

Birds of the Badia region of Jordan

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We visited the Badia region of northern Jordan in spring in both 1996 and 1997. We recorded birds systematically in a range of habitats across the region, but we also made casual records. The range of species in our systematic list suggests that the conservation importance of this little studied area is considerable.

The Badia region in the north of the Kingdom of Jordan comprises the Basalt desert, Ar Ruwayshid desert and the limestone hamma-da and chalk cliffs of the Eastern desert (Andrews 1995) (Figure 1). Access is not easy, and the absence of easily identified 'sites' has meant that the region has received less attention from birdwatchers than other areas of Jordan. Multi-disciplinary studies pertinent to the development of the region have been undertaken since 1992 under the management of the Jordan Badia Research and Development Programme (Dutton & Shahbaz 1999). As part of this programme, a series of studies of the biodiversity of the region was undertaken, funded by the UK Government 'Darwin' Initiative, of which ornithological studies formed a part. This paper aims to provide a basic checklist of the bird species found during the studies in this infrequently visited part of the Kingdom.

METHODS

We visited the region in spring 1996 from 28 February to 22 March and in spring 1997 from 25 March to 7 April. From our base in Safawi (Figure 2), we carried out transect-based bird surveys in a variety of sites and habitats (*qv*) across the region in order to assess the bird communities associated with differing habitats (Thomas & Green in prep). We walked our transects at a slow but steady pace across areas of habitat, recording birds in two distance bands – up to 50 m and 50–100 m from the transect centreline, to allow for subsequent calculation of densities. This methodology is regarded as being the most efficient of all general bird survey techniques in terms of data gathered per unit effort (Bibby *et al* 1992). In large areas of habitat, several observers walked parallel transects. The length of transects varied according to each site's habitat and geography. We kept casual records of all additional observations made around our base and when travelling between sites throughout each period. All records have been combined in the following systematic list. The weather in 1996 was dry with cold nights. In 1997 there had been significant rainfall before our visit, producing standing water in many of the qas and thick vegetation across many of the marrifs.

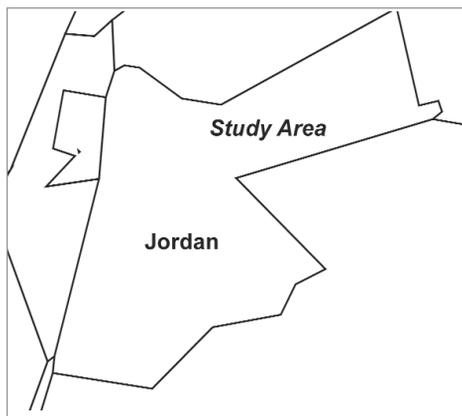


Figure 1. Location of study area in Jordan

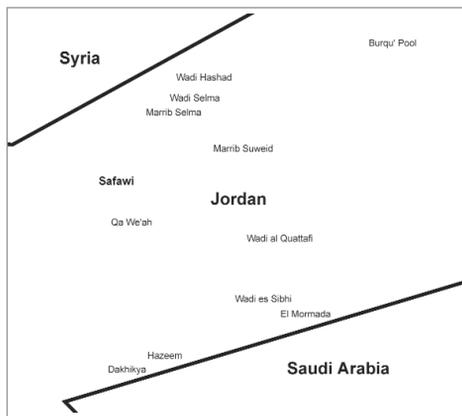


Figure 2. Badia region of Jordan

HABITATS AND SITES

The Badia comprises a large and significant part of the Hashemite Kingdom of Jordan (Allison *et al* 1998). It lies in an arid climatic zone, rainfall being erratic. The land ranges from c1150 m asl in the northwest, to c400 m along the Saudi Arabia border. Much of the large central area around Safawi, at a mean altitude of 700 m, consists of basalt lava flows, or Harrat, of varying ages. Erosion has produced habitats dominated by small broken boulders, interspersed by drainage channels or larger wadis. There is little vegetation over much of the area. Towards the area's southeast, around Dakhikya, near the Saudi Arabia border is an area of tertiary sediments, mainly limestone and marls. This is an area of high cliffs separated by flat landscapes and some quite large areas of scrub habitats. The eastern section is a mixture of tertiary sediments, overlain in places by recent alluvial deposits of sands and gravels, and includes the Al Ruwayshid desert area of rolling red sands.

