Birds of the Socotra Archipelago, Yemen: an annotated checklist

RICHARD PORTER & AHMED SAEED SULEIMAN

The publication of this checklist has been supported
by the UNEP-GEF Socotra Conservation Programme

Summary: This checklist summarises the status of all birds in the Socotra archipelago since observations were first made in the nineteenth century. The pace of exploration in recent years is demonstrated by the fact that in 1993 the total number of species recorded was 110, but by 2022 it had more than doubled to the 229 species described in this checklist. Only 40 species breed regularly, with a further six occasionally or probably breeding. The checklist summarises the status of all breeding birds, including the 12 endemic breeding species for which these islands are renowned.

INTRODUCTION

The Socotra archipelago lies some 350 km south of the Yemen mainland and comprises the main island of Socotra (37 000 km²), the much smaller satellite islands of Abd al Kuri, Darsa and Samha, and the sea stacks of Kal Farun and Sabuniya (Figure 1). The climate is monsoonal. During the hot dry southwest summer monsoon, which lasts from May to September, gusts regularly reach over 60 km/hour. The winds of the northeast monsoon (November to March) are much weaker and bring the winter rains, which can be torrential. The spring transitional period, March to May, between the monsoons, brings more gentle rains though this can be the hottest period of the year. The autumn transitional period, from September to October, is very dry before the autumn rains start.

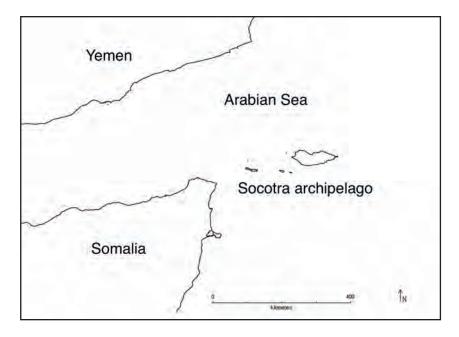


Figure 1. Map showing the position of the Socotra archipelago in relation to Yemen and the Horn of Africa.

Rising to 1500 m asl in the granite Haggeher mountains, many of the higher areas (500–1000 m asl) of Socotra island are limestone. It supports a wide range of habitats from semi-evergreen woodland in the highlands (Plate 1), succulent shrubland and open



Plate 1. Mosaic of semi-evergreen montane vegetation, Skand in the Hagghers, looking towards the peaks, January 2008. © Lisa Banfield



Plate 2. Dwarf vegetation on the northern coastal plain, February 2004. © Richard Porter

woodland to dwarf coastal vegetation (Plate 2), mangroves and palm groves. In addition there are coastal khors (here meaning the estuary of a wadi) and lagoons. The outer islands are rather barren, as typified by Abd al Kuri (Plate 3). An excellent account of the habitats and plant assemblages of the archipelago is given in Millar & Morris (2004).

Other than introduced livestock (sheep, goats and miniature cattle), there are no larger mammals on Socotra other than the introduced Lesser Indian Civet *Viverricula indica*. Furthermore there is no evidence of any historical extinctions nor of large mammals having been part of the Socotra fauna, despite claims to the contrary (*eg* Heuglin 1861). Rats have been introduced and are evident in Hadiboh and Qalansiyah towns.



Plate 3. Abd Al Kuri, February 1992. © Tony Miller

The Socotra archipelago is internationally renowned for its plant and animal biodiversity as well as its cultural richness, with the inhabitants speaking the unique Socotri language (Cheung & DeVantier 2006). It has over 300 species of endemic plants, at least 27 endemic reptiles and 12 endemic breeding birds – the last resulting in the Socotra archipelago being designated an Endemic Bird Area (EBA) by Stattersfield *et al* (1998).

The endemic birds are: Jouanin's Petrel Bulweria fallax (only known to breed on Socotra, but ranges widely in the Indian Ocean), Socotra Buzzard Buteo socotraensis, Socotra Scops Owl Otus socotranus, Socotra Sunbird Chalcomitra balfouri, Socotra Warbler Incana incana, Socotra Cisticola Cisticola haesitatus, Socotra White-eye Zosterops socotranus, Socotra Starling Onychognathus frater, Socotra Golden-winged Grosbeak Rhynchostruthus socotranus, Socotra Sparrow Passer insularis, Abd-al Kuri Sparrow Passer hemileucus and Socotra Bunting Emberiza socotrana.

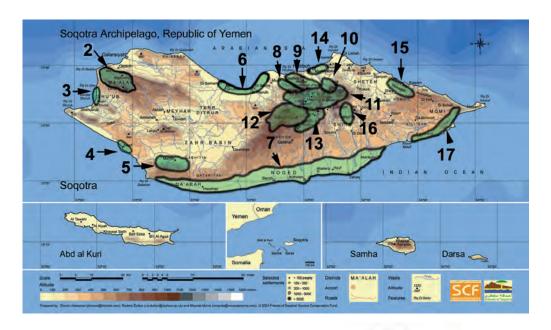
Although the taxonomic status the breeding birds on Socotra has been the subject of much documentation and discussion (eg Ripley & Bond 1966, Martins 1996) only four taxa have been assigned endemic subspecies status by Gill et al (2022) whose taxonomy we follow here: Nubian Nightjar Caprimulgus nubicus jonesi, Forbes-Watson's Swift Apus berliozi berliozi, Great Grey Shrike Lanius excubitor uncinatus and Long-billed Pipit Anthus similis sokotrae. However we have commented, as appropriate, under each breeding species, including the above, where there has been debate or disagreement with the arrangement presented in Gill et al (2022).

For plant endemism, per square kilometre, the main island of Socotra is ranked in the top ten islands in the world (Banfield *et al* 2011). This biological richness of the islands encouraged UNESCO to declare the Socotra archipelago a World Heritage Site in 2008, in which year Yemen signed the International Convention on Wetlands (the Ramsar Convention) and Socotra's Ditwah lagoon became Yemen's first Ramsar site.

A total of 229 bird species has been recorded in the archipelago, of which only 40 breed regularly, with a further six occasionally or probably breeding. It has one globally Endangered breeding species, Egyptian Vulture *Neophron percnopterus*, and three globally Vulnerable breeding species: Socotra Cormorant *Phalacrocorax nigrogularis* and the endemic

Socotra Buzzard and Abd-al Kuri Sparrow. Jouanin's Petrel, Socotra Cisticola and Socotra Bunting are globally Near Threatened. Several other globally threatened species have been recorded as migrants, but only occasionally or in small numbers and the archipelago is not considered to be important for their conservation. Details of each species' IUCN threat status are given in the checklist.

The Important Bird and Biodiversity Areas (IBAs) of Yemen, including Socotra, were first chronicled in Evans (1994). Since then a series of bird and habitat surveys, notably from 1999 to 2011 and led by BirdLife International and Yemen's Environment Protection Authority, have greatly increased our knowledge of the status of birds on the archipelago, especially the distribution and populations of breeding species. Furthermore this has enabled revision of the IBAs and identification of new ones (Porter & Suleiman 2016). These have now been adopted by BirdLife International.



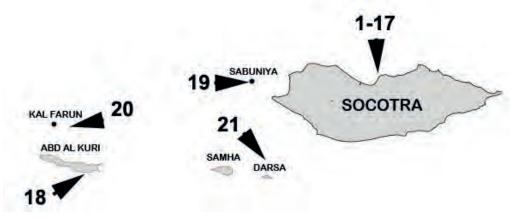


Figure 2. The 21 IBAs of the Socotra archipelago (from Porter & Suleiman 2016).

ORNITHOLOGICAL EXPLORATION

Visits to study the avifauna of Socotra began in the 1880s. These early explorations were essentially to study a range of taxa and birds were part of this. Many species were collected, described and named for the first time. Surprisingly, it would be more than sixty years before the next important study was made, by Alec Forbes-Watson in 1964. Population studies started during the OSME survey of 1993, followed by extensive surveys between 1999 and 2011 supported by BirdLife International, the then Socotra Conservation and Development Programme and Yemen's Environment Protection Authority. These helped determine the distribution and population of the breeding birds of the archipelago. At the same time important studies were being undertaken by teams from the Czech Republic. During this period and subsequently a number of visits were made by birdwatchers, mostly European, and these increased to 2011 as travel to Socotra for tourists became easier, before growing internal conflict curtailed visits.

All of these have added greatly to our knowledge of the birds of these islands and the pace of exploration in recent years is simply demonstrated by the fact that in 1993 the total number of species recorded was 110, but by 2022 it had more than doubled to 229.

A list of all visits to study birds that are known to us appears below. This does not include travels through Socotran waters which have made bird observations incidentally. However important records from such voyages are included in the systematic list and appropriately referenced.

We apologise to anyone who has visited Socotra to watch birds and has not been acknowledged in this list. They are invited to send us their records, which will be published in any future update.

