident. Seen mainly on the Compound and in Dera Ismail Khan Cantonment, rarely elsewhere.
- COPPERSMITH BARBET *Megalaima haemacephala* Uncommon. Recorded all year but mainly in March-October, in the Compound and Dera Ismail Khan Cantonment only.
- COMMON HOOPOE *Upupa epops* Common winter visitor, 3 August-25 May, though most had left by the end of March.
- EUROPEAN ROLLER *Coracias garrulus* In spring not uncommon; in summer very rare; in autumn a common migrant. In spring single birds were seen irregularly from 19 April-27 May. In summer once: four birds on the eastern side of Sheikh Budin on 28 June 1996. In autumn it was seen from 2 August-9 October, with the peak in the latter half of August/beginning of September, e.g. 68 birds on 6 September 1992 alongside a 40 km stretch of the road between Dera Ismail Khan and Tank.
- INDIAN ROLLER *C. benghalensis* (Br) Common resident.
- COMMON KINGFISHER *Alcedo atthis* Not uncommon winter visitor, 29 August-15 May, mainly in October-March.
- WHITE-THROATED KINGFISHER *Halcyon smyrnensis* (Br) Common resident throughout the area.
- PIED KINGFISHER *Ceryle rudis* (Br) Common resident on the river, in winter often seen elsewhere, too.
- GREEN BEE-EATER *Merops orientalis* (Br) Very common in summer, uncommon in winter. Most had left by the end of October, returning in March.
- BLUE-CHEEKED BEE-EATER *Merops persicus* Rare in spring, occasionally in summer, common in autumn. In spring six sightings of 1-3 birds 19 April-22 May. In summer 2-3 birds were seen twice in suitable habitat, but there was no proof of breeding. In autumn there were sightings of up to 60 birds 30 July-17 November, with the peak in September-early October; south-westerly migration was noted on several occasions.
- BLUE-TAILED BEE-EATER *Merops philippinus* Very rare. After scrutinising hundreds of large bee-eaters over the years, one bird was finally found on 7 September 1997.
- PIED CUCKOO *Clamator jacobinus* Common autumn visitor, 22 June-2 October, with the peak in August.
- COMMON HAWK CUCKOO *Hierococcyx varius* Uncommon summer visitor, very rare in winter. In winter once: one bird by Bridge Lake on 17 January 1993. Otherwise seen or heard 21 February - 30 June. The frequency of encounters increased during the period.
- EURASIAN CUCKOO *Cuculus canorus* Rare migrant. In spring seen three times 19 April-1 May. In autumn three times 23 August-11 September.
- ASIAN KOEL *Eudynamis scolopacea* (Br) Common summer visitor, rare in winter. Mostly seen in March-October, but odd individuals overwintered annually.
- GREATER COUCAL *Centropus sinensis* Common resident.
- ALEXANDRINE PARAKEET *Psittacula eupatria* (Br) Rare resident. A few pairs in the Compound and Dera Ismail Khan Cantonment. The chicks were often taken from the nests to be sold.
- ROSE-RINGED PARAKEET *Psittacula krameri* (Br) Very common resident, occurring throughout the area.
- ALPINE SWIFT *Tachymarptis melba* Not uncommon migrant in spring, occasionally in summer, uncommon in autumn. In spring sightings 9 February-20 April. More than 100 birds seen three times, all heading north-east around Sheikh Budin: 490 on 22 February 93, 120 on 15 March 1997 and an extraordinary cloud-like flock of 2,300 birds on 23 March 1995 in overcast weather. In summer seen twice: five flew east on 30 June 1993 and two flew south-east on 1 July 1996. In autumn small numbers were seen irregularly, 24 August-13 November, and flocks were seen heading both SE-SSE and SSW-SW.
- COMMON SWIFT *Apus apus* Not uncommon migrant in spring, rare in autumn. In spring sightings 22 March-27 April, up to 35 per day, peak 10-15 April. In autumn five sightings of 1-3 birds 26 August-2 October.
- HOUSE SWIFT *Apus affinis* (Br) Abundant summer visitor, uncommon in winter. The bulk of the population moved away by the end of October, and returned in March when over 200 birds were once seen flying high north-west. In winter some tens of birds were present, exclusively in Dera Ismail Khan town.
- PALLID SCOPS OWL *Otus brucei* Rare resident around Sheikh Budin.
- COLLARED SCOPS OWL *Otus bakkamoena* Very rare. Sighted once only: on 29 April 1997 near Dhoph Shumali.
- EURASIAN EAGLE OWL *Bubo bubo* Rare in the north-western hills, where single birds were seen on 20 February 1990 and 17 December 1997.

- *LITTLE OWL *Athene noctua* Two sightings in the north-western hills: one on 12 October 1997 and two (one calling) at the mouth of a cliff hole on 4 November 1989. These records extended the known range of the species 200 km north-west.
- SPOTTED OWLET *Athene brama* (Br) Common resident on the plains wherever there were some mature trees; also scattered pairs in the north-western hills.
- LONG-EARED OWL *Asio otus* Rare migrant and winter visitor. In October single birds twice. In winter two birds on 1 January 1997 and one on 22 February 1998 at Bridge Lake. In spring four sightings totalling six birds, 21 March-27 April.
- SHORT-EARED OWL *Asio flammeus* Rare migrant. In spring single birds seen three times 7 March-11 April, in autumn once: on 9 October 1997.
- SYKES'S NIGHTJAR *Caprimulgus mahrattensis* Not uncommon summer visitor in SW-NW plains. Sightings 18 March-9 October.
- ROCK PIGEON *Columba livia* (Br) Common resident in the hills.
- YELLOW-EYED PIGEON *Columba eversmanni* Uncommon migrant. In spring three times: flocks of 5-48 birds, 15-27 April. In autumn 1-19 birds three times, 8-19 October.
- ORIENTAL TURTLE DOVE *Streptopelia orientalis* Rare autumn migrant, very rare winter visitor. In autumn 1-2 birds seen four times 24 September-12 November. In winter once, 15 January 1995.
- LAUGHING DOVE *Streptopelia senegalensis* (Br) Very common resident.
- RED TURTLE DOVE *Streptopelia tranquebarica* (Br) Common summer visitor. The first arrival was noted on 31 March, and they had virtually all departed by the end of August. After that only twice: 1 October 1990 and 4 October 1997.
- EURASIAN COLLARED DOVE *Streptopelia decaocto* (Br) Common resident.
- *YELLOW-FOOTED GREEN PIGEON *Treron phoenicoptera* Irregular, but not uncommon visitor almost throughout the year. The biggest flock was of 19 birds.
- | No. of sightings | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|----|---|---|---|---|
| ♂ | F | M | A | M | ♀ | ♀ | A | S | 0 | N | D |
| 6 | 4 | 3 | 6 | 1 | 3 | 2 | 14 | 3 | 5 | 0 | 0 |
| Average no. of birds | | | | | | | | | | | |
| ♂ | F | M | A | M | ♀ | ♀ | A | S | 0 | N | D |
| 5 | 5 | 3 | 6 | 1 | 5 | 5 | 5 | 8 | 3 | | |
- MACQUEEN'S BUSTARD *Chlamydotis macqueeni* A single bird on 9 October 1993 in the north-western plains.
- DEMOISELLE CRANE *Grus virgo* Uncommon migrant, less common than Common Crane. In spring migrated during a very restricted period: 21-24 March, when flocks were heard flying N-NNW over the Compound at night, often in thunderstorms or rain. In autumn seen 6 September-6 October, occasionally resting by the river or on the north-western plains. Commonly trapped in spring.
- COMMON CRANE *Grus grus* Regular uncommon migrant. Migrants heading NW seen 17 March-5 April and heading ESE-SSE 5 September-18 October, with the peak from 5-15 October. Seldom heard at night. Commonly trapped in spring.
- WATER RAIL *Rallus aquaticus* Uncommon winter visitor, 19 October-12 March.
- *WHITE-BREASTED WATERHEN *Amaurornis phoenicurus* (Br) Common resident on roadside ditches and sewage water ponds. Appeared to be rapidly expanding in Pakistan as Roberts (1991-1992) did not include NWFP in its range.
- BAILLON'S CRAKE *Porzana pusilla* Uncommon migrant, 9 March-3 May, and 28 September-11 November. Twice an adult and 1-2 juveniles were seen together but breeding was not proved.
- RUDDY-BREASTED CRAKE *Porzana fusca* Uncommon migrant/winter visitor. Seven sightings 23 August-22 April.
- *WATERCOCK *Gallicrex cinerea* Very rare straggler. One bird in rice field at Kotla Habeeb on 12 August 1993, 350 km west of its normal range.
- PURPLE SWAMPHEN *Porphyrio porphyrio* Not uncommon resident in the best wetlands. 70 birds counted on Chashma on 9 January 1990.
- COMMON MOORHEN *Gallinula chloropus* (Br) Common resident in all wetlands.
- COMMON COOT *Fulica atra* Common winter visitor in October- March. Some birds regularly lingered up to the middle of May. Single birds overwintered twice.
- CHESTNUT-BELLIED SANDGROUSE *Pterocles exustus* Uncommon resident in western and north-western plains. Trapping took place commonly in the spring and autumn.
- PINTAIL SNIPE *Gallinago stenura* Rare migrant/winter visitor. Five sightings of single birds 18 September-26 March. Might be more frequent but difficult to distinguish from Common Snipe.
- COMMON SNIPE *Gallinago gallinago* Common migrant and winter visitor, 13 August-27 April. Numbers highest in January-middle March; the biggest gathering was 77 birds on Bridge Lake on 3 March 1990.
- JACK SNIPE *Lymnocyptes minimus* Uncommon migrant. In spring four sightings of 1-3 birds 18 February-5 April. In autumn three sightings 6 October-13 November.
- BLACK-TAILED GODWIT *Limosa limosa* Erratic migrant and winter visitor. In autumn seen 29 August-30 November, more than two birds together only once. In winter seen six times, normally 1-12 birds. A flock of c. 600 birds on Chashma on 21 February 1997 was extraordinary. Migration starts in the first half of March, with the peak at the end of March-beginning of April. The last sighting was on 18 May.
- *BAR-TAILED GODWIT *Limosa lapponica* Very rare. An injured individual on Bridge Lake on 25 April and 5 May 1993.
- *WHIMBREL *Numenius phaeopus* Uncommon autumn migrant for a very short period. Sightings 21 April-6 September, on migration only, often with Eurasian Curlews.
- EURASIAN CURLEW *Numenius arquata* Common migrant, very rare in winter. In spring sightings 25 March-16 May. In autumn 1 July-13 November, with a clear