The general flow of the extensive wadi system that drains the area is from the north to the south and southwest. Much of the water from the area ends up in the Azraq basin. Associated with the wadi system are two further geomorphological features of fine grained water-lain sediments. The first of these, the qas, are fed by wadis but have no major outward drainage; consequently, many qas are saline and possess little vegetation. Marribs, the second feature, are areas where water from the wadis tends to spread out over larger areas before continuing downstream, leaving fine sediments that can hold considerable vegetation especially in wetter years. Some marribs are utilised for agricultural planting, mainly cereals. The wadis, whether rocky or more open, and associated qas and marribs, are a mosaic of habitats suitable for many bird species.

Figure 2 indicates the general location of the main sites we visited during the study, namely:

- Safawi: our project base was at As Safawi, which was surrounded by basalt desert. There were some trees around the buildings.
- Wadi Selma, a deep wadi through the basalt, generally rocky habitat with some vegetation – small bushes and seasonal grasses and herbs. It is partially protected as a reserve which has reduced grazing.
- Qa Selma (not shown in Figure 2): large open qa at the south end of Wadi Selma – open ground with little vegetation.
- Marrib Selma: large marrib area of scrub and open, partially vegetated ground.
- Qa 'Selma Road' (not shown in Figure 2): small qa between Safawi and Wadi Selma.
- Wadi Hashad: wadi in basalt area similar to Selma.
- Marrib Suweid: large marrib, particularly well vegetated in 1997, grazed and holding some small agricultural areas.
- Burqu' pool: ancient pool in the edge of the Basalt desert – the only permanent water in the region.
- Wadi Al Quattafi: rocky wadi in red sand area – possesses a variety of rocky habitats in the wadi, surrounded by open sand desert.
- Dakhikya: large area of chalk cliffs and open desert floor with some scrub habitat.
- Hazeem: cultivated area of date palms and other crops.
- Wadi es Sibhi: rocky wadi
- The wadi south of el Mormada Qa, a rocky wadi.
- Qa We'ah: area of open qa, having some vegetated areas.

- Pipeline (not shown in Figure 2): track following the pipeline across the centre of the region, which is mainly basalt, crossed by several wadis. In 1997, the area held some ephemeral pools.

SYSTEMATIC LIST

All records are given, except where species were commonly seen across the region. For these species the main habitats where they occurred are given. Where only one year is mentioned, we had no records from the other year of the survey. Our two relatively short visits were outside the main breeding season and so we did not ascribe status such as 'resident' or 'passage' to species.

Key: m = male, f = female, imm = immature. Date convention is day/month.

Chukar *Alectoris chukar*. 1996: 1 Wadi es Sibhi 12/3. 1997: Pairs displaying near Wadi Al Quattafi and Wadi es Sibhi.

Sand Partridge *Ammoperdix heyi*. (NB: possible confusion with See-See Partridge *A. griseogularis*, Andrews *et al* 1999). 1996: singles at Wadi es Sibhi 12/3, south of el Murmada 14/3, pipeline 15/3. 1997: Pairs at Wadi Selma, Wadi es Sibhi and Wadi Al Quattafi.

Common Quail *Coturnix coturnix*. 1997: Individuals flushed from patches of crops across the area: a maximum of 5 at Qa We'ah.

Mallard *Anas platyrhynchos*. 1996: 1, Burqu' pool 1/3.

Northern Shoveler *Anas clypeata*. 1996: 9 Burqu' pool 10/3. 1997: 1 Burqu' pool 29/3

Northern Pintail *Anas acuta*. 1996: 17, Burqu' pool 10/3.

Garganey *Anas querquedula*. 1996: Several, Burqu' pool 18/3. 1997: 3m & 2f Burqu' pool 29/3.

Common Teal *Anas crecca*. 1996: 38, Burqu' pool 10/3.

Western White Stork *Ciconia ciconia*. 1997: Recorded from several qas: 4+ at Marrib Selma, 14 at Qa Selma Road and 38 at Qa We'ah.

Black-crowned Night Heron *Nycticorax nycticorax*. 1997: 2 adults at Safawi base on 29/3; after leaving their roost next day, joined by 6 other adults.

Grey Heron *Ardea cinerea*. 1997: 2 on roadside seasonal pool, 10km south of Burqu' pool 29/3.

Purple Heron *Ardea purpurea*. 1996: one in flooded qa near Wadi Al Quattafi 15/3.