Historical visits: 1834 to 1964 (an asterisk indicates that a visit was also made to the outer islands)

1834: January–March, June–July: JR Wellsted (in Wellsted 1835). Gives brief mention of a few birds seen, most of them unidentified and some apparently incorrectly attributed. **1880:** February–30 March*: IB Balfour (in Sclater, PL & G Hartlaub. **1881.** On the Birds collected in Socotra by Prof IB Balfour. *Proceedings of the Zoological Society of London* 1881: 165-175). **1881:** *E Riebeck & G Schweinfurth (in Hartlaub, G. 1881. On the birds collected in Socotra and Southern Arabia by Dr Emil Riebeck. *Proceedings of the Zoological Society of London* 1881: 953-957). **1898–1899:** Winter*: HO Forbes & WR Ogilvie-Grant (in Ogilvie-Grant, WR & HO Forbes. 1903. Birds of Sokotra and Abd-el-Kuri. Pp. 21–63 *in* Forbes, HO (*ed*) *The Natural History of Sokotra and Abd-el-Kuri*. Porter, London). **1920s:** Visit apparently made by G Archer & EM Godman, but dates not known. **1953:** 21 January–27 April: G Popov; **1964:** 7 March–14 June*: AD Forbes-Watson (in Ripley, SD & GM Bond. 1966. The birds of Socotra and Abd-el-Kuri. *Smithsonian Misc. Coll.* 151(7): 1–37).

Recent visits: 1993 to 2022 (an asterisk indicates that a visit was also made to the outer islands)

1993: 30 March–6 April 1993: OSME survey (Kirwan *et al* 1996)

1996: 27–30 March 1996: RF Porter & O Al-Saghier; 20–27 December 1996: DB Stanton.

1997: 14-21 March 1997: DB Stanton; 13-21 November 1997: Michel Clouet.

1998: 12 July–2 September 1998: Massimiliano Lipperi; 19–30 December 1998: DB Stanton. **1999**: May*: O Al-Saghier, A Alsuhaibany & P Symens; October: F Gardner; 5–25 November: K Šťastný, V Bejček & B Pražan; 16 November–1 December: SJ Aspinall & RF Porter.

2000: February: W Wranik; 18 February–17 March & 20 October–24 November: K Šťastný, V Bejček & B Pražan; 10–20 March: A Hellquist; 18 February–10 March: MI Evans, DS Flumm & RF Porter; 25 August–15 September: MI Evans; 8–29 December: MC Jennings.

2001: 12 January–2 March: K Gedeon & V Neumann; 2–16 February: RP Martins & RF Porter; 23 March–April: K Šťastný, V Bejček & B Pražan.

2004: 6-27 February: SJ Aspinall & RF Porter.

2005: 22–29 March*: A Bolen, AY Al Hassan & A Shamsan.

2006: 6–13 January: I Sinclair; 12–20 January: D Sargeant, H & J Eriksen; 17 February–9 March: RF Porter.

2007: 19–22 January: I Sinclair, J Hornbuckle and group; 16 February–1 March: RF Porter; 27 March–2 April*: B Rose & PG Ryan; 14–18 May: C Hoots; 21–27 September: J-M & F Thiollay; 12–19 October: OJ Campbell, S James & NJ Moran; 26 October–9 November: RF Porter; 9–12 November: H Buck and group.

2008: February: P Kohler; 24 October–7 November: RF Porter; 4–9 December: P Fågel, AbdulRahman Al-Sirhan, G Brown & I Mazurkevich.

2009: 20 February–4 March: R Felix, J Bouwman, R Ketelaar, Ron Felix; March: D Stanton; 18 October–2 November*: N Holmstrom & U Stahle; 24 December 2009–6 January 2010: C Richardson.

2010: 25 October-7 November: R Felix.

2011: 16 February-9 March: RF Porter.

2013: 14-31 August 2013: MC Jennings.

2014: 1-4 January: DJ Fisher.

2020: 26 February-4 March: R Nessing.

2021: 22 November–13 December*: L Calabrese, A Foster, MC Jennings, K O'Toole & D Stanton; 13-20 December: NJ Redman, M Mills, P Hall & A Leventis; J & H Hering: 27 December–9 January 2022 (see articles in this issue of *Sandgrouse*).

2022: 14–21 March*: JA Eaton, R Hutchinson, L Petersson and Birdtour Asia group; 18–25 October*: M Beaman and Birdquest group.

In addition, AS Suleiman is resident on Socotra and has made observations since 1999. O Al-Saghier and N Taleb were frequent visitors to Socotra from mainland Yemen, mostly in 2000-2010.

THE SYSTEMATIC LIST

Records refer to the main island of Socotra unless stated otherwise. All observations to October 2022 that we are aware of have been included.

Taxonomy and nomenclature

The taxonomic order, English names and scientific names of birds are constantly under review and revision and this can cause confusion. In this list we have adopted the recommendations of the International Ornithological Committee (Gill *et al* 2022).

Place names

There are many variations, translations and spellings of Socotran place names. In this checklist place names used are from the map of Socotra published by Friends of Soqotra and the map and the list of local Socotran geographical names used in entomological literature (Bezdek *et al* 2012). As an aid to the location of place names for the main island of Socotra, they are listed in the Appendix together with the bird recording unit in which they occur.

Inclusion of records and database

Since 1993 an attempt has been made by RFP to record details of all visits by birdwatchers and document their observations. The submitted reports have been kept electronically or as hard copies and a copy of the resulting database is stored with OSME for safe keeping and future reference.

If anyone has visited Socotra to watch birds and not sent us their records, we encourage them to do so and they will be published in any future update and with full acknowledgement.

All observations submitted up to October 2022 have been analysed and included. Where there has been some doubt as to a bird's identity the record has been cited under 'Unsubstantiated Records' at the end of the systematic list. In 1999 a Socotra bird records committee was established, the members being Omar Al Saghier, Simon Aspinall, Nadim Taleb and RFP. This ceased in 2011 after the death of Simon Aspinall and when the conflict in Yemen meant few ornithological visits were being made to the archipelago. Since then all records submitted have been assessed by RFP, consulting with others as appropriate. Fortunately most observations of rare species are now supported by photographs, which has made assessment much easier and creates a permanent record. Where photographs have been taken this is cited in the species' account as have any papers published in support of a sighting.

Operating in the absence of a formal records committee that can judge records is not ideal, but we hope that few errors have crept into this checklist and that it is as complete as is possible.

Vagrants

We define a vagrant as a species that has been recorded five times or fewer. Where there are three or fewer records the name of the observer(s) is given. Many species currently defined as vagrants are likely to be prove to be uncommon but regular migrants as coverage increases.

Breeding species

The accounts of breeding species have been summarised from Porter & Suleiman (2013, 2014) which contain further details of status.

Common Quail Coturnix coturnix

Uncommon passage migrant and winter visitor. Historically 'a few' observed in winter 1898/99, including on Abd al Kuri (Ogilvie-Grant & Forbes 1903, Kirwan *et al* 1996). Since 1993 recorded on 17 dates in October and November and February to April, with a maximum count of four, 23 November 1999. One flying towards Socotra seen during a pelagic trip 31 October 2009. In addition a *Coturnix* sp was seen at the end of March 1964 (Ripley & Bond 1966).

Harlequin Quail Coturnix delegorguei

Vagrant. Two flushed to the east of Qalansiyah, 26 February 2007 (RF Porter).

White-faced Whistling Duck Dendrocygna viduata

Vagrant. A flock of 12 was discovered at Qariyah lagoon, 27 January 2019 (Suleiman 2020). By June just one remained, at Khor Sirhan, and was still present in December 2021, but apparently not in 2022.

Greater White-fronted Goose Anser albifrons

Vagrant. One at Qariyah lagoon, 1–16 December 2002 (AS Suleiman); one there in autumn 2019 was still present 2 March 2020 (AS Suleiman, R Nessing).

Ruddy Shelduck Tadorna ferruginea

Vagrant. One at Khor Qadheb, 20 February 2019 (AS Suleiman).

Cotton Pygmy Goose Nettapus coromandelianus

Rare visitor. At least five records, totalling 14 birds, all January to March (in 2004, 2007, 2009, 2014 and 2020). Observed at Khor Sirhan, Qalansiyah estuary and Qariyah lagoon in groups of up to four.

Garganey Spatula querquedula

Regular winter visitor and passage migrant. Recorded from September to March on most of the north coast khors and lagoons with the highest counts being 41 at Qariyah lagoon, 28 March 1996; 18 at Khor Sirhan, 19 November 1999; 25 at Khor Mouri, 13 December 2021; 24 at Qalansiyah estuary, 8 November 2007 and 31 there, 25 October 2008.