- peak at the end of August-beginning of September. Twice in winter: singles on 8 January 1997 and on 30 January 1998, on Bridge Lake.
- SPOTTED REDSHANK *Tringa erythropus* Not uncommon migrant but numbers fluctuate, rare in winter. In spring met with 2 March-27 April, in autumn 6 September-13 November. Single birds seven times in winter.
- COMMON REDSHANK *Tringa totanus* Common migrant, not uncommon in winter, very rare in summer. In spring numbers increase in March, with the last sighting on 18 May. In summer once: on 17 June 1992, one on Bridge Lake. In autumn first on 3 August, numbers decreased in October.
- *MARSH SANDPIPER *Tringa stagnatilis* Uncommon migrant, very rare in winter. In spring seen 26 March-27 April, up to three birds together. In autumn singles seen 29 July-10 November. In winter single birds three times.
- COMMON GREENSHANK *Tringa nebularia* Very common migrant, common in winter, rare in summer. Sightings 30 June-23 May, twice in between: nine on 9 June 1997 and five on 17 June 1992, both on Bridge Lake.
- GREEN SANDPIPER *Tringa ochropus* Common migrant and winter visitor. Sightings 27 June-3 May. Peaks difficult to define as the birds occurred scattered around ponds and smaller bodies of water.
- WOOD SANDPIPER *Tringa glareola* Common migrant, uncommon winter visitor. Sightings 29 July-16 May. Peaks in April and end of August-September.
- *TEREK SANDPIPER *Xenus cinereus* Uncommon autumn migrant. 1-8 birds flying south low along the river, 29 July-31 August.
- COMMON SANDPIPER *Actitis hypoleucos* Common migrant and winter visitor. Sightings 1 July-18 May.
- LITTLE STINT *Calidris minuta* During migration not uncommon, irregular in winter. Sightings 18 September-18 May. Numbers highest in March (up to 30 birds on Bridge Lake) and October (up to 20 birds on Bridge Lake).
- TEMMINCK'S STINT *Calidris temminckii* Common migrant and winter visitor, but numbers varied greatly. Sightings 3 August-18 May. Peaks in October and in March (up to 250 birds on Bridge Lake). In winter up to 130 birds on Bridge Lake.
- DUNLIN *Calidris alpina* Not uncommon migrant/winter visitor though very irregular in occurrence. Sightings 28 September-16 May. The biggest gathering was 87 birds on 22 February 1992 on Bridge Lake.
- *CURLEW SANDPIPER *Calidris ferruginea* Very rare. A single bird was seen with two Dunlins on Chashma on 13 April 1998.
- RUFF *Philomachus pugnax* Regular but uncommon migrant. In spring flocks of 1-40 birds seen 12 March-18 May, mainly on flooded fields. In autumn up to seven birds seen 3 August-11 November, on Bridge Lake only.
- GREATER PAINTED-SNIPE *Rostratula benghalensis* (Br) Irregular summer visitor, sightings 19 March-7 September. Male with one pullus on the Compound on 31 May 1991.
- PHEASANT-TAILED JACANA *Hydrophasianus chirurgus* (Br) Common summer visitor, scarce in winter. Small numbers overwintered, mainly on Chashma. The numbers increased greatly during the first half of May, and most left in September.
- GREAT THICK-KNEE *Esacus recurvirostris* (Br) Uncommon resident on the Indus. Breeding recorded on 18 May 1990 when an adult and one pullus were seen near Bridge Lake.
- BLACK-WINGED STILT *Himantopus himantopus* (Br) Common throughout the year. Migration was seen in April (e.g. 200 birds in five flocks flew northwest on 28 April 1990).
- *PIED AVOCET *Recurvirostra avosetta* Erratic, recorded on Chashma only. In spring four sightings 7-24 March of 1-2, but on 7 March 1989 of c. 50 birds. In autumn once: on 19 October 1989, a flock of 13 individuals. Once in winter: a single on 5 January 1997.
- *PACIFIC GOLDEN PLOVER *Pluvialis fulva* Regular but uncommon migrant, 18 February-25 April, and 6 September-10 November.
- GREY PLOVER *Pluvialis squatarola* Regular and not uncommon migrant, irregular in winter. The numbers increased from the beginning of February and more than ten birds were seen several times in February-March. The last in spring was on 18 May. The first in autumn was on 23 August, with the peak in October.
- *COMMON RINGED PLOVER *Charadrius hiaticula* Uncommon migrant/winter visitor. Sightings almost annually, 21 August-28 March. Normally single birds, but on 21 August 1992 a flock of eight birds was seen flying south low over the river.
- LITTLE RINGED PLOVER *Charadrius dubius* (Br) Common migrant and winter visitor, rare in summer. Migrants began to arrive in the first half of August, and most had left by the end of March. Breeding was recorded in 1992.
- KENTISH PLOVER *Charadrius alexandrinus* Common in spring, uncommon in autumn, erratic in winter. In winter absent in some years, but up to 15 birds were seen on Bridge Lake in others. The numbers began to increase in February, with a peak in the middle of March (e.g. 60 birds on 18 March 1990). The last one was seen on 23 May. The first arrival was on 30 July, with the peak in the first half of October, when up to 33 birds were seen.
- *GREATER SAND PLOVER *Charadrius leschenaultii* Very rare autumn migrant. One bird on Bridge Lake 11 October-17 December 1989, and one on the river near Dera Ismail Khan on 17 October 1994.
- NORTHERN LAPWING *Vanellus vanellus* Common winter visitor, 19 October-5 April. The peak (over 100 on Bridge Lake) was in January-first half of February.
- RED-WATTLED LAPWING *Vanellus indicus* (Br) Very common resident.
- SOCIABLE LAPWING *Vanellus gregarius* Very rare migrant. Two birds were seen on 15 March 1997 in the north-western plains.
- WHITE-TAILED LAPWING *Vanellus leucurus* Common migrant, uncommon in winter. In spring numbers