Little Egret *Egretta garzetta*. 1997: 2 at Burqu' pools 29/3.

Raptor spp. There was a much more noticeable movement of raptors across the area in 1997 during our second visit, which was later in the year. Most movement was observed in the last few days of March and the first week in April, the peak time as recorded by Andrews (1996). A large movement (80+ birds), thought mainly to be Steppe Buzzard *B. b. vulpinus*, but accompanied by other species including unidentified eagles and a probable Northern Goshawk *Accipiter gentilis*, took place over Wadi Al Quattafi on 1 April 1997. The records overall indicate a broad movement of raptors across the region.

Lesser Kestrel *Falco naumanni*. 1997: 1 at Qa Selma road 28/3, 1f Marrib Suweid 29/3, c10 Qa We'ah 29/3, 3 roosting at Safawi 4/4.

Common Kestrel *Falco tinnunculus*. 1996: Pair, Dakhikya 8/3, 1 near Safawi 10/3, 1 south of El Murmada 15/3, 1 Dakhikya 16/3. 1997: Pairs breeding at Dakhikya and Safawi, 1m Wadi Selma 26/3, 6 Qa We'ah 29/3, 1 near Wadi Al Quattafi 1/4, 1 Wadi es Sibhi 7/4.

Black Kite *Milvus migrans*. 1996: 1, Burqu' pool 18/3. 1997: Up to 7 birds in study period, all moving northwards.

Short-toed Snake Eagle *Circaetus gallicus*. 1996: 2 on pylons south of Safawi 17/3. 1997: One at Dakhikya 2/4.

Western Marsh Harrier *Circus aeruginosus*. 1996: m & f Qa We'ah 6/3, m just south of El Murmada 15/3. 1997: 1 imm Wadi Selma road 28/3, 3m Qa We'ah 29/3, 1m Safawi 8/4, 4m & 1f Qa We'ah 7/4.

Hen Harrier *Circus cyaneus*. 1996: Single ringtail (f), Qa We'ah 6/3. 1997: 1 Qa We'ah 29/3, 1 near Wadi Al Quattafi 1/4.

Pallid Harrier *Circus macrourus*. 1996: 1m Marab Selma 3/3, 1m Qa We'ah 6/3. 1997: recorded many sites in a variety of habitats, mostly singles, but up to 7 at Qa We'ah on 29/3 and 7/4.

Steppe Buzzard *Buteo buteo vulpinus*. 1997: Recorded at a variety of sites as part of a general movement of raptors between 29/3 and 7/4.

Long-legged Buzzard *Buteo rufinus*. 1996: Singles at Qa We'ah 6/3, near Wadi es Sibhi 12/3, south of el Murmada 15/3, pipeline 15/3 and Wadi Selma 19/3. 1997: Singles at Safawi 25/3, Qa Selma road 25/3, Qa Selma 28/3 and near Wadi Al Quattafi 1/4.

Golden Eagle *Aquila chrysaetos*. 1996 and 1997: Breeding pair south of study area had established site with 3 alternative nests within 0.5 km separation. The active nest was decorated with rags including a complete headscarf draped across front of nest.

Common Crane *Grus grus*. 1996: 5 Dakhikya 8/3, 30 overhead, climbing thermals, Wadi es Sibhi 13/3, 7 at flooded qa near Wadi Al Quattafi 15/3, 12 Qa Selamr 16/3. 1997: Two flocks of 14 and 8 over Wadi Selma 26/3, 14 feeding at Qa Selma 28/3.

Wader spp. Many records refer to the permanent open water at Burqu' pool, but waders also were seen in temporary pools in the desert, especially in 1997 when rains had left more areas of standing water.

Black-winged Stilt *Himantopus himantopus*. 1996: 5 Burqu' pool 18/3. 1997: 1 Qa Selma 27/3, 1 Burqu' pool 29/3.

Eurasian Stone-curlew *Burhinus oedicnemus*. 1997: 1 Dakhikya 3/4.

Little Ringed Plover *Charadrius dubius*. 1996: 1 Burqu' pool 1/3. 1997: 2 Burqu' pool 29/3, 1 flooded qa near Wadi Al Quattafi 1/4.

Kentish Plover *Charadrius alexandrinus*. 1996: Burqu' pool 3 on 1/3, 7 on 10/3 & 5 on 18/3. 1997: Pair near Safawi 25/3, 10+ Burqu' pool 29/3, some paired and displaying.