Northern Shoveler Spatula clypeata

Regular winter visitor and passage migrant in small numbers, first recorded in December 1998. Observed from September to February on most of the north coast khors and lagoons with the highest counts being 20 at Khor Mouri, 13 December 2021; 12 at Khor Sirhan, 21 November 1999 and ten at Qariyah lagoon, 13 February 2001.

Gadwall Mareca strepera

In winter 1898/99 described as 'fairly common on the brackish estuaries of the rivers traversing the Hadiboh plain and in the swamps near Khor Garieh [=Khor Qariyah]' (Ogilvie-Grant & Forbes 1903), but only two seen since, a male at Khor Sirhan, 3 January 2014 (DJ Fisher) and one at Qadeb lagoon, 13 December 2021 (MC Jennings *et al*).

Eurasian Wigeon Mareca penelope

Rare winter visitor. Historically, in winter 1898/99 Ogilvie-Grant & Forbes (1903) found it to be 'fairly common about the mouths of the rivers near Hadiboh...with large flocks near Khor Garieh [=Khor Qariyah]'. Since 1999 recorded from November to March on just nine dates in 1999, 2000, 2001 and 2021 on the north coast khors and lagoons, all of singletons, but two at Khor Sirhan, 2 December 1999 and three at Qariyah lagoon, 3 February 2001.

Mallard Anas platyrhynchos

Vagrant. Two records: four at Khor Sirhan, 13 January–19 February 2006 (D Sargeant, RF Porter) and one at Khor Matyif, 20 February 2007 (RF Porter).

Northern Pintail Anas acuta

Regular winter visitor and passage migrant, first recorded November 1999. Observed from October to March in small numbers on many of the north coast khors and lagoons, but most regularly at Qariyah lagoon. Counts of more than five birds, all at Qariyah lagoon were: ten, 3 February 2001; 13, 13 February 2004 and 22, 17 February 2007; also six at Khor Mouri, 18–23 October 2022.

Eurasian Teal Anas crecca

Regular winter visitor and passage migrant. Observed from October to February in small numbers on many of the north coast khors and lagoons, with counts of more than five birds being 27 at Qariyah lagoon, 3 February 2001 and ten at Khor Sirhan, 6 February 2004.

Common Pochard Aythya ferina (Vulnerable)

Vagrant. First recorded in February 2001 when three at Qariyah lagoon. Since then just four records: three at Qariyah lagoon in February 2004 and 15 there in March 2020; two at Khor Mouri and one at Qalansiyah estuary in December 2021.

Ferruginous Duck Aythya nyroca (Near Threatened)

Rare winter visitor. Historical records were of a small flock at the estuary of Wadi Dinehan (= Di Negehen) (Ogilvie-Grant & Forbes (1903) and one at Gollensir (=Qalansiyah) (Hartlaub 1881). Since 1999 recorded in five years to 2014, all from November to March, at several north coast khors: up to four Khor Sirhan, 26 November–2 December 1999; three at Qariyah lagoon, 3–13 February 2001 and three there 13–14 February 2004; one at Khor Sirhan, 27 February 2009, one 2 March 2011 and five there, 1–4 January 2014.

Tufted Duck Aythya fuligula

Vagrant. Four records: up to five at Khor Sirhan, 2–14 February 2001, five there, 17–23 February 2006 and two, 3 January 2014; one at Ditwah lagoon, 25 December 2009–3 January 2010.

European Nightjar Caprimulgus europaeus

Vagrant. One roosting in daylight in Hadiboh on 3 November 2007 (RF Porter). Historically one recorded off Abd al Kuri on 21 October 1930 (Kirwan 1998).

Egyptian Nightjar Caprimulgus aegyptius

Vagrant. One at Ras Irisseyl, 3 November 2010 (R Felix).



Plate 4. Nubian Nightjar Caprimulgus nubicus, Socotra, December 2021. © Tasso Leventis

Nubian Nightjar Caprimulgus nubicus (Plate 4)

Endemic subspecies *C. n. jonesi* is cited as occurring on Socotra by Gill *et al* (2022), but the validity of this taxon is questioned by Kirwan (2004). However genetic and/or vocal studies might yet shed additional light on the taxonomy of the species as a whole, including the

Socotran population. Breeding resident (Figure 3). Found mostly on sparsely vegetated sandy and gravelly plains below 100 m asl. Targeted dusk surveys from 1999 to 2011 show that it is not uncommon, nonetheless it would be reasonable to assume the population is less than 100 pairs.

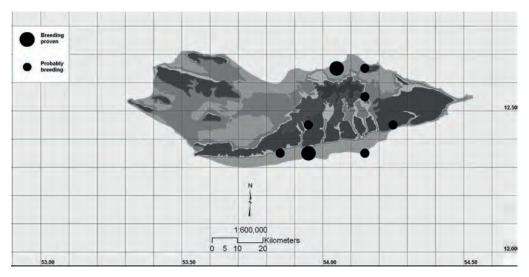


Figure 3. Breeding distribution of Nubian Nightjar Caprimulgus nubicus from Porter & Suleiman (2013).

Himalayan Swiftlet Aerodramus brevirostris

Vagrant. An amazing record of six, photographed, at Diksam on 10 & 11 November 2007 (H Buck, D Hoddinott, W Suter *et al*). Photographs by W Suter are published in Demey (2008).



Plate 5. Forbes-Watson's Swift Apus berliozi, Socotra, October 2022. © Mark Beaman.

Alpine Swift Tachymarptis melba

Vagrant. Two over Khor Sirhan on 3 November 2007 (RF Porter).

Forbes-Watson's Swift Apus berliozi (Plate 5)

Although assigned to the subspecies *berliozi*, discussion by Grieve & Kirwan (2012) over the identification, taxonomy and status of this southwest Arabian and northeast African swift strongly suggest it is monotypic and that the subspecies *bensoni*, breeding in Somalia, is not valid. Breeding visitor (Figure 4). Breeding proven at two sites on Socotra. Also found nesting on Abd al Kuri (three colonies March/April 2007) and Samha, with birds present on Kal Farun (Suleiman *et al* 2007). Breeding population unknown. Present throughout much of the year with *c*600 on 20 February 2000 being the largest flock recorded. None seen between 20 December and 19 February when probably absent from the archipelago.

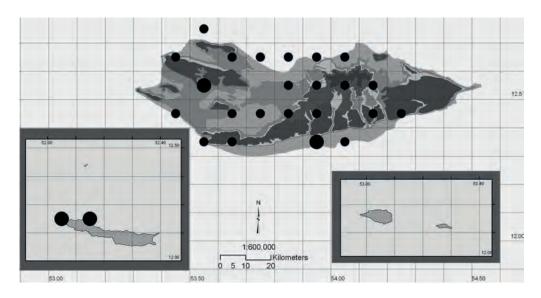


Figure 4. Breeding distribution of Forbes-Watson's Swift Apus berliozi from Porter & Suleiman (2013).

Little Swift Apus affinis

Vagrant. Several observed and photographed over Diksam, 10–11 November 2007 (H Buck *et al*). Photograph published in Demey (2008).

Macqueen's Bustard Chlamydotis macqueenii (Vulnerable)

Vagrant. One at Hayf on the Noged plain, 18 November 1999. This is at the southernmost limit of the species' known winter range (SJ Aspinall & RF Porter).

White-browed Coucal Centropus superciliosus

Originally described as an endemic subspecies *sokotrae* (Ripley & Bond 1966), this taxon is now considered invalid (Kirwan 2007) and the Socotran taxon is assigned to the nominate subspecies *superciliosus* of southwest Arabia and northeast Africa. Breeding resident (Figure 5). The small population of probably less than 100 pairs is confined mainly to the northern wooded slopes of the Haggeher mountains down to the date palms near sea level.

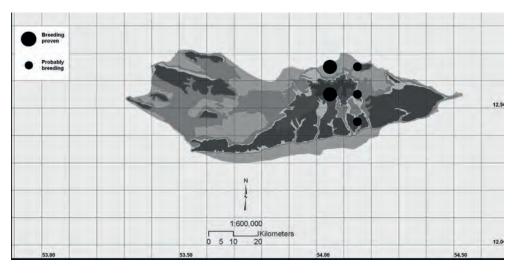


Figure 5. Breeding distribution of White-browed Coucal Centropus superciliosus from Porter & Suleiman (2013).

Jacobin Cuckoo Oxylophus jacobinus

Vagrant. Three at Hayf on the Noged plain, 18 November 1999 (SJ Aspinall & RF Porter).

Asian Koel Eudynamys scolopaceus

Vagrant. Three, one male and two females, seen and photographed at Wadi Di Negehen, 7–12 February 2004 (RF Porter & O Al-Saghier). One immature male, caught and photographed, in Hadiboh, 22 December 2021 (AS Suleiman).