- were at their highest, up to 30 birds, in February. Disappeared by the end of March, and only twice seen later: three on 23 May 1993, and one up to 9 June 1997 on Bridge Lake. The return passage starts early: on 1 July 1991 three were flying south on Bridge Lake. Scarce prior to September, with the peak at the end of September-beginning of October, when up to 60 birds were seen.
- INDIAN COURSER *Cursorius coromandelicus* Straggler. Two were seen in the north-western plains on 24 August 1997.
- *COLLARED PRATINCOLE *Glareola pratincola* Very rare. Constant searching for the species was rewarded by one individual on 21 May 1998, on Chashma on our last journey from Dera Ismail Khan. Two unidentified large pratincoles were seen flying south on 18 September 1996 over the Compound.
- SMALL PRATINCOLE *Glareola lactea* Very common in spring, irregular in summer, common in autumn. The first arrivals were on 2 March, with the peak in the middle of April. In summer often none, but occasionally up to 250 birds on the Bridge Lake. Regularly seen again in August-September. An incredible cloud of 6,700 birds was concentrated on a small islet near Dhop Shumali on 29 August 1997, during an extraordinary high flood on the river. The last sighting was on 15 October.
- INDIAN SKIMMER *Rynchops albicollis* Uncommon migrant and summer visitor. Six sightings 9 March-23 August. In spring 1-3 birds together, in August flocks of five and seven flying south.
- PALLAS'S GULL *Larus ichthyaetus* Uncommon regular winter visitor, 19 October-24 March. The biggest gatherings were on Chashma, where up to 22 were seen.
- YELLOW-LEGGED GULL *Larus cachinnans* Not uncommon migrant and winter visitor, 14 September-16 May, but mainly in October-March. The numbers were highest in February, when up to 80 individuals were noted on Chashma.
- BROWN-HEADED GULL *Larus brunnicephalus* Regular but uncommon winter visitor, very rare in summer. Sightings 21 October-16 February. After that, single subadult birds were seen once in April, twice at the beginning of May and from 29 July-3 August 1997.
- BLACK-HEADED GULL *Larus ridibundus* Very common migrant and winter visitor, uncommon in summer. The numbers increased in November and over 1,000 normally overwintered on Chashma; scarce after April.
- GULL-BILLED TERN *Gelochelidon nilotica* (Br) Common migrant, occasional in summer, rare in winter. The first in spring was on 14 March, with the peak in April or at the beginning of May. Breeding was confirmed once, in 1994. In autumn migrants were seen 12 August-22 October, without a prominent peak, and it was generally less common than in spring. In winter twice: on 14 December 1997 on Bridge Lake, and on 16 February 1993 on Chashma.
- CASPIAN TERN *Sterna caspia* Common migrant in spring, uncommon but regular in autumn, rare in summer, very rare in winter. In spring sightings 14 March-9 May, with the peak at the end of March-beginning of April. 1-3 birds were seen three times in June. In autumn, sightings 5 September-21 November. In winter twice: one on 17 December 1997 on Chashma, and two on 11 February 1998 on Bridge Lake.
- RIVER TERN *Sterna aurantia* (Br) Common resident on the river, wandering widely along the watercourses and floods throughout the area.
- *COMMON TERN *Sterna hirundo* Very rare. One individual of the nominate race was seen on Bridge Lake on 5 and 25 March 1993.
- LITTLE TERN *Sterna albifrons* (Br) Not uncommon migrant and summer visitor, very rare in winter. Sightings 27 February-28 October. In winter once: one on 24 January 1993 on Chashma.
- BLACK-BELLIED TERN *Sterna acuticauda* Common on the river from the end of September to the beginning of April. Not seen in June-July.
- WHISKERED TERN *Chlidonias hybridus* Common migrant, occasional in summer, rare in winter. The first arrivals were on 1 April, with the peak in May. In June-July occasionally singles were seen. In autumn the first was on 30 July, with the peak in September, and last sighting on 27 October. In winter seen four times, normally single birds, but on 21 February 1997 nine were on Chashma.
- WHITE-WINGED TERN *Chlidonias leucopterus* Very rare migrant. A single bird on 18 May 1997 on Bridge Lake.
- OSPREY *Pandion haliaetus*. Regular but uncommon migrant, rare in winter. In spring 18 February-29 April. In autumn 13 September-9 November. In winter seen four times.
- ORIENTAL HONEY-BUZZARD *Pernis ptilorhynchus* Irregular migrant, uncommon winter visitor. Sightings 24 August-15 May. In April migration was in a WNW-NNW direction, and in September a S-SSE direction. An exceptional migration was noted on 12-13 September 1992: 33 and 47 individuals respectively.
- BLACK-SHOULDERED KITE *Elanus caeruleus* (Br) Not uncommon breeding resident.
- BLACK KITE *Milvus migrans* (Br) Common breeding resident, very common winter visitor from September to March. In March-April a north-westerly migration of up to 60 birds/day was noted. From the latter half of August to mid September daily totals of up to 220 individuals were seen heading SSE.
- BRAHMINY KITE *Haliastur indus* Very rare straggler on the river. Single sub-adult birds were seen on 13 November 1988, 4 April 1990 and 5 May 1993.
- PALLAS'S FISH EAGLE *Haliaeetus leucoryphus* Rare but regular winter visitor, 19 October-18 April. An adult was seen only once.
- *WHITE-TAILED EAGLE *Haliaeetus albicilla* Very rare. A first calendar-year bird (same individual?) was noted on 26 September and 26 December 1993 on Bridge Lake and Dhop Shumali, respectively. An immature was seen over Bridge Lake on 29 February 1996.
- EGYPTIAN VULTURE *Neophron percnopterus* Rare migrant. In spring four sightings (eight individuals) 18