Lesser Sand Plover *Charadrius mongolus*. 1996: 6 Burqu' pool 1/3. Several, flooded qa near Wadi Al Quattafi 15/3

Greater Sand Plover *Charadrius leschenaultii*. 1997: 5+ on pool near Wadi Al Quattafi 1/4.

Common Snipe *Gallinago gallinago*. 1997: 1 Burqu' pool 29/3.

Spotted Redshank *Tringa erythropus*. 1996: 1 on flooded qa near Wadi Al Quattafi 15/3.

Common Greenshank *Tringa nebularia*. 1996: 2 Burqu' pool 10/3. 1997: 1 Burqu' pool 29/3.

Green Sandpiper *Tringa ochropus*. 1996: 4 Burqu' pool 10/3, 1 at flooded qa near Wadi Al Quattafi 15/3. 1997: 1 Qa We'ah 29/3, 2 near Wadi Al Quattafi 1/4.

Wood Sandpiper *Tringa glareola*. 1996: 2 at flooded qa near Wadi Al Quattafi 15/3. 1997: 1 Burqu' pool 29/3, 1 Qa We'ah 29/3.

Common Sandpiper *Actitis hypoleucos*. 1996: 2 on small roadside pool near Safawi 10/3. 1997: 1 Burqu' pool 29/3

Little Stint *Calidris minuta*. 1996: Burqu' pool 1 on 1/3, 5 on 10/3, 1 on 18/3. 1997: 2 on pool near Wadi Al Quattafi 1/4.

Dunlin *Calidris alpina*. 1997: 1 Burqu' pool 29/3. 2 near Wadi Al Quattafi 1/4.

Ruff *Philomachus pugnax*. 1996: Burqu' pool, 1 on 1/3, 3 on 10/3, small flock at flooded qa near Wadi Al Quattafi 15/3. 1997: 1 Burqu' pool 29/3, 6 flooded qa near Wadi Al Quattafi 1/4.

Cream-coloured Courser *Cursorius cursor*. 1996: 1 Wadi es Sibhi 12/3. 1997: Total of 4 birds noted when driving between sites, mainly on harrat habitat, plus 1 Qa We'ah 29/3.

Black-headed Gull *Larus ridibundus*. 1996: 1 Burqu' pool 18/3.

Pin-tailed Sandgrouse *Pterocles alchata*. 1996: 26 Qa We'ah 6/3. 1997: much more movement late March/early April, including: Safawi – 3 flocks totalling 9000 birds westwards morning 26/3; Wadi Selma – 2200 heading NE late afternoon on 26/3; 3000+ southwards between 06.00 and 10.00 h on 27/3, returning from 15.00 until sunset; Marrib Selma and Qa Selma – 100s flying over morning 28/3.

Black-bellied Sandgrouse *Pterocles orientalis*. 1996: 2 Qa We'ah 18/3.

Rock Dove *Columba livia*. Common but patchily distributed where suitable habitat of cliffs or buildings.

Eurasian Collared Dove *Streptopelia decaocto*. Recorded around palm groves and human settlement, but not elsewhere.

Laughing Dove *Streptopelia senegalensis*. Recorded around palm groves and human settlement but not elsewhere.

Eurasian Eagle Owl *Bubo bubo*. Recorded both years from steep sided rocky wadis or cliff areas across the region. At least 5 pairs found. Two nests located, one at top of a sand talus slope at the base of a cliff (2 eggs on 17/3/96) and one deep in a boulder crevice. All individuals clearly observed were pale and small – probably the race *ascalaphus*.

Little Owl *Athene noctua*. Seen across the region in steep sided wadis and cliff areas. Frequently encountered in daylight. All individuals seen were very pale.

Alpine Swift *Tachymarptis melba*. 1996: 1 Dakhikya 8/3. 1997: 2 Qa We'ah 7/4.

Common Swift *Apus apus*. 1996: 1 14/3 south of el Murmada. 1997: 1 Marrib Selma 28/3, 4 Wadi Al Quattafi 30/3, 1 Dakhikya 3/4.

Pallid Swift *Apus pallidus*. 1996: 1 Hazeem 9/3.

Eurasian Hoopoe *Upupa epops*. Encountered throughout the area mainly in marrib and wadis: frequently in pairs.