Common Cuckoo Cuculus canorus

Uncommon passage migrant. First recorded on 14 November 1999 since when 13 records, all in October and November, including two on Abd al Kuri, 21 October 2022. Of particular note is that on 27 November 2019 a bird fitted with a PTT (satellite tag) in June on its breeding grounds in Mongolia was tracked flying over Socotra on its migration to Africa (Porter 2020).

Lichtenstein's Sandgrouse Pterocles lichtensteinii (Plate 6)

The subspecies *lichtensteinii* ocurrs which is widespread in northeast Africa. Breeding resident (Figure 6). Widespread on Socotra below 200 m asl. and also recorded on Abd al Kuri. Highest counts at drinking pools at dusk: 100, 50 and 30. Detailed surveys from 1999 to 2011 calculated the population at over 2200 individuals and the breeding season mid-November to late April.



Plate 6. Lichtenstein's Sandgrouse Pterocles lichtensteinii, adult male, Socotra, March 2022. @ James Eaton

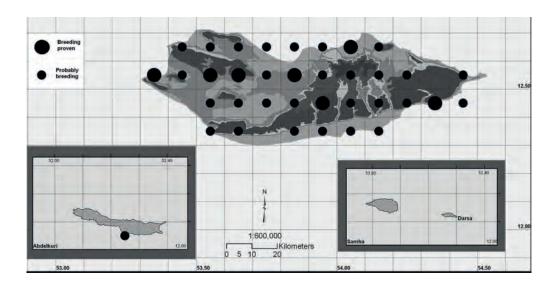


Figure 6. Breeding distribution of Lichtenstein's Sandgrouse Pterocles lichtensteinii from Porter & Suleiman (2013).

Feral Pigeon Columba livia var. domestica

Introduced breeding resident. Small domestic population in Hadiboh of up to c12 birds since at least 1999; also a small population in Qalansiyah of <10 birds. What appeared to be pure Rock Doves recorded on cliffs west of Hadiboh at least until 2008 with up to six birds present.

Eurasian Turtle Dove Streptopelia turtur (Vulnerable)

Vagrant. Two records, both in 2022: one at Khor Sirhan, 18 October and one photographed on Abd al Kuri, 21 October (M Beaman *et al*).

Laughing Dove Spilopelia senegalensis

Earlier opinions that the taxon on Socotra was of an endemic subspecies *sokotrae* have been rejected (see Kirwan 2007 for discussion) and thus the Socotran birds are now assigned to the nominate and widespread subspecies *senegalensis*. Breeding resident (Figure 7). Found only on the main island of Socotra where it has the widest distribution of any species and is the third commonest breeding bird (after the Socotra Sparrow and Black-crowned Sparrow-lark). Detailed surveys from 1999 to 2011 calculated the population at over 166 600 individuals. It occurs in all habitats, except for coastal dwarf vegetation, up to 1000 m asl. The breeding season is November to June.

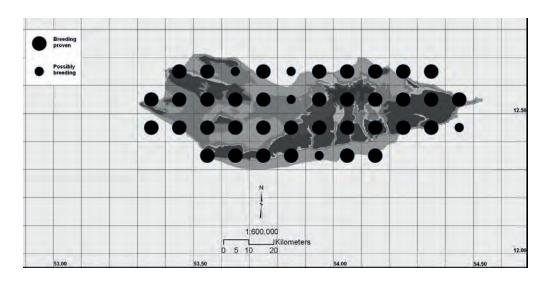


Figure 7. Breeding distribution of Laughing Dove Spilopelia senegalensis from Porter & Suleiman (2013).

Namaqua Dove Oena capensis

Vagrant. The only record is of an adult male collected at Gollansiya (= Qalansiyah) on an unknown date by E Riebeck (Hartlaub 1881).

Bruce's Green Pigeon Treron waalia

Breeding resident (Figure 8). Found only on Socotra island where in occurs mainly in the eastern part, favouring palm groves at lower altitudes, but also thickets up to 1100 m asl in the Haggeher mountains. Detailed surveys from 1999 to 2011 calculated the population at over 8300 individuals and the breeding season from November to March.

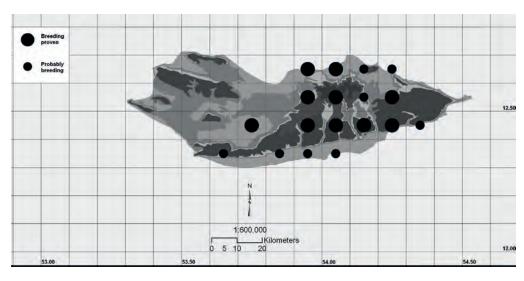


Figure 8. Breeding distribution of Bruce's Green Pigeon Treron waalia from Porter & Suleiman (2013).

Corn Crake Crex crex

Vagrant. One at Wadi Zirage, 17 October 2007 (OJ Campbell & NJ Moran).

Spotted Crake Porzana porzana

Rare winter visitor and passage migrant. Historically one collected in winter 1896/97 by EN Bennett, but locality unknown. This clarifies the date for the species entry in Ogilvie-Grant & Forbes (1903) and Kirwan (1998). All records since 2007 are given. Khor Sirhan: singles, 18 October 2007 and 5 March 2011; two, 16 March 2008 and one, 18 October 2022; Khor Dibnih: one, 18 October 2007 and 23-24 October 2022; Khor Hadiboh: three, 1 October and one, 25-26 October 2008.

Common Moorhen Gallinula chloropus

Apparently an uncommon and irregular visitor which has bred at least twice. Historically five adults were obtained by Riebeck (Hartlaub 1881) but no date or locality given. One to two at Khor Sirhan, 1998-2001 with breeding suspected in 2006 when adults with a juvenile were seen. In 2011 breeding was proved there and at least four adults and four immatures were observed in February and March. Two seen at Khor Sirhan in January 2014, whilst in December 2021, when a used nest was found, there was an unprecedented number of 30 there, including at least two immatures, with birds also recorded at Qalansiyah estuary (two), Khor Sheq (four) and Khor Dibnih (three). Then in March 2022 a total of 40 was recorded at Khor Sirhan, three of which were immatures. In October 2022 immatures were observed at Khor Ghubbah and Khor Di Lisha.

Eurasian Coot Fulica atra

Vagrant. First recorded in November 1999 at Khor Sirhan where two present. One at Khor Hadiboh in February 2000 and two at Qalansiyah estuary in January–February 2007 and two at Khor Matyif, January 2007; one at Khor Sheq, 19 December 2021.

Red-knobbed Coot Fulica cristata (Plate 7)

On 27 February 2020 a total of 37 birds discovered on Qariyah lagoon and creek and by early March seven were sitting on nests. Breeding was successful and in June 89 birds were counted at Qariyah and Khor Sirhans, many of them juveniles (Suleiman 2020, Nessing 2020). In December 2021 *c*50 birds were still present: four at Khor Mouri, 35 at Khor Sirhan and ten at Qariyah lagoon; a bird was nest building on Khor Sirhan on 18–19 December. In March 2022 a total of 30 was counted at Khor Sirhan with birds feeding full grown young, whist at Khor Qadheb five adults and four chicks were seen.



Plate 7. Red-knobbed Coot Fulica cristata, Socotra, March 2022. © Lars Petersson

Baillon's Crake Zapornia pusilla

Vagrant. Three records: a first-winter bird seen and photographed at Qalansiyah estuary, 25 February 2006 (RF Porter); one seen and photographed at Khor Sirhan, 5 November 2008 (RF Porter) and five there, photographed, in April 2020 and may have bred (Suleiman 2020).

Little Crake Zapornia parva

Vagrant. Five records: one photographed at Wadi Sirhan, 19 October 2007; a first-winter bird photographed at Qalansiyah estuary, 27 October 2008; one at Wadi Zirage, 21 February 2009; an immature at Khor Sheq, 18 October 2022 and an immature at Khor Dibnih, 23–24 October 2022.

Watercock Gallicrex cinerea

Vagrant. One seen and photographed on Khor Sirhan, 2–7 March 2011 (Porter & Suleiman 2011).

White-breasted Waterhen Amaurornis phoenicurus

Vagrant. Two at Khor Sirhan, 25 May 2022 (AS Suleiman).

Common Crane Grus grus

Vagrant. An adult photographed between Hadiboh and Homhil, 12 February 2000 (W Wranik).

Little Grebe Tachybaptus ruficollis

Breeding occurred in two years, otherwise a vagrant. Four present at Khor Sirhan, July–December 1998, when an immature was seen. In November 1999 a pair was observed there with one young. Not seen again on Socotra until February–March 2020 when four at Khor Sirhan and two at Qariyah lagoon; in December 2021 two at Khor Sirhan and single birds at Khor Mouri and Qalansiyah estuary; in October 2022 two at Khor Qadheb.