- March-24 April. In autumn five sightings (13 individuals) 24 August-12 October.
- WHITE-RUMPED VULTURE *Gyps bengalensis* Regular visitor in February-July, occasional in August-January. No breeding colonies were noted.
- EURASIAN GRIFFON *Gyps fulvus* Rare visitor in October-December, more often in January-March. Sightings 2 October-17 April.
- CINEREOUS VULTURE *Aegyptius monachus* Very rare visitor. Single adults were seen on 8 October 1990, 6 February 1993 and 1 April 1989.
- SHORT-TOED SNAKE EAGLE *Circaetus gallicus* Regular but uncommon migrant, very rare in winter. Sightings 24 August-10 November and 5 February-14 April. Once in winter: 14 December 1997, one flew south-east over Bridge Lake.
- EURASIAN MARSH HARRIER *Circus aeruginosus* Common migrant and winter visitor, 14 August-29 April. In autumn migrating birds were seen 26 August-6 November, with a peak from 10-25 September. In spring respective dates were 11 March-28 April and 21-31 March. In March 1989 a pair built a nest by Bridge Lake and, although the female was subsequently seen sitting on the nest, the site was deserted in April.
- HEN HARRIER *Circus cyaneus* Rare migrant/winter visitor. 10 sightings (five males, five females), 1 December-23 March.
- PALLID HARRIER *Circus macrourus* Regular and not uncommon migrant. In spring sightings 19 March-23 April, with a peak from 22-23 March. In autumn 14 September-18 November, with a peak from 21-30 September.
- MONTAGU'S HARRIER *Circus pygargus*. Regular and not uncommon migrant, slightly more common than Pallid Harrier. In spring seen 9 March-16 April, with a peak from 23-31 March. In autumn 24 August-27 October, with a peak from 6-13 September.
- PALLID/MONTAGU'S HARRIER *Circus macrourus/pygargus*. More than 25% of all sightings of Pallid/Montagu's Harriers were of unidentified "ringtails". Once in winter: one on 10 January 1991 on Bannu Road.
- SHIKRA *Accipiter badius* Irregular visitor almost throughout the year. Not seen in June, and in May only once. Most sightings were on the Compound.
- EURASIAN SPARROWHAWK *Accipiter nisus*. Common migrant, rare in winter. In spring seen 16 February-26 April. In March it was seen significantly less often than in February or in April. In autumn seen 13 September-30 November, with a peak from 15-30 October. In winter three times, all single males.
- EURASIAN SPARROWHAWK/SHIKRA. *Accipiter nisus/badius* Almost half of all sightings of Sparrowhawks were not specifically identified.
- | No. seen | | | | | | | | | | | |
|----------|---|----|----|---|---|---|---|---|----|---|---|
| ♂ | F | M | A | M | ♂ | ♀ | A | S | 0 | N | D |
| 2 | 8 | 13 | 18 | 0 | 1 | 0 | 1 | 3 | 21 | 2 | 5 |
- NORTHERN GOSHAWK *Accipiter gentilis* Very rare migrant. Singles three times: 21 September 1997, 23 March 1995 and 10 April 1994.
- WHITE-EYED BUZZARD *Butastur teesa* Rare visitor. Four sightings of single birds, all juv./subad. Three in autumn 3 August-16 October. In spring only on 7 March 1991.
- COMMON BUZZARD *Buteo buteo*. Rare winter visitor/spring migrant. Seven sightings 26 January-15 March. Once a flock of three birds flew north, otherwise singles only were noted.
- LONG-LEGGED BUZZARD *Buteo rufinus*. Not uncommon migrant, rare in winter. Sightings 24 August-24 March, but in November-January only three times. A late spring migrant on 30 April 1991.
- LESSER SPOTTED EAGLE *Aquila pomarina*. Very rare. On 25 October 1996 an adult was seen by Bridge Lake.
- GREATER SPOTTED EAGLE *Aquila clanga*. Rare winter visitor. 1-4 sightings annually, irregularly 13 December-28 March on the Indus.
- TAWNY EAGLE *Aquila rapax*. Rare. Five definite sightings: three on 6 January 1997, one adult on 11 February 1998, one immature on 10 June 1991, one adult on 24 August 1997, and one exhausted adult on 26 August 1993.
- STEPPE EAGLE *Aquila nipalensis*. Common winter visitor, 12 September-17 April, with the peak in November-February.
- IMPERIAL EAGLE *Aquila heliaca*. Scarce winter visitor, very rare in summer. 2-5 sightings annually 4 October-2 April. Once in summer: 24 August 1997 a juvenile on the western plains.
- Aquila nipalensis/rapax/heliaca*. More than a third of all sightings relating to these three species were not identified to species.
- | No. of birds | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|
| ♂ | F | M | A | M | ♂ | ♀ | A | S | 0 | N | D |
| 3 | 4 | 6 | 2 | 1 | - | - | - | - | 2 | - | 1 |
- GOLDEN EAGLE *Aquila chrysaetos*. Rare winter visitor. On 24 October 1993 a juvenile flew south-east near Dera Ismail Khan; on 26 December 1992 one was noted at Sheikh Budin; one was seen on 31 January-1 February in the north-western hills - the last two were 3-4 calendar year birds.
- BONELLI'S EAGLE *Hieraaetus fasciatus*. Resident pair on Sheikh Budin. Courtship flight was seen but breeding was not confirmed.
- BOOTED EAGLE *Hieraaetus pennatus*. Not uncommon migrant, very rare in winter. In spring 10 February-11 April. In autumn 24 August-8 October. Between these periods singles were seen three times: 11 November 1988, 18 December 1994 and 27 January 1998.
- *LESSER KESTREL *Falco naumanni* Very rare migrant. An adult male on 12 October 1997 was seen in the north-western hills.
- COMMON KESTREL *Falco tinnunculus*. Common migrant, uncommon in winter, rare in summer. In spring migrants were seen from 7 March-15 April, with the peak from 20-31 March. In autumn it was seen from 7 September-15 November, with the peak from 20 September-5 October. In winter uncommon, mainly around the north-western hills. In summer occasionally found around Sheikh Budin.

- RED-NECKED FALCON *Falco chicquera* Uncommon autumn visitor, rare in spring. Seven sightings of single birds 3 August-4 November. Outside of this period only twice: 9 March 1991 and 26 March 1992.
- MERLIN *Falco columbarius* Very rare winter visitor. On 30 December 1992 a female was noted at Kotla Habeb.
- EURASIAN HOBBY *Falco subbuteo* Rare migrant. In spring five sightings of single birds 10 March-23 May. In autumn four sightings 18 September-12 October, on the latter date two, otherwise single birds.
- LAGGAR FALCON *Falco jugger* Very rare. Seen once: one bird flying south-east over the Compound on 4 October 1990. Trapping commonly takes place in October-November, e.g. on 19 October 1997, from one spot near Dhop Shumali, 22 traps belonging to at least two groups of trappers were counted.
- PEREGRINE FALCON *Falco peregrinus* Rare migrant/winter visitor. Local ones were seen seven times 22 October-31 January. It was twice seen migrating in a north-westerly direction: on 23 February 1993 and 24 February 1991. On 27 November 1997 one *F. p. babylonicus* flew north over the Compound. Trapping commonly takes place in October/November.
- LITTLE GREBE *Tachybaptus ruficollis* (Br) Common resident.
- *RED-NECKED GREBE *Podiceps grisegena* Very rare. A first year bird was seen on 6 October 1994 on Bridge Lake. Roberts (1991-1992) reported only three sightings for Pakistan.
- GREAT CRESTED GREBE *Podiceps cristatus* Uncommon and irregular winter visitor. Sightings of 1-50 birds from 1 December to 13 April, mainly on Chashma. Against this background a flock of 282 birds on 8 May 1995 on Chashma was very surprising. Four birds were also seen there on 5 May 1997.
- *HORNED GREBE *Podiceps auritus* Very rare. A single individual was seen on Bridge Lake on 30 January 1998. Roberts (1991-1992) reported only four sightings for Pakistan.
- BLACK-NECKED GREBE *Podiceps nigricollis* Regular winter visitor in small numbers, 23 October-14 April. The biggest gathering was of 35 birds on Chashma on 9 February 1991.
- DARTER *Anhinga melanogaster* Very rare. Seen three times: singles on 1 January 1989 and 13 September 1992 on Bridge Lake, and one on 17 December 1997 on Chashma.
- LITTLE CORMORANT *Phalacrocorax niger* (Br) Common resident.
- *INDIAN CORMORANT *Phalacrocorax fuscicollis* Rare visitor in spring and autumn. Four sightings of single birds: 23 October 1997, 3 November 1996, 25 April 1993, 2 May 1990.
- GREAT CORMORANT *Phalacrocorax carbo* Common winter visitor, 24 October-7 May. The biggest gathering was of 450 birds on Bridge Lake on 26 February 1998.
- LITTLE EGRET *Egretta garzetta* (Br) Common resident on the river. During floods it was dispersed on the plains west of Dera Ismail Khan: e.g. on 4 July 1992 c. 200 were concentrated on one of the last remaining flood ponds as small as 15x35 m.
- GREY HERON *Ardea cinerea* Common winter visitor, scarce in summer. The biggest gathering was of 79 birds on Bridge Lake on 29 February 1996. In autumn migration was noted from 5 August-31 December, and in spring from 28 February-24 April. The direction in autumn was south on the river, south-east elsewhere; in spring the direction was always to the north-west.
- PURPLE HERON *Ardea purpurea* (Br) Not uncommon resident, but numbers fluctuated. The biggest gathering was of 23 birds on Chashma on 27 May 1993. In November-January often absent, e.g. from Bridge Lake.
- GREAT EGRET *Casmerodius albus* A scarce resident, almost entirely restricted to the river; only twice seen elsewhere.
- INTERMEDIATE EGRET *Mesophoyx intermedia* Scattered but not uncommon resident on the river but numbers fluctuated. The biggest gathering was of 100+ birds on the Chashma grasslands, on 9 January 1990. It was occasionally seen west of the city on flood pools and watercourses.
- CATTLE EGRET *Bubulcus ibis* (Br) Common and widespread resident.
- INDIAN POND HERON *Ardeola grayii* (Br) Common resident.
- LITTLE HERON *Butorides striatus* Rare. Single individuals were seen three times on Chashma: 15 May 1997, 22 July 1990 and 30 September 1997.
- BLACK-CROWNED NIGHT HERON *Nycticorax nycticorax* (Br) Common resident, but numbers fluctuated. The biggest gathering was of 184 birds on Chashma on 30 September 1993. North-westerly migration was often seen from 14 April-12 May.
- LITTLE BITTERN *Ixobrychus minutus* Uncommon summer visitor, 23 May-3 July.
- YELLOW BITTERN *Ixobrychus sinensis* (Br) Common summer visitor, very rare in winter, 9 May-11 October. Single males were seen on Bridge Lake on 8 January 1997, and on Dhop Shumali on 12 March and 9 April 1998.
- CINNAMON BITTERN *Ixobrychus cinnamomeus* Fairly common summer visitor, 9 April-15 October. Once in winter: 10 December 1988 on Bridge Lake.
- *BLACK BITTERN *Dupetor flavicollis* Not uncommon summer visitor, 12 March-30 September.
- GREAT BITTERN *Botaurus stellaris* Rare and very local winter visitor, occasional sightings 19 October-12 March on Dhop Shumali only.
- GREATER FLAMINGO *Phoenicopterus ruber* Very rare straggler. Three juveniles on Chashma on 10 October 1990.
- GREAT WHITE PELICAN *Pelecanus onocrotalus* Very rare. Two individuals seen: an adult on 8 and 23 March 1989 on Chashma, and a juvenile on 6 October 1994 on Bridge Lake.
- GLOSSY IBIS *Plegadis falcinellus* Rare migrant visitor. In spring three sightings of 1-2 birds 25 March-1 May. In September 1997 twice: on 5th three and on 24th five birds.
- EURASIAN SPOONBILL *Platalea leucorodia* Regular and not uncommon migrant on the river. Seen 26