Eurasian Wryneck *Jynx torquilla*. 1996: 1, Safawi 19/3. 1997: Safawi: 1, 25/3; 2, 30/3; 1, 2/4; 1, 7/4; 1 Wadi Selma 26/3, 1 Wadi Al Quattafi 31/3.

Isabelline Shrike *Lanius isabellinus*. 1997: 1f Dakhikya 3/4.

Great Grey Shrike *Lanius excubitor*. 1996: 1 Dakhikya 8/3, 1 Hazeem 9/3. 1997: 1 Dakhikya 9/4.

Woodchat Shrike *Lanius senator*. 1996: 1 Marib Selma 3/3, 1 Wadi Selma 3/3, 1 Safawi 16/3. 1997: Singles at Safawi, Wadi Selma, Qa We'ah and Wadi Al Quattafi.

Brown-necked Raven *Corvus ruficollis*. Breeding on pylons across the region and in cliff habitats at Dakhikya.

Sand Martin *Riparia riparia*. 1997: 1 Dakhikya 3/4, 12 Qa We'ah 7/4.

Barn Swallow *Hirundo rustica*. 1996: Several near Safawi 10/3, many over Burqu' pool 10/3 & 18/3, 1 Safawi 20/3. 1997: Seen in small numbers across the region throughout, the largest movement being 60+ birds between 06.00 and 07.00 h on 7/4 at Wadi es Sibhi.

Red-rumped Swallow *Cecropis daurica*. 1997: 1 Qa We'ah 29/3, 1 Wadi es Sibhi 5/4.

Common House Martin *Delichon urbicum*. 1997: 2 Qa We'ah 29/3, 1 Dakhikya 3/4.

Greater Hoopoe Lark *Alaemon alaudipes*. 1996: 2 south of el Murmada 15/3, 1 Qa We'ah 6/3, 1 Hazeem 9/3. 1997: 1 Dakhikya 3/4. 3 near Wadi es Sibhi 3/4.

Thick-billed Lark *Ramphocoris clotbey*. 1997: 1m near Safawi 25/3, pair Wadi Selma 27/3, 2m Wadi Hashad 28/3, 1m Wadi Al Quattafi 1/4, 1m Dakhikya 3/4.

Calandra Lark *Melanocorypha calandra*. 1997: 2 Wadi Hashad 28/3.

Bimaculated Lark *Melanocorypha bimaculata*. 1996: Several small flocks Qa We'ah 6/3, 20 Dakhikya 8/3. 1997: c50 Qa Selma 28/3, 8 Burqu' pool 29/3.

Bar-tailed Lark *Ammomanes cinctura*. Seen throughout the region in open country.

Desert Lark *Ammomanes deserti*. Common across the basalt desert.

Greater Short-toed Lark *Calandrella brachydactyla*. 1997: 2 Safawi 25/3, 4 Qa Selma 27/3.

Lesser Short-toed Lark *Calandrella rufescens*. Seen throughout the region and usually associated with vegetated areas.

Dunn's Lark *Eremalauda dunni*. 1997: 1 Wadi Al Quattafi 1/4.

Crested Lark *Galerida cristata*. Seen throughout the region, always associated with vegetated areas.

Eurasian Skylark *Alauda arvensis*. 1996: 2 Marrib Selma 3/3, 1 Dakhikya 8/3.

Temminck's Lark *Eremophila bilopha*. Seen throughout the region; like all the other common larks, always associated with vegetation.

Scrub Warbler *Scotocerca inquieta*. 1996: Wadi Selma 2, 2/3; 6, 3/3, 1 Hazeem 9/3, Wadi es Sibhi 2 pairs 12/3. 1997: 2 pairs + pulli, Wadi Selma 27/3, 1 Wadi Al Quattafi 31/3, 1/4.

Graceful Warbler *Prinia gracilis*. 1997: 1 Wadi Selma 27/3, 1 Wadi Al Quattafi 1/4.

Eurasian Reed Warbler *Acrocephalus scirpaceus*. 1997: 1 Safawi 2/4.

Willow Warbler *Phylloscopus trochilus*. 1997: Single birds from 31/3–4/4.

Common Chiffchaff *Phylloscopus collybita*. 1996: Wadi es Sibhi 12/3, Safawi 16/3 & 20/3. 1997: Records from various sites from 25/3–7/4.

Eastern Bonelli's Warbler *Phylloscopus orientalis*. 1997: 1 Dakhikya 4/4, 1 Wadi es Sibhi 6/4.