Greater Flamingo Phoenicopterus roseus

Winter visitor and passage migrant. Historically 'quantities of Flamingos' were recorded (Ogilvie-Grant & Forbes 1903) and small numbers, presumably of this species, as late as mid-June 1964 (Ripley & Bond 1966). More recently in years when the main sites were counted in autumn/winter (13 years from 1993 to 2021), numbers have fluctuated with none recorded in some years and up to 52 in others: 1993 (49), 1999 (0), 2000 (35), 2001 (51). 2004 (39), 2006 (52), 2007 (13), 2008 (50), 2010 (26), 2011 (18), 2014 (3) and 2021 (40). The highest counts at the main sites were 52 at Qariyah lagoon, February 2006; 50 at Khor Qadheb, August 2008; 27 at Khor Nojaar, October 2008 and 26 at Di Hamdh, December 2009 and January 2010. Qariyah lagoon is consistently the most important site for this species. An immature recorded on Abd al Kuri, 20 October 2022.

Eurasian Oystercatcher Haematopus ostralegus (Near Threatened)

Vagrant. Four records. Ditwah lagoon: one, 5 March 2000, two, 28 February 2008 and two, 2–3 January 2010; one at Khor Hadiboh, 12 May 2011.

Black-winged Stilt Himantopus himantopus

Resident (Figure 9) and probably a winter visitor and passage migrant. Not observed on Socotra until March 1993 since when recorded in increasing but fluctuating numbers. The population is estimated to be >150 birds, with the highest count of 109 at Qalansiyah lagoon in February 2006. Breeding first occurred in 2007 at Neet, since when it has been proven at Qalansiyah estuary and Khor Sirhan. For full details see Suleiman (2009).

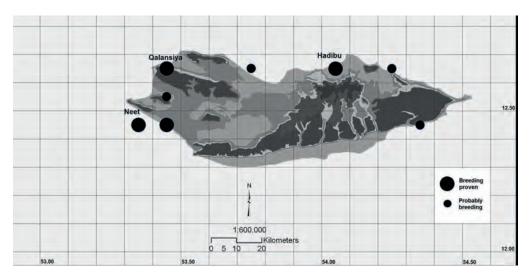


Figure 9. Breeding distribution of Black-winged Stilt Himantopus himantopus from Porter & Suleiman (2014).

Northern Lapwing Vanellus vanellus (Near Threatened)

Vagrant. One near Hadiboh, January 2006 (I Sinclair).

Pacific Golden Plover Pluvialis fulva

Winter visitor and passage migrant. Seen regularly, usually up to three birds, on several north coast khors and lagoons from August to March. Highest counts in autumn, notably at Khor Sirhan: 15 on 10 September 2000; 13 on 12 November and eight on 2 December 1999. A total of 42 was recorded on Samha, March/April 2007.

Grey Plover Pluvialis squatarola

Winter visitor and passage migrant. Seen regularly in small numbers on the north coast khors and lagoons from September to April, but more commonly on spring passage. Highest counts: 132 at Ditwah lagoon, March 2000; eight on Hadiboh shore, March 2000 and ten at Qariyah lagoon, February 2001.

Common Ringed Plover Charadrius hiaticula

Winter visitor and passage migrant. Seen regularly in small numbers on the north coast khors and lagoons from September to April, but more commonly on spring migration. Highest counts: total of 51 on the north coast khors, 15 March 2000; 14 at Ras Diblih, 3 April 1993; 12 at Khor Ghubbah, 19 February 2006; ten at Qariyah lagoon, 25 February 2000; ten at Qalansiyah estuary, 25 February 2006; ten at Khor Nojaar, 26 October 2008 and eight at Khor Sirhan, 9 February 2001.

Little Ringed Plover Charadrius dubius

Winter visitor and passage migrant. Seen regularly in small numbers, usually one to five, on the north coast khors and lagoons from October to April. Highest count was at Qalansiyah estuary where ten recorded in December 1998.

Kentish Plover Charadrius alexandrinus

The widespread subspecies *alexandrinus* occurs. Breeding resident (Figure 10) and possibly a winter visitor in small numbers. Systematic counts at all potential breeding areas from 1999 to 2011 give a population estimate of 200 birds, perhaps equating to 100 breeding

pairs. Most recorded on the north coast khors and lagoons, with highest counts being: 22 along the Hadiboh/Khor Sirhan shore, 19 November 1999; 47 from Di Selmeho to airport, 7 March 2000; 39 at Qariyah lagoon, 24 February 2000 and 42 there, 18 February 2006 and 70 at Ras Irisseyl, 27 February 2011. Breeding season is mid-November to end May.

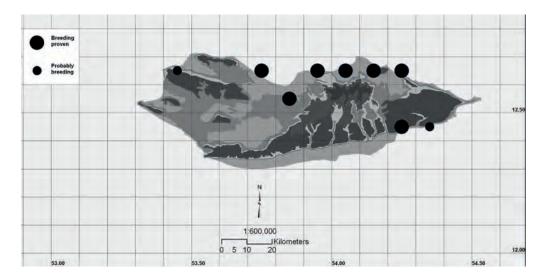


Figure 10. Breeding distribution of Kentish Plover Charadrius alexandrinus from Porter & Suleiman (2014).

Lesser Sand Plover Charadrius mongolus

Rather uncommon winter visitor and passage migrant. First recorded in 1993 and less than 20 records to 2022, usually of one to four individuals, on the north coast khors and lagoons from August to April; also recorded Abd al Kuri. Highest count was 14 at Qariyah lagoon, 17 February 2007.

Greater Sand Plover Charadrius leschenaultii

Rather uncommon winter visitor and passage migrant. First recorded in 1993 and then *c*16 records to 2021, usually of one or two birds, on the north coast khors and lagoons from September to April; also recorded Abd al Kuri. Highest counts: five at Khor Sirhan, 10 September 2000, 12 at Qariyah lagoon, 28 December 2009 and eight at Ras Irisseyl, 27 February 2011.

Caspian Plover Charadrius asiaticus

Vagrant. One recorded near Hadiboh, 6–13 January 2006 (I Sinclair).

Pheasant-tailed Jacana Hydrophasianus chirurgus

Vagrant. Five records: one photographed at Khor Hadiboh, 19 November 1999; one photographed at Khor Sirhan, 6–26 February 2004; one photographed at Khor Dibnih, 18 October 2007; one at Khor Sirhan, 1 January 2014 and one photographed there, 16 January 2022.

Eurasian Whimbrel Numenius phaeopus

Winter visitor and passage migrant in small numbers. Seen regularly on the north coast khors and lagoons from August to April usually with counts of one to two birds and rarely more than eight. The highest total counts on central north coast wetlands, were 29 on 5

April 1993; 20 on 15 March 2000 and 30 on 27 February 2008 on which date a bird showing the characters of the globally extremely rare subspecies *alboaxillaris* (Steppe Whimbrel) was observed at Amak beach (P Kohler).

Eurasian Curlew *Numenius arquata* (Near Threatened)

Winter visitor and passage migrant in small numbers. All birds recorded are of the race *orientalis*. Seen regularly on the north coast khors and lagoons from July to April, usually just one to five birds. Counts above five: seven at Ditwah lagoon, March 2000 and 30 there, February 2006; nine at Khor Sirhan, August 2000 and 20 at Khor Qadheb, January 2010.

Bar-tailed Godwit Limosa lapponica (Near Threatened)

Winter visitor and passage migrant in small numbers. Seen on the north coast khors and lagoons from October to March with usually just one or two individuals recorded. Up to 2021 there were some 20 records. The highest counts were at Ditwah lagoon where eight, November 1999, ten, February 2009 and 27, 3 March 2000.

Black-tailed Godwit Limosa limosa (Near Threatened)

Vagrant. First recorded 30 November–2 December 1999 when a single bird was at Khor Sirhan and Khor Hadibo; two at Qalansiyah estuary, 2–7 March 2011; up to four at Khor Sirhan, 1–4 January 2014; and one there, 15–17 December 2021.

Ruddy Turnstone Arenaria interpres

Winter visitor and passage migrant. Seen commonly in small numbers on the north coast shores and khors from September to April. Highest counts: 35 on the north coast shores and khors, March 2000; 25 at Khor Mouri, December 2021; 17 at Khor Sirhan, March 2000; 13 on Hadiboh shore, November 1999; eleven at Di Hamdh, February 2000 and nine at Qariyah lagoon, December 2021. Also 21 on Samha, March/April 2007. On Abd al Kuri a total of 66 counted in March/April 2007.

Red Knot Calidris canutus

Vagrant. One near Di Lishah, 3 April 1993 (Kirwan et al 1996).