- September-5 November and again 7 March-18 May. It was twice noted in winter: three on 16 December 1997, and two on 11 February 1998 on Bridge Lake.
- BLACK STORK *Ciconia nigra* Uncommon but regular winter visitor on the river. Flocks of 1-19 birds were seen 4 October-26 March.
- WHITE STORK *Ciconia ciconia* Rare migrant and recently also winter visitor. In spring single individuals were seen three times 26-28 March. Two birds were noted feeding on Chashma on 21 February 1997. Three were around Bridge Lake on 30 November 1997 and one was there from 30 January-11 February 1998.
- RED-BACKED SHRIKE *Lanius collurio* Very rare. A first calendar-year male was seen by Bridge Lake on 23 August 1997.
- ISABELLINE SHRIKE *Lanius isabellinus* Regular but uncommon winter visitor, 13 August-31 March.
- BAY-BACKED SHRIKE *Lanius vittatus* (Br) Common summer visitor, few regularly overwinter. Migration started at the beginning of March with numbers increasing rapidly thereafter. The bulk of the population had left by the end of September.
- LONG-TAILED SHRIKE *Lanius schach* (Br) Common resident.
- SOUTHERN GREY SHRIKE *Lanius meridionalis* (Br) Common resident. A nest with full-grown chicks was found on 19 March 1993.
- RUFIOUS TREEPIE *Dendrocitta vagabunda* Rare in summer, not uncommon in winter. Numbers increased in October, and decreased again in March.
- HOUSE CROW *Corvus splendens* (Br) Abundant resident.
- COMMON RAVEN *Corvus corax* Uncommon resident in the western plains. Numbers appeared to be decreasing.
- EURASIAN GOLDEN ORIOLE *Oriolus oriolus* Common migrant, rare in summer. In spring less common than in autumn, sightings 15 April-6 May, with the peak around 25 April. In summer five sightings of 1-3 birds from 9-22 June. In autumn seen 2 August-11 October, with the peak from 20-31 August.
- *SMALL MINIVET *Pericrocotus cinnamomeus* Very rare. Seen only once: on 5 January 1997 two were seen in Chashma.
- LONG-TAILED MINIVET *Pericrocotus ethologus* Not uncommon winter visitor, 30 October-14 March.
- WHITE-BROWED FANTAIL *Rhipidura aureola* (Br) Not uncommon resident.
- BLACK DRONGO *Dicrurus macrocercus* (Br) Common in summer, much less so in winter. Southerly migration of up to 90 birds per morning was noted in mid September.
- ASHY DRONGO *Dicrurus leucophaeus* Two birds were seen flying south over the Compound on 6 October 1997. The species may have been overlooked.
- ASIAN PARADISE-FLYCATCHER *Terpsiphone paradisi* Very rare. A white male was seen on 11 September 1992 on the Compound.
- COMMON WOODSHRIKE *Tephrodornis pondicerianus* Very rare. A single bird on 19 September 1993 on the Compound.
- RUFIOUS-TAILED ROCK THRUSH *Monticola saxatilis* Very rare autumn migrant. Single females were seen on 31 August 1993 and 5 October 1997 in the north-western plains.
- BLUE ROCK THRUSH *Monticola solitarius* Uncommonly on hills in winter, not uncommon migrant in spring. The first sighting was on 4 November. Spring migrants were seen from 7 March-21 April, when it could turn up anywhere.
- BLUE WHISTLING THRUSH *Myophonus caeruleus* Rare winter visitor in the north-western hills, where singles were seen three times from 30 October-31 January.
- DARK-THROATED THRUSH *Turdus ruficollis* Not uncommon winter visitor, 25 October-25 March. The biggest flock was of seven birds, normally only 1-2 were seen together.
- REDWING *Turdus iliacus* Remnants of an individual were found on the Compound in February 1989, and the specimen is now in the collection of the Bombay Natural History Society. The first for Pakistan, and probably for the Indian subcontinent (T. J. Roberts *in litt.*)
- SPOTTED FLYCATCHER *Muscicapa striata* Very rare. Seen only on 6 September 1994, when surprisingly two individuals were seen, one on the Compound, and another by Bridge Lake.
- RED-THROATED FLYCATCHER *Ficedula parva* Common migrant, uncommon winter visitor. In spring numbers began to increase around 10 March, with the peak in the first half of April, and the last sighting on 1 May. In autumn the first was on 3 September, with the peak in the latter half of October. All but a few had disappeared by the end of November.
- ULTRAMARINE FLYCATCHER *Ficedula superciliaris* Very rare. A male was seen on the Compound on 17 March 1992.
- GREY-HEADED CANARY FLYCATCHER *Culicicapa ceylonensis* Very rare autumn migrant. Seen twice: on 20 November 1989 and 26 November 1992, both on the Compound.
- BLUETHROAT *Luscinia svecica* Common winter visitor, 6 September-27 April.
- RUFIOUS-TAILED SCRUB ROBIN *Cercotrichas galactotes* Regular autumn migrant in small numbers, 13 August-7 September.
- ORIENTAL MAGPIE ROBIN *Copsychus saularis* Very rare. A single male was noted on the Compound from 19 January-14 March 1995.
- INDIAN ROBIN *Saxicoloides fulicata* (Br) Common resident.
- RUFIOUS-BACKED REDSTART *Phoenicurus erythronota* Regular but uncommon winter visitor, 17 November-16 February.
- BLACK REDSTART *Phoenicurus ochruros* Common winter visitor, 15 October-19 April.
- PLUMBEOUS WATER REDSTART *Rhyacornis fuliginosus* Very rare winter visitor. A female was seen on 15 January 1989 by the river in Dera Ismail Khan Cantonment.
- COMMON STONECHAT *Saxicola torquata* Common migrant, rare in winter. Migration was commenced by males from 16-24 February, it was then common