Wood Warbler *Phylloscopus sibilatrix*. 1997: 1 Wadi es Sibhi 6/4, 1 Qa We'ah 8/4.

Blackcap *Sylvia atricapilla*. 1997: 1m Wadi es Sibhi 6/4. 2m Safawi 7/4.

Lesser Whitethroat *Sylvia curruca*. 1996: 1 Dakhikya 8/3, 2 Hazeem 9/3, 1 Safawi 20/3. 1997: Many records across region – most movement first week in April.

Asian Desert Warbler *Sylvia nana*. 1996: 2 south of el Murmada 15/3.

Common Whitethroat *Sylvia communis*. 1996: 1 Wadi Selma 2/3, 1 Marrib Selma 3/3, 1 Safawi 16/3. 1997: 2 Safawi 30/3, 1 Wadi Al Quattafi 31/3, 1 Wadi Al Quattafi 1/4. 1 Wadi Hashad 6/4.

Spectacled Warbler *Sylvia conspicillata*. 1996: 1 Wadi Selma 3/3. 1997: 1 Wadi Hashad 28/3.

Sardinian Warbler *Sylvia melanocephala*. 1997. Single males at Safawi & Wadi es Sibhi.

Ménétries Warbler *Sylvia mystacea*. 1997: Safawi 1f 2/4 & 4/4, Dakhikya 1m 3/4, 1f 4/4, 2m & 1f Wadi es Sibhi 6/4.

Rüppell's Warbler *Sylvia rueppelli*. 1996: Wadi Selma 19/3, Safawi 20/3. 1997: 2 Safawi 30/3.

Common Starling *Sturnus vulgaris*. 1997: Safawi; 25 on 25/3, 75 on 26/3.

Song Thrush *Turdus philomelos*. 1996: 1 near Safawi 10/3.

Bluethroat *Luscinia svecica*. 1996: 1 Safawi 16/3, 1 Burqu' pool 18/3. 1997: Safawi: 1 on 25/3, 4 on 26/3, 1 on 29/3, 4 on 30/3, 1 on 2/4, 2 Qa We'ah 29/3.

Common Nightingale *Luscinia megarhynchos*. 1996: 1 Safawi 20/3. 1997: 1 Safawi 20/3, 8+ Wadi es Sibhi 6/4

Western Black Redstart *Phoenicurus ochruros*. 1996: 1m Wadi Selma 3/3, 1m near Safawi 10/3, 1m Wadi es Sibhi 12/3. 1997: 1f Safawi 29/3.

Common Redstart *Phoenicurus phoenicurus*. 1997: 1m Safawi 29/3 & 2/4. 1m & 1f Wadi es Sibhi 6/4.

Whinchat *Saxicola rubetra*. 1996: 1 near Safawi 10/3, 1 Wadi es Sibhi 12/3. 1997: 1 Qa We'ah 7/4.

Stonechat *Saxicola torquatus*. 1996: 1 near Safawi 10/3, 1m Wadi es Sibhi 12/3, 1 Hazeem 9/3. 1997: 1m Safawi 25/4

Red-rumped Wheatear *Oenanthe moesta*. 1996: pair, south of el Murmada 14/3. 1997: Single male singing – unnamed location 6/4.

Isabelline Wheatear *Oenanthe isabellina*. 1996: 1 Wadi es Sibhi 12/3, 1 south of el Murmada 15/3. 1997: Singles noted at several sites also at locations between sites.

Northern Wheatear *Oenanthe oenanthe*. 1996: 1m Marrib Suweid 11/3, 2m south of el Murmada 15/3, 2f Safawi 20/3. 1997: Seen at various sites, males only until 20/3, then both sexes.

Red-tailed Wheatear *Oenanthe xanthopyrmyna*. 1996: Territorial pair south of El Murmada 15/3.

Pied Wheatear *Oenanthe pleschanka*. 1996: 2m pipeline 15/3. 1997: Safawi 25/3, 26/3, 29/3, 30/3. Wadi Al Quattafi 1/2. All of the several observers involved were confident of these all being Pied Wheatear, but we did not take formal descriptions and note the occurrence of and possible confusion with Cyprus Pied Wheatear *O. cypriaca* (Andrews *et al* 1999). However, we consider migration of Pied Wheatear across the eastern desert is likely given its breeding range (Hollom *et al* 1988).