Ruff Calidris pugnax

Uncommon winter visitor and passage migrant. First recorded 13 November 1999 then fewer than 20 records to 2021, nearly all single birds on four of the north coast khors and lagoons from September to March. Most records were at Khor Sirhan, where up to three in October 2007; up to two at Wadi Hadiboh, December 2009; up to ten at Qalansiyah estuary, January 2007 and a singleton inland at Wadi Zirage, 30 December 2009.

Broad-billed Sandpiper Calidris falcinellus

Rare winter visitor. First recorded at Qariyah lagoon 24 February 2000 when two were present. Further records: one at Khor Sirhan, early January 2007; two at Khor Ghubbah, 15–17 October 2007; one at Qariyah lagoon, 18 October 2007; one at Qariyah lagoon, 3 March 2020 and two at Khor Mouri, 13 December 2021.

Curlew Sandpiper *Calidris ferruginea* (Near Threatened)

Uncommon winter visitor and passage migrant. First recorded August 1998 and then on fewer than 20 occasions to 2022 with flocks of up to ten birds on the north coast khors and lagoons from August to February. Highest counts: four at Khor Ghubbah, February 2001 and 2004; four at Khor Sheq, November 1999; seven at Qariyah lagoon, February 2001; seven at Khor Sirhan, November 1999; eight on the khors west of airport, February 2001 and ten on Khor Mouri, December 2021.

Temminck's Stint Calidris temminckii

Winter visitor and passage migrant. Seen regularly in small numbers on most north coast khors and lagoons and on Abd al Kuri from October to April. Most sightings were of just one or two birds, but often small groups of up to five. The largest numbers were seen at Khor Sirhan where the highest count was 15 in February 2009; other high counts were seven at Qariyah lagoon in March 1993 and 12 on Hadiboh shore also in March 1993.

Long-toed Stint Calidris subminuta

Vagrant. One in partial summer plumage photographed at Qalansiyah estuary, 25 February–8 March 2008 (RF Porter & AS Suleiman).

Sanderling Calidris alba

Winter visitor and passage migrant. Historically listed as a vagrant (Dowsett & Dowsett-Lemaire 1993). Recently found to be uncommon with fewer than 15 records since 1993, most being on the north coast shores and khors from October to April. Sightings usually of one to three birds with the highest counts being: 13 on Hadiboh shore, November 1999; eight at Khor Nojaar, February 2004; nine at Khor Ghubbah, December 2009, 30 at Qalansiyah lagoon, December 2021 and 16 at Ditwah lagoon, December 2009 where an unprecedented 105 were counted on 3 January 2010. On Abd al Kuri 46 were counted in March/April 2007.

Dunlin Calidris alpina

Uncommon winter visitor and passage migrant. First recorded in November 1999 and then fewer than 15 records to 2021, usually of one or two birds, on four of the north coast khors and lagoons from October to March. Highest counts: three at Qariyah lagoon, February 2007; four at Khor Sirhan, October 2009 and eight at Khor Ghubbah, March 2000.

Little Stint Calidris minuta

Common winter visitor and passage migrant. The commonest wintering and passage wader, recorded at all north coast khors and lagoons from October to May, with Qariyah lagoon being the most important site where over 50 counted regularly. Highest counts at the favoured localities: 91 at Qariyah lagoon, December 2009; 47 at Di Hamdh, February 2000; 42 at Ditwah lagoon, March 2000; 30 at Khor Mouri, December 2021 and 20 at Khor Nojaar, October 2008. It would not be unreasonable to suggest a Socotran wintering population of >250 birds.

Jack Snipe Lymnocryptes minimus

Rare winter visitor. First recorded 18–19 February 2004 when one at Wadi Zirage and one at Khor Sirhan from 21–26 February. Four recorded in 2006: one-two at Khor Sirhan, 17–20 February, one at Wadi Zirage, 21 February and one at Qalansiyah estuary, 3 March; one at Di Lishah on 16 October 2007 and one at Khor Sirhan on 17 December 2021.

Pin-tailed Snipe Gallinago stenura

Winter visitor. Recorded at several north coast wetlands, also inland from October to March, usually singly. The first record was on 10 March 1998 at Qadeb lagoon, thereafter observed on about 20 occasions to 2022 with counts of more than one being: two at Khor Sirhan, March 2000, four there, February 2006 and two there, February 2009. Three at Wadi Zirage, March 2000.

Common Snipe Gallinago gallinago

Common winter visitor and passage migrant. Recorded singly or in small numbers, usually less than five, at most wetlands throughout Socotra from September to April. Counts of over five birds: seven at Khor Sirhan, 14 November 1999, six, 1 March 2000 and

13 on 19 February 2011; nine at Wadi Zirage, 23 November 1999, seven, 11 February 2001, eight, 5 November 2007 and 20 on 28 October 2008; seven at Skand, 3 March 2000.

Terek Sandpiper Xenus cinereus

Vagrant. First recorded at Khor Ghubbah on 6 February 2001. Further records were: one at Khor Sirhan, 13 February 2004; two at an unrecorded site, 2 September 2007 and one at Khor Sirhan, 16 October and 10 November 2007.

Red-necked Phalarope Phalaropus lobatus

Passage migrant in the Arabian Sea. Historically, in February 1953, phalaropes reported as always present around Socotra and Gulf of Aden in winter, most believed to be *lobatus*. In addition several thousand *Phalaropus* sp. including flocks of 200–300 birds (of which two birds came on deck and were *P. lobatus*) in the seas north of the island on 30 September 1960 (Phillips 1954, Proud 1961, Kirwan 1998). Recently, apart from single birds in February 2006 at Di Lishah, November 2007 off Qalansiyah and Khor Sirhan, 25 June 2022, the only flocks seen have been 150 and 20 off the north coast, 12 and 14 October 2007; 500 off Qadheb, 28 October 2009; groups of 55 and 76 between Kal Farun and Abd al Kuri, 27 November 2021, 300 between Socotra and Abd al Kuri, 17 March 2022 and up to 26 between Qalansiyah and Abd al Kuri, 20-22 October 2022.

Grey (Red) Phalarope Phalaropus fulicarius

Vagrant. One photographed at sea between Socotra and Abd al Kuri, with Red-necked Phalaropes, 17 March 2022 (RO Hutchinson & L Petersson)

Common Sandpiper Actitis hypoleucos

Common winter visitor and passage migrant. Recorded, usually singly or in very small groups, from August to April on all the north coast khors and lagoons as well as scattered inland localities. Highest counts, 1993 to 2021: total of 33 at six coastal localities, April 1993; 19 at several localities, December 1998; eight at Khor Sheq, November 1999; 37 on the north coast khors, March 2000; 12 Khor Sirhan, August 2000; ten at Qariyah lagoon, February 2001 and six at Qalansiyah estuary, February 2007.

Green Sandpiper Tringa ochropus

Common winter visitor and passage migrant. Recorded from October to March throughout Socotra, mostly on inland wadis with running water; also Abd al Kuri. Usually only one to two seen, but six on Wadi Di Farho, 8 February 2001 and three on flood waters on the Noged plain, 28 October 2007.

Common Redshank Tringa totanus

Rather uncommon winter visitor and passage migrant. Recorded, usually singly or in groups of up to four, from August to April on most north coast khors and lagoons. Counts above five, 1993 to 2021: nine at Qariyah lagoon, March 1999 and 16 there, March 2000; nine at Ditwah lagoon, November 1999 and six there, March 2000; a total of 23 was counted on the north coast estuaries, March 2000.

Marsh Sandpiper Tringa stagnatilis

Rare winter visitor and passage migrant. One at Qadeb lagoon, 6 April 1993; singles at Khor Sirhan, 14 January–2 March 2006, 26–31 December 2009 and 16 February–6 March 2011; one at Wadi Hadiboh, 5 January 2010, 22 August 2013 and 25 October 2022; two at Qalansiyah estuary, 9 December 2008 and one, 2 March 2011.

Wood Sandpiper Tringa glareola

Common winter visitor and passage migrant. Recorded from August to March at all north coast khors and lagoons and three inland localities. Mostly seen in ones or twos and occasionally three together. Counts above three: four at Wadi Hadiboh, 28 August 2000; four at Wadi Di Farho, 8 February 2001; eight on flood water on Noged plain, 28 October 2007; four at Qalansiyah estuary, 2 November 2007 and six there, 2 March 2011; five at Khor Sirhan, 19 February 2011. Most remarkably 122, in two groups, were counted at Khor Ghubbah on 15 October 2007, where also 22 on 17 October.

Spotted Redshank Tringa erythropus

Vagrant. One at Khor Ghubbah, 29 February and two at Sanadaf creek, 5 March 2000 (DS Flumm & RF Porter); one at Wadi Zirage, 24 October 2022 (M Beaman *et al*).