- in March, and last seen on 28 April. In autumn the first sighting on 23 August, it was common in September-October, and the last ones were noted in the middle of November. In winter six sightings of 1-4 birds, mainly males.
- WHITE-TAILED STONECHAT *Saxicola leucura* (Br) Locally common resident.
- PIED BUSHCHAT *Saxicola caprata* (Br) Common summer visitor, occasionally overwintered. Males were the first to appear, from 13-18 February, and the species was then common in March. The last ones left by 20 November. In winter it was encountered four times, all males.
- GREY BUSHCHAT *Saxicola ferrea* Very rare migrant. A male was seen in the north-western plains on 23 March 1995.
- *HUME'S WHEATEAR *Oenanthe alboniger* (Br) Locally common resident in the north-western hills.
- NORTHERN WHEATEAR *Oenanthe oenanthe* Very rare migrant. A male by Bridge Lake on 25 April 1990 was the first for the Indus Plains.
- *FINSCH'S WHEATEAR *Oenanthe finschii* Very rare. A male was seen in the north-western hills on 7 September 1997.
- VARIABLE WHEATEAR *Oenanthe picata* Common migrant, fairly common winter visitor, 3 August-15 April. The pattern of occurrence of the different morphs is interesting: *picata* was the most common, comprising 54 % of all sightings. It was the first to start migration in August and was common throughout the winter. All had gone by the end of March, with the last seen on 19 March. *Capistrata* was seen in autumn only, from 31 August-30 December. In general, *opistholeuca* was slightly less common than *capistrata*, but occurred mainly in spring. With the exception of a male on 6 February, it was recorded from 15 March-11 April. In autumn it was noted three times from 4 October-2 December.
- PIED WHEATEAR *Oenanthe pleschanka* Very rare migrant. Three sightings: singles on 2 October 1992, 17 October 1994 and 23 March 1995.
- RUFIOUS-TAILED WHEATEAR *Oenanthe xanthopyrmyna* Common winter visitor in the hills, occasionally on the plains, 5 October-14 April.
- DESERT WHEATEAR *Oenanthe deserti* Not uncommon migrant, very rare in winter. In autumn seen 4 October-29 November. In winter once: a male near Dera Ismail Khan on 1-21 January 1989. In spring 3 February-18 April.
- ISABELLINE WHEATEAR *Oenanthe isabellina* Not uncommon migrant, 3 February-19 March and 12 August-18 November.
- CHESTNUT-TAILED STARLING *Sturnus malabaricus* Very rare. A juvenile was seen on the Compound on 10 October 1994.
- BRAHMINY STARLING *Sturnus pagodarum* Rare autumn migrant. Four sightings of 1-3 birds from 5 August-20 September.
- ROSY STARLING *Sturnus roseus* Common migrant. First stragglers on 19 March, but the masses did not arrive until 10 April, and the peak was from 15-25 April.
- The last ones were in June. During the peak migration the birds were very commonly hunted by men and boys by all possible means, mainly with airguns and slingshots. In autumn the first migrants were on 1 July, but there was no clear peak. The numbers fell sharply at the end of October, and the last sighting was on 11 November.
- COMMON STARLING *Sturnus vulgaris* (Br) Common migrant and winter visitor, uncommon in summer. Migration started in the first half of October, with the peak in November (e.g. 4,000 birds by Bridge Lake on 13 November 1988). In winter small flocks occurred almost anywhere, but big gatherings were rare. Spring migration started in early February, with the last sighting of migrants on 19 April. In summer six sightings.
- COMMON MYNA *Acridotheres tristis* (Br) Abundant resident.
- BANK MYNA *Acridotheres ginginianus* (Br) Common resident.
- WALLCREEPER *Tichodroma muraria* Winter visitor, perhaps regular in the north-western hills. Single birds were seen there twice: on 5 March 1989 and on 1 February 1998.
- BAR-TAILED TREECREEPER *Certhia himalayana* Rare winter visitor. Four sightings (including one overwintering) 9 December-12 March, all on the Compound.
- WHITE-CROWNED PENDULINE TIT *Remiz coronatus* Uncommon but regular winter visitor. The first ones were seen on 19 October, and all had left by the end of February. Once later: three on 14 April 1990 on Chashma.
- GREAT TIT *Parus major* Not uncommon winter visitor, 17 October-24 March.
- PLAIN/SAND MARTIN *Riparia diluta/riparia* Not uncommon migrant, rare in winter, 24 August-16 May. On 29 April 1997 an exceptional migration was seen: c. 1,200 birds flew north at Dhop Shumali. In summer once: three on 17 June 1992 over Bridge Lake.
- PLAIN MARTIN *Riparia paludicola* (Br) Very common in summer, uncommon in winter. Numbers decreased at the end of November, and in January it was seen only occasionally; however, in February it became common again.
- EURASIAN CRAG MARTIN *Hirundo rupestris* Regular winter visitor in the western and north-western hills. Sightings of up to 15 birds 1 December-23 March.
- ROCK MARTIN *Hirundo fuligula* Rare migrant. In spring three sightings of 2-20 birds 5 February-15 March. In autumn five sightings of 1-9 birds 11 September-30 October.
- BARN SWALLOW *Hirundo rustica* In summer not uncommon, but in the rest of the year it was very common. Breeding was not confirmed, but parents feeding juveniles (with yellow gapes) were often seen in April.
- WIRE-TAILED SWALLOW *Hirundo smithii* Constant vigilance for the species was rewarded on 22 June 1996, when one individual was noted over Bridge Lake.