Black-eared Wheatear *Oenanthe hispanica*. 1996: 2 pipeline 15/3. Safawi 20/3. 1997: 3m Safawi 25/3, 1m Wadi Al Quattafi 1/4, 1m Dakhikya 2/4. A few birds thought to be females noted at 2 sites on 6/4.

Desert Wheatear *Oenanthe deserti*. 1996: 1m Wadi Selma 3/3, 1m south of el Murmada 15/3, 1m Burqu' pool 18/3. 1997: 5+ near Safawi, pair Wadi Selma, 1 Marrib Selma, pair Wadi Al Quattafi, 1 Wadi es Sibhi.

Mourning Wheatear *Oenanthe lugens*. Seen in many locations in harrat habitat and many rocky wadis. Most records dark phase. 1 record of dark and light phase males together in Wadi Selma 3/3/96.

Finsch's Wheatear *Oenanthe finschii*. 1996: 1m Marrib Suweid 11/3. 1997: 1m Wadi Hashed 7/4.

Hooded Wheatear *Oenanthe monacha*. 1996: 1 Dakhikya 8/3.

White-crowned Wheatear *Oenanthe leucopyga*. 1996: 1 pipeline 15/3, 1 Wadi Selma 3/3. 1997: Singles at Wadi Selma and Wadi Al Quattafi.

Rufous-tailed Rock Thrush *Monticola saxatilis*. 1997: 1m Qa Selma 27/3. 1m Dakhikya 3/4.

Blue Rock Thrush *Monticola solitarius*. 1996: 1f Dakhikya 8/3, 1m near Safawi 10/3, 1m Wadi es Sibhi 12/3, 1m Wadi Selma 3/3. 1997: 1f Wadi es Sibhi 6/4.

Eurasian Pied Flycatcher *Ficedula hypoleuca*. 1997: Singles at Safawi 4/4 & 7/4, Wadi es Sibhi 6/4.

Collared Flycatcher *Ficedula albicollis*. 1997: 2 Wadi es Sibhi 6/4. Safawi 4/4, 7/4 & 8/4. Unnamed location 6/4.

House Sparrow *Passer domesticus*. Always present around human habitation. Desert colonies in cliff habitats such as Dakhikya.

Spanish Sparrow *Passer hispaniolensis*. 1997: up to 10 birds at Safawi.

Pale Rockfinch *Carpospiza brachydactyla*. 1997: c50 Qa Selma 25/3, c30 Marrib Selma 28/3.

Western Yellow Wagtail *Motacilla flava*. 1996: 1 Safawi 19/3. 1997: 30+ Qa We'ah 29/3, 100+ Qa We'ah 7/4.

Citrine Wagtail *Motacilla citreola*. 1997: 1f Qa We'ah 8/4.

White Wagtail *Motacilla alba*. 1996: flock at Safawi 19/3. 1997: Seen at several sites in small numbers.

Tawny Pipit *Anthus campestris*. 1997: Noted in small numbers at several sites from 26/3.

Meadow Pipit *Anthus pratensis*. 1997: one at Wadi Al Quattafi 31/3.

Tree Pipit *Anthus trivialis*. 1997: as for Tawny Pipit, noted in small numbers at several sites from 26/3.

Red-throated Pipit *Anthus cervinus*. 1997: 2 Qa We'ah 29/3, 50+ moving through Qa We'ah 7/4.

Water Pipit *Anthus spinoletta*. 1997: 1 Qa We'ah 29/3.

Common Linnet *Carduelis cannabina*. 1997: 1, several days Safawi, 1 Wadi es Sibhi 7/4.

Trumpeter Finch *Bucanetes githagineus*. Seen throughout the region – associated mainly with rocky areas with some vegetation.

Desert Finch *Rhodospiza obsoletus*. 1996: 1 Wadi es Sibhi 12/3. 1997: Safawi – maximum count 5.

Corn Bunting *Emberiza calandra*. 1996: 68 near Safawi, near rainwater pools. 1997: 10+ and 6+ coming to freshwater pools near Safawi, singles at Wadi Al Quattafi 31/3 and 1/4.

Ortolan Bunting *Emberiza hortulana*. 1997: 2 Qa We'ah 7/4.

Cretzschmar's Bunting *Emberiza caesia*. 1996: 1 Wadi Selma 19/3. 1997: Several records (max 10) Safawi.

Black-headed Bunting *Emberiza melanocephala*. 1996: 1m Safawi 19/3.

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