Common Greenshank Tringa nebularia

Common winter visitor and passage migrant. Recorded from August to April on all north coast estuaries and lagoons and occasionally inland wadis with most counts being of one to six birds. Highest counts at the main sites: a total of 49 on the central north coast khors, 15 March 2000; 40 at Qalansiyah estuary, 18 December 2021; 40 at Ditwah lagoon, 16 January 2006; 23 at Qariyah lagoon, 27 February 2011; eleven at Khor Sirhan, 14 November 1999 and eleven at Wadi Di Farho, 20 February 2000.

Crab-plover Dromas ardeola

Vagrant. Historically reported as common at Qalansiyah by Balfour (Sclater & Hartlaub 1881). Recently six (two adults, four immatures) on Hadiboh shore, 19 November 1999 (SJ Aspinall & RF Porter), one at Denham, 21 February 2009; one at Ras Irisseyl, 4 November 2010 (R Felix) and six (two adults, four immatures) at Khor Sirhan, 27 November 2011 (AS Suleiman).



Plate 8. Cream-coloured Courser Cursorius cursor, adult and juvenile, Socotra, November 2008. © Richard Porter

Cream-coloured Courser Cursorius cursor (Plate 8)

The North African and Arabian subspecies, cursor, occurs. Breeding resident (Figure The commonest of the three species of waders that breed on Socotra and found mainly on the coastal and inland plains up to 100 m asl. During detailed surveys from 1999 to 2011 the population was calculated at c1050 individuals. The known breeding season September to July, the longest of any of the

Socotran breeding species. Furthermore, five seen on Abd al Kuri east of Khissa Saleh on 21 October 2022 might indicate a breeding site on that island.

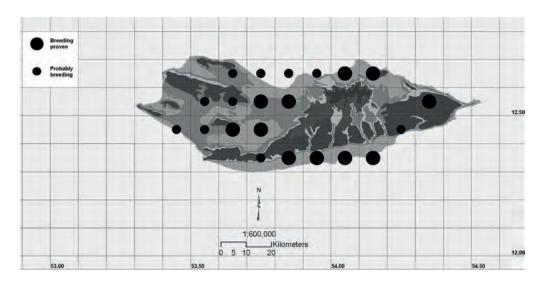


Figure 11. Breeding distribution of Cream-coloured Courser Cursorius cursor from Porter & Suleiman (2014).

Collared Pratincole Glareola pratincola

Vagrant. Singles recorded on the Noged plain, 16 November 1999, Qalansiyah estuary, 16 January and 3 March 2006, Khor Hadiboh, 21 September 2008; two at Qalansiyah estuary, 30 October 2009.

Brown Noddy Anous stolidus

The subspecies *pileatus* occurs which is found in the Red Sea, Gulf of Aden, Indian and Pacific Oceans. Breeding summer visitor and present offshore throughout year. A breeding survey on the islands in the archipelago in May 1999 recorded the following pairs: Darsa 1000–1500; Samha 100–200; Sabuniya 250–300; Kal Farun 150–250 (Al-Saghier *et al* 2000), suggesting a total archipelago population of *c*1900 pairs, *c*17% of the Arabian breeding population (Jennings 2010). For further details see Porter & Suleiman (2014). Both during and outside the breeding season seen regularly around the coast of Socotra and the archipelago seas including around Abd al Kuri, though its occurrence is rather unpredictable. In March/April 2007 a total of 3094 were counted on transects while travelling to the outer isles. From the mainland the highest counts were in autumn when *c*3400 were feeding in flocks off northeast Socotra on 6-7 November 2007 and up to 2500 in the seas off Hadiboh and Ras Hebak from 24 October–3 November 2008.

Lesser Noddy Anous tenuirostris

Vagrant. One seen off the Mouri coast in October 1999 (F Gardner); several feeding with Brown Noddies and other seabirds off the north coast, 27 September 2007 (J-M & F Thiollay); one photographed off Abd al Kuri, 22 October 2022 (M Beaman *et al*).

Slender-billed Gull Chroicocephalus genei

Vagrant. First recorded on 16 January 2006 at Qalansiyah estuary, where one to two also present and photographed, 25 February–3 March 2006 (D Sargeant, H&J Eriksen and RF Porter); two at Ditwah lagoon, 1 March 2009 (R Felix *et al*); two on the shore by Khor Sirhan, 15 December and six at Ditwah lagoon, 16 December 2021 (NJ Redman *et al*).

Black-headed Gull Chroicocephalus ridibundus

Uncommon winter visitor. Recorded on fewer than 15 occasions from December to March at just four sites, all on the north coast: one at Wadi Hadiboh, 30 December 1998; singles at Khor Sirhan with two, 2 March 1993; singles at Khor Qadheb with two, 19 February 2006 and two, 13 December 2021; singles at Qalansiyah estuary with four, 25 February 2006 and 12 on 16 January 2006.

Pallas's Gull Ichthyaetus ichthyaetus

Vagrant. Four records, but three may relate to the same individual. A first-winter bird photographed near Khor Sirhan, 13 January 2006 and what was probably the same bird at Qalansiyah Lagoon on 16 January (D Sargeant and H & J Eriksen); a first-winter seen and photographed at Qalansiyah lagoon, 25 February-8 March 2006 (RF Porter). An immature at Qalansiyah Lagoon, 28 February 2008 (P Kohler).

White-eyed Gull Ichthyaetus leucophthalmus

Vagrant. Historically small numbers of gulls, including this species, were seen along the north coast in 1964 (Ripley & Bond 1966). Recent records: two at Ras Momi, 1 April 1993; one sub-adult at Di Lishah, 23 February 2000 and probably the same bird at Ras Hebak, 20 March; one sub-adult photographed at Wadi Hadiboh, 25 February 2007 and two there, and photographed, 29 October to 5 November 2008; one adult Riy Di Bedu, 20 October 2022.

Sooty Gull *Ichthyaetus hemprichii* (Plate 9)

Common resident and winter visitor throughout the archipelago. The only proven breeding is on Darsa, where 1000 pairs were counted in May 1999 and subsequently many pairs with chicks were found in October (Al-Saghier *et al* 2000, Suleiman *et al* 2005). Breeding season probably September and October. Present in large numbers throughout the year around the coasts of Socotra, especially the north coast where attracted to the fishing ports at Hadiboh and Qalansiyah. Frequently seen in flocks of up to 100, but particularly high counts were: 200 at Di Lishah, November 1999; 250 at Ditwah lagoon, January 2010; 300 at Khor Qadheb, October 2009; 300 at Di Shu'ub, October 2009; 600 at Didoem, February 2011; 1200 on Hadiboh shore, November 1999 and 2000 at Qalansiyah, January 2006.



Plate 9. Sooty Gull Ichthyaetus hemprichii, adult winter, Socotra, March 2022. © Lars Petersson

Caspian Gull Larus cachinnans

Very rare winter visitor. Recorded on six occasions from 2000 to 2021: one at Khor Sirhan, 4 March 2000 and two, 16 January 2006; one at Ghubbah, 4 February 2001; one at Khor Qadheb, 3 February 2004; two at Qalansiyah estuary, 17 January 2006 and one at Khor Mouri, 13 December 2021.

Lesser Black-backed Gull Larus fuscus

Common winter visitor and passage migrant. The status of the sub-species recorded is given below. Prior to 1999 sub-speciation of the Lesser Black-backed Gull complex was not attempted. However retrospective consideration would strongly suggest the vast majority observed were of the subspecies *heuglini*.

Baltic Gull Larus fuscus fuscus

Rare or uncommon winter visitor. Noted on seven occasions from 2000 to 2009, all from 18 October to 7 March: Hadiboh and Khor Sirhan where five singletons in November, February and March; Khor Ghubbah, one in March and between Qadheb and Hadiboh where 'a few' recorded 26–28 October 2009. In 2022 five were recorded at Khor Qadheb on 16 March and one at Khor Mouri, 18 October 2022.

Heuglin's Gull Larus fuscus heuglini

Common winter visitor and passage migrant. Recorded from October to April around the coasts of Socotra, being especially numerous on the north coast and around the fishing port of Hadiboh. Regularly seen in flocks of up to 100, but particularly high counts in period 1999 to 2021 were: 1000 Hadiboh shore (November 2006) and 400 there (February 2000); 230 Khor Qadheb (March 2000); 200 Khor Mouri (December 2021); 200 Ras Irisseyl (February 2001); 120 Qalansiyah (October 2008). See also under Lesser Blackbacked Gull.

Steppe Gull Larus fuscus barabensis

Apparently an uncommon winter, recorded October to February, but confusion with Heuglin's Gull may hide the true status. First positively recorded on 19 February 2000 when one on Hadiboh shore with Heuglin's Gulls. Thereafter single birds observed at Hadiboh/Khor Sirhan in February 2001, 2004, 2006 and 2014, with six in December 2008; at Ras Irisseyl a singleton seen in February 2001 and two at Khor Qadheb in December 2009; two at Khor Ghubbah, 19 October and eight at Ditwah lagoon, 22 October 2022. The highest counts were: ten at Qalanansiyah, 11 November 2007 and 20 there, 9 December 2008; 43 at Khor Nojaar, 24 December 2009 and 'several' at Khor Mouri, 13 December 2021.

Gull-billed Tern Gelochelidon nilotica

Rare winter visitor and passage migrant. Recorded on ten occasions from 1998 to 2022: singles at Khor Sirhan, September 2000, February 2006 and December 2021; two at Qalansiyah estuary, July 1998 and singles February 2006 and December 2008; one-two Di Hamdh, February/March 2000 and five there in February 2009; two at Khor Mouri, December 2021 and one at Khor Ghubbah, October 2022.

Caspian Tern Hydroprogne caspia

Uncommon passage migrant and winter visitor. Recorded from 1998 to 2022 on the north coast wetlands of Ditwah (four, February 2006 and one, October 2022); Khor Ghubbah (two July–August 1998 and February 2006); Qabheb lagoon (two, December 2021); Khor Mouri (eight, December 2021 and one, October 2022); Khor Sirhan (one, December 2021); Khor Hadiboh (two, April 2022) and Qariyah lagoon (one, October 2022).

Greater Crested Tern Thalasseus bergii

Passage migrant and winter visitor throughout the archipelago. Observed in all months with the largest numbers from August to March. The highest count was 1600, feeding offshore, at Hadiboh, 28 August 2000. A total of 300 counted at several north coast localities in November 1999, this being the highest number recorded in late autumn. In winter the most notable counts were 420 roosting at Erher and 690 at Qariyah lagoon, 28 December 2009 and 250 at Khor Sirhan, 19 December 2021. In spring total counts at north coast localities were: *c*400, April 1993; *c*500, February–March 2000; *c*400, February 2001; *c*470, February 2006 and *c*260, February 2007. On 17 May 2007 five adults and five juveniles at Khor Qadheb might indicate breeding on the island.

Lesser Crested Tern Thalasseus bengalensis

Passage migrant and winter visitor throughout the archipelago. Apart from five at Khor Qadheb in May 2007, recorded regularly from October to April in small flocks, rarely exceeding 100. Highest counts: 50 Khor Sirhan, October 2007; 100 feeding with Brown Noddies off Ras Hebak, October 2008; 150 along Hadiboh shore, December 2006 and 600, February 2011; 100 off Qalansiyah, March 2009 and 200, January 2006.

Sandwich Tern Thalasseus sandvicensis

Passage migrant and winter visitor from July to April. Numbers fluctuate annually, but most seen in spring when total counts on the north coastal wetlands have ranged between 250 and 600. In autumn fewer observed with total counts at wetlands and offshore rarely exceeding 100. In winter the highest counts are 100 at Hadiboh, January 2006 and a total of 300, including a roost of 200, at Qariyah lagoon, December 2009.

Little Tern Sternula albifrons

Status uncertain because of confusion with Saunders's Tern outside the breeding season. One at Khor Sirhan on 3 November 2007 was recorded as Saunders's at the time, but later re-identified as Little Tern from photos; it was in a group of five birds, all of which therefore may have been Little Terns (RF Porter). Two at Khor Ghubbah and seven at Khor Di Hamdh, 19 October 2022 and one at Khour Mouri, 23 October 2022 were all photographed (M Beaman *et al*). See also entry for Saunders's/Little Tern.

Saunders's Tern Sternula saundersi

Breeding summer visitor (Figure 12). Status outside breeding season uncertain. Breeds on the main island, where the population is provisionally estimated at *c*300 pairs, and Abd al Kuri where breeding was proven in 1999 and the population estimated at 150–250 pairs (Al-Saghier *et al* 2000). The total breeding population of the Socotra archipelago estimated at *c*500 pairs appears to be a significant proportion of the Arabian population (see Jennings 2010). The breeding season is May–August. See also entries for Little Tern and Saunders's/Little Tern.

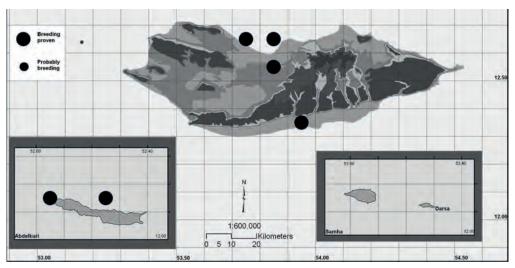


Figure 12. Breeding distribution of Saunders's Tern Sternula saundersi from Porter & Suleiman (2014).

Saunders's/Little Tern Sternula saundersi/albifrons

A recent paper (Mullarney & Campbell 2022) has greatly increased our understanding of the non-breeding plumage of the two species and also our knowledge of the non-breeding distribution of each in Arabian waters and the Indian Ocean generally. As all reports of birds on Socotra outside the breeding season have, hitherto, been of Saunders's Terns, yet the only one photographed has been shown to be a Little Tern (as a result of the new identification criteria) it would seem safer to include all records outside the breeding season as Saunders's/Little and these are given below.

All records, October to March: six on Hadiboh shore, 19–21 November 1999 and six, 24 October 2008; seven at Khor Ghubbah, 29 February and 30 there, 5 March 2000; 23 at Sanadaf creek, 5 March 2000; five at Khor Sirhan, 3 November 2007 (one of which was a Little Tern – see above); one at Qalansiyah estuary, 8 November 2007 and one near Di Shu'ub, 5 December 2021.

Bridled Tern Onychoprion anaethetus

The subspecies *antarcticus* occurs, which is found in the tropical Indian Ocean, Red Sea and Arabian Gulf. Breeding summer visitor. Only found breeding on three of the outer islands: Darsa, 200-300 pairs; Kal Farun, 200–300 pairs and Sabuniya, 300-500 pairs giving a total population of *c*900 pairs. It would appear that birds do not arrive to breed until May as only 18 recorded on Kal Farun in a visit to the islands in March/April 2007. The breeding season would appear to be May to July/August. Outside the breeding season a total of 653 were recorded on transects while travelling to the outer islands in March/April 2007. Rare in autumn with one off the north coast, 18 October 2007, 15 off Erihan, 6 November 2007, two in October/November 2009 and one at Sabuniya, 22 October 2022. 750 Sooty or Bridled Terns were seen feeding at a distance off the north coast on 12 October 2007.

Sooty Tern Onychoprion fuscatus

Vagrant or rare. Historically recorded in 'greater numbers than Bridled Tern' in Socotran waters on 4 August 1951 (Norris 1952). Surprising few recent records. Over 30 counted, the majority juveniles, off the north coast, 12–18 October 2007, when 750 Sooty/Bridled Terns were seen at distance feeding offshore on 12 October (OJ Campbell, S James & NJ Moran). Three at Ras Di Hawlef, 27 October 2010 was the only other record (R Felix).

Roseate Tern Sterna dougallii

Vagrant. Two flew east off Ras Hebak, 6 April 1993 (Kirwan et al 1996) and two flew east off Hadiboh, 19 March 2000 (A Hellquist).

Common Tern Sterna hirundo

Passage migrant. Somewhat unpredictable with none recorded in some years, notably since 2010. First observed in November 1999 when up to 250 counted along the Hadiboh shore. Up to 25 seen along the north coast, March 2000 and noted as widespread in small numbers, October 2007. Over 100 feeding offshore at Ras Hebak, October 2008; 30 on the beach at Erher, 21 October 2009 and *c*70 on the north coast khors in October 2022. The only winter records were singles at Khor Sirhan, Qalansiyah estuary and Hadiboh, 16–19 January 2006. In addition there have been very occasional winter records that have been identified to Common/White-cheeked Tern.

White-cheeked Tern Sterna repressa

Spring passage migrant, present in summer, uncommon in autumn. None reliably recorded in winter and very few in February and early March with the highest count being 56 offshore at Hadiboh, 21 February 2009. Spring passage does not appear to start until mid-March. In 1993 a total of 10 261 was recorded from 30 March to 5 April including 400 off Ras Hebak, 30 March; 2500/hour flying east off Ras Diblih, 4 April and 4380/hour east and 2390/hour west off Ras Hebak, 5 April. A total of 1820 was recorded on the north coast from 10 to 20 March 2000 of which 1110 flew east on 19 March. In 2007 a total of 2447 were counted on transects to the outer isles in March/April. A total of 14 was recorded on the khors and lagoons west of Hadiboh, 15 May 2007; 18 were observed at Qalansiyah estuary, 28 July 1998 and four adults and three juveniles there