- RED-RUMPED SWALLOW *Hirundo daurica* Common migrant, very rare in winter. In spring sightings 6 February-9 May, with the peak in the latter half of March. In autumn sightings 10 August-17 November, and the peak in October, when numbers were many times greater compared with those in spring (up to 100 birds/day). In winter once: one on 27 December 1997 on Kotla Habeeb.
- STREAK-THROATED SWALLOW *Hirundo fluviicola* (Br) Common summer visitor, few birds overwinter. The biggest colony consisted of 118 nests.
- WHITE-EARED BULBUL *Pycnonotus leucotis* (Br) Common resident.
- RED-VENTED BULBUL *Pycnonotus cafer*, (Br) Very common resident.
- ZITTING CISTICOLA *Cisticola juncidis* Not uncommon but very patchily distributed in summer, rare in winter. In spring started arriving in the middle of February, and the numbers decreased again in August. In November-January three sightings.
- STREAKED SCRUB WARBLER *Scotocerca inquieta* Common resident.
- RUFIOUS-VENTED PRINIA *Prinia burnesii* (Br) Common resident.
- STRIATED PRINIA *Prinia criniger* Not uncommon resident on hills.
- RUFIOUS-FRONTED PRINIA *Prinia buchanani* (Br) Common resident.
- GRACEFUL PRINIA *Prinia gracilis* (Br) Common resident.
- YELLOW-BELLIED PRINIA *Prinia flaviventris* (Br) Common resident.
- *ASHY PRINIA *Prinia socialis* Very rare. Two birds were seen near Chashma on 20 February 1997.
- PLAIN PRINIA *Prinia inornata* (Br) Common resident.
- ORIENTAL WHITE-EYE *Zosterops palpebrosus* Fairly common winter visitor, 27 October-30 March.
- CETTI'S BUSH WARBLER *Cettia cetti* Not uncommon winter visitor on best wetlands, 11 October-9 April.
- GRASSHOPPER WARBLER *Locustella naevia* Rare migrant: 12 April 1993, 19 April 1997 and 12 September 1992.
- MOUSTACHED WARBLER *Acrocephalus melanopogon* Common winter visitor, 23 August-29 April.
- PADDYFIELD WARBLER *Acrocephalus agricola* Regular but uncommon migrant, 12 March-15 May and 19 August-15 October.
- *EURASIAN REED WARBLER *Acrocephalus scirpaceus* Straggler. One bird was seen at Dhop Shumali on 9 April 1998. The first definite records for Pakistan and the Indian subcontinent were in southern Punjab in March and May 1993, and in Sindh on 12 January 1996 (Khan and Pyhäälä 1997). Roberts (1991-1992) quoted a possible nesting record from Christison and Ticehurst (1922), but this was not confirmed.
- BLYTH'S REED WARBLER *Acrocephalus dumetorum* Very common migrant in spring, common in autumn. In spring seen 12 April-7 June, with the exception of a singing male by Bridge Lake as early as 2 March 1994. In autumn sightings 29 July-5 October.
- CLAMOROUS REED WARBLER *Acrocephalus stentoreus* (Br) Very common migrant, common in summer, very rare in winter. In spring the first sightings were on 10 March, with the peak in April. Bred commonly in reedbeds (e.g. by Bridge Lake tens of pairs). The last ones were seen at the beginning of November. After that, singles were seen twice: on 27 December 1993 and 4 February 1989, both by Bridge Lake.
- BOOTED WARBLER *Hippolais caligata* Regular but uncommon migrant, rare in summer and in winter. In spring seen 14 March-6 May. In summer three times, but no hints of breeding. In autumn 5 August-14 October. In winter five sightings.
- *UPCHER'S WARBLER *Hippolais languida* Very rare. One bird was seen by Bridge Lake on 3 November 1996.
- COMMON CHIFFCHAFF *Phylloscopus collybita* Common winter visitor, 13 September-30 April.
- MOUNTAIN CHIFFCHAFF *Phylloscopus sindianus* Nine definite sightings 12 October-9 February. Might have been more frequent but distinction from Common Chiffchaff was difficult.
- PLAIN LEAF WARBLER *Phylloscopus neglectus* Very rare migrant. One was seen on 8 April 1990 by Bridge Lake.
- SULPHUR-BELLIED WARBLER *Phylloscopus griseolus* Rare migrant in spring, very rare in autumn. Four sightings 9 March-10 April. In autumn once: on 6 September 1994.
- BROOKS'S LEAF WARBLER *Phylloscopus subviridis* Rare winter visitor. Five sightings of single birds 24 December-9 March. HUME'S WARBLER *Phylloscopus humei* Common migrant and winter visitor. In autumn the first was on 8 September, with the peak in mid November. In spring the peak was during the last third of February, and the last sighting was on 15 April.
- GREENISH WARBLER *Phylloscopus trochiloides* *P. t. nitidus* was an uncommon autumn migrant, very rare in spring. In autumn sightings 8 September-15 October. In spring twice: on 22 April 1994 and on 26 April 1997. *P. t. viridanus* was an uncommon migrant, very rare in winter. In spring sightings 25 April-16 May, in autumn 23 September-13 October. In winter only once, in 1992-1993 when two individuals successfully overwintered on the Compound.
- YELLOW-EYED BABBLER *Chrysomma sinense* Very rare. Two on 18 March 1990, and one on 2 May 1990 by Bridge Lake.
- JERDON'S BABBLER *Chrysomma altirostre* Rare very local resident. On Bridge Lake up to 12 birds were present since March 1992. In winter 1998 the site was burned and ploughed, causing birds to disappear.
- COMMON BABBLER *Turdoides caudatus* (Br) Very common resident.
- STRIATED BABBLER *Turdoides earlei* (Br) Common resident.
- JUNGLE BABBLER *Turdoides striatus* (Br) Not uncommon resident.
- GREATER WHITETHROAT *Sylvia communis*. Very rare. One was seen by Bridge Lake on 6 September 1994.

- LESSER WHITETHROAT *Sylvia curruca* Very common winter visitor, 23 August-12 May.
- DESERT WARBLER *Sylvia nana* Common winter visitor, 4 October-31 March.
- ORPHEAN WARBLER *Sylvia hortensis* Uncommon migrant, very rare in winter. Sightings 15-18 March and 24 August-7 September. In winter once: a male on 28 January 1998 in the north-western plains. Seen exclusively in non-irrigated dry areas with scattered trees.
- *MÉNÉTRIES'S WARBLER *Sylvia mystacea* Very rare. A first calendar year bird was seen at Kotla Habeeb on 21 September 1993.
- *BLACK-CROWNED SPARROW LARK *Eremopterix nigriceps* Very rare. A male was noted near Bridge Lake on 27 April 1997.
- ASHY-CROWNED SPARROW LARK *Eremopterix grisea* Rare summer visitor. Four sightings of 1-4 birds 18 April-9 September.
- *RUFIOUS-TAILED LARK *Ammomanes phoenicurus* Very rare. One bird was noted at the same site on 24 August and 21 September 1997.
- DESERT LARK *Ammomanes deserti* Uncommon resident on NW Hills, common in winter. Numbers increased in October, and in winter it was seen occasionally also on the plains around Dera Ismail Khan. The winter visitors disappeared in February.
- BIMACULATED LARK *Melanocorypha bimaculata* Rare migrant. In spring three sightings of 1-9 birds 9-28 March. In autumn once: a flock of ten on 4 October 1997.
- GREATER SHORT-TOED LARK *Calandrella brachydactyla* Common migrant, uncommon in winter. In spring migration began in mid February, the peak was in March (up to 320 birds headed north-west in one morning), and the last ones were seen on 11 April. In autumn the first ones were on 31 August, the peak was at the end of September (up to 70 birds headed south-east in one morning).
- HUME'S SHORT-TOED LARK *Calandrella acutirostris* Very rare. A singing male was seen in the western plains on 25 May 1997.
- LESSER SHORT-TOED LARK *Calandrella rufescens* Very rare spring migrant. One was seen on 3 February 1997, and two on 19 March 1993 in the north-western plains.
- SAND LARK *Calandrella raytal* (Br) Common resident on the river.
- CRESTED LARK *Galerida cristata* (Br) Common resident.
- EURASIAN SKYLARK *Alauda arvensis* Common winter visitor, 30 October-28 March.
- ORIENTAL SKYLARK *Alauda gulgula* Common resident, but patchily distributed.
- PURPLE SUNBIRD *Nectarinia asiatica* (Br) Common summer visitor, very rare in winter. Sightings 11 March-6 October. A female overwintered on the Compound 1992-1993.
- HOUSE SPARROW *Passer domesticus* (Br) Abundant resident, very common migrant. Between 1,000-3,000 birds per day were often seen migrating through from 5-25 September. The highest numbers were seen in the evening of 17 September 1993, when 11,820 birds were counted in 40 minutes, heading SSE. In spring migration took place from February to early April, but it was much less prominent than in autumn.
- SPANISH SPARROW *Passer hispaniolensis* Common spring migrant, very rare in autumn and winter. Many flocks appeared in mid February, but the numbers start to decrease in the first week of March. The last sighting was on 23 April. In autumn there were three sightings 15 October-6 November. Single birds once in December once, and twice in January.
- SIND SPARROW *Passer pyrrhonotus* (Br) Not uncommon resident both on the river and in irrigated areas.
- CHESTNUT-SHOULDERED PETRONIA *Petronia xanthocollis* Uncommon summer visitor, 15 March-13 August.
- WHITE WAGTAIL *Motacilla alba* Common migrant and winter visitor, 5 August-2 May. No clear peaks.
- WHITE-BROWED WAGTAIL *Motacilla maderaspatensis* (Br) Regular resident in suitable localities.
- CITRINE WAGTAIL *Motacilla citreola* Common migrant and winter visitor. Sightings 29 July-25 May. In autumn the peak was in September, in spring it was in March.
- YELLOW WAGTAIL *Motacilla flava* Common migrant, irregular in winter. Sightings 19 August-2 May. In autumn numbers peaked irregularly in September or October. In winter there were normally few individuals, but flocks of 25 and 100 birds were encountered. In February numbers started to increase, and the peak was in the latter half of March-April.
- GREY WAGTAIL *Motacilla cinerea* Rare migrant. In spring three sightings 30 March-5 April, in autumn five sightings 6 September-2 November.
- PADDYFIELD PIPIT *Anthus rufulus* (Br) Common resident.
- TAWNY PIPIT *Anthus campestris* Common winter visitor, 24 August-25 March.
- LONG-BILLED PIPIT *Anthus similis* Not uncommon winter visitor, mainly in the north-western hills. Sightings of 1-3 birds 7 September-25 March.
- TREE PIPIT *Anthus trivialis* Common migrant. In spring seen 24 February-27 April, the peak was at the end of March/beginning of April. In autumn it occurred 23 August-24 October, and the peak was from 5-15 September.
- MEADOW PIPIT *Anthus pratensis* Very rare winter visitor and spring migrant. Singles by Bridge Lake on 18 December 1992, 14 March 1993 and 26 March 1990.
- RED-THROATED PIPIT *Anthus cervinus*. Rare winter visitor. Six sightings of 1-2 birds 8 November-17 March by Bridge Lake.
- ROSY PIPIT *Anthus roseatus* Rare winter visitor, but might have been overlooked. Four sightings of 1-2 birds 10 December-27 March by Bridge Lake.
- WATER PIPIT *Anthus spinoletta* Common winter visitor. The first ones were on 22 September after which numbers increased quickly. The peak of the spring migration was in the latter half of February. The last sighting was on 19 April.

- BLACK-THROATED ACCENTOR *Prunella atrogularis* Erratic migrant and winter visitor. Sightings 28 October-21 March. In some winters (e.g. 1993/1994 and 1994/1995) it was totally lacking, in some others (e.g. 1990/1991) it was common and stayed for a long period.
- BLACK-BREASTED WEAVER *Ploceus benghalensis* Rare summer visitor. Nine sightings of 1-3 birds 23 March-23 August.
- STREAKED WEAVER *Ploceus manyar* (Br) Common summer visitor, rare in winter. Flocks appeared suddenly from 10-15 April.
- Numbers decreased during first half of September. In October-March small flocks were noted occasionally.
- BAYA WEAVER *Ploceus philippinus* (Br) Uncommon summer visitor, 12 March-5 October.
- RED AVADAVAT *Amandava amandava* Uncommon and erratic visitor recorded throughout the year. Most sightings were in October-November. Normally 1-10 birds, but on 1 December 1996 about 50 by Bridge Lake.
- INDIAN SILVERBILL *Lonchura malabarica* (Br) Not uncommon resident.
- SCALY-BREASTED MUNIA *Lonchura punctulata* Not uncommon early autumn visitor. In May-July single birds once in each month. Arrived in August-September, and the last sighting was on 17 December. Nest-building was noted on 28 October 1992, but the site was not visited later to confirm breeding.
- CHAFFINCH *Fringilla coelebs* Not uncommon winter visitor, 19 November-31 March, with flocks of up to 50 birds.
- BRAMBLING *Fringilla montifringilla* Rare winter visitor. Five sightings of 1-2 birds 28 October-16 February. Not encountered after 1993.
- FIRE-FRONTED SERIN *Serinus pusillus* Very rare. A flock of 120 birds was seen at Sheikh Budin on 23 March 1995.
- COMMON ROSEFINCH *Carpodacus erythrinus* Uncommon migrant. Sightings 1 April-6 May and 19 August-15 October. Once later: one on 18 November 1989.
- ROCK BUNTING *Emberiza CIA* Common winter visitor in the hills, occasionally elsewhere. Sightings 30 October-21 March.
- GREY-NECKED BUNTING *Emberiza buchanani* Uncommon migrant in spring, very rare in autumn. In spring sightings of 1-5 birds 12-27 April. In autumn three times 12 September-12 October.
- WHITE-CAPPED BUNTING *Emberiza stewarti* Common winter visitor in the hills, occasionally elsewhere. Sightings 12 October-25 March.
- HOUSE BUNTING *Emberiza striolata* (Br) Common resident in the hills, in winter rarely also elsewhere.
- RED-HEADED BUNTING *Emberiza bruniceps* Common migrant, 23 March-25 May and 29 July-9 October.
- REED BUNTING *Emberiza schoeniclus* Uncommon but regular winter visitor. Sightings of 1-6 birds 3 November-10 March.

DISCUSSION

Two species were surprisingly absent: the Common Tailorbird *Orthotomus sutorius* and the Rook *Corvus frugilegus*. The Common Tailorbird was heard several times in two places behind the river, hardly 20 km from the edge of the study area. It is speculated that the Indus forms a natural barrier to the expansion of the species. The Rook was often seen in winter on roadsides around Bannu, hardly 100 km away. Roberts (1991-1992) mentioned a sighting from Dera Ismail Khan, but this must have been unusual as I have been constantly on the lookout for the species but in vain. Some species, each of which was encountered only once, were much rarer than would have been expected according to Roberts (1991-1992): Wire-tailed Swallow, Common Woodshrike, Small Minivet and Yellow-eyed Babbler.

There are some recent colonists, the range of which is shown as quite distant from Dera Ismail Khan in Roberts (1991-1992), but were seen by the author. They appeared to still be expanding and had reached different stages in their colonization of the study area. Oriental Magpie Robin and Ashy Prinia were in the initial stages, as both were encountered only once. It is anticipated that they will occur more regularly in the area in the near future. The number and nature of sightings of Scaly-breasted Munia suggested that it will soon become a regular breeder. White-breasted Waterhen had already reached the third stage, as it was a regular breeder at every suitable location.

Chestnut-tailed Starling is an interesting species, as Roberts (1991-1992) referred to stragglers in Sindh only. However, Pyhälä (1998) reported some recent sightings from Islamabad and, based on these, he considered the species to have strong expansionist tendencies. The sighting of a bird in Dera Ismail Khan supports his claim.

The sighting of Rufous-tailed Lark was very surprising because it has not been reported in Pakistan since the 1940s, and then it was seen only in the Salt Range.

There is some circumstantial evidence of occasional breeding of Eurasian Marsh Harrier in Baluchistan. Attempted breeding is remarkable.

Sightings of Little Owl expanded its range by c. 200 km to the north-east. It most probably occurs in the area between its former known range and the recorded extension but the area is poorly, if at all, explored by ornithologists.

The occurrence of Hume's Wheatear in Dera Ismail Khan is surprising as, hitherto in Pakistan, it has been recorded only in Sindh and Gilgit. Its distribution in southern NWFP was apparently more extensive, as the author also noted it in several places in the hilly tract between Bannu, Kalabagh and Kohat, north of the study area.

One important difference between these observations and those of Roberts (1991-1992) concerns the status of Clamorous Reed Warbler. Roberts stated it to be a plentiful winter visitor and a local and unusual breeder on the Indus plains. This may be true in the eastern reaches, but at the western end the author's observations draw quite a different picture. In winter the species was met with only twice, but breeding was confirmed at several sites, some of them having tens of pairs.

Most records concerning migrants and winter visitors were not unexpected. The Lesser Kestrel in Pakistan was known from only one individual (Roberts 1991-1992). Its occurrence in Dera Ismail Khan was remarkable, although not totally surprising as it breeds in northern China and winters in Africa. It is possible that it occurs more regularly but distinguishing it in the field from the Common Kestrel is difficult. There are some waders that hitherto have been seen inland rarely, but which were recorded more or less regularly in Dera Ismail Khan. Only one inland sighting each of Common Ringed Plover, Pacific Golden Plover and Terek Sandpiper was given by Roberts (1991-1992), and Whimbrel had not been seen inland outside of Sindh. It is speculated that either the 'Bridge Lake' area provided exceptionally good conditions for waders or that the species have been overlooked elsewhere.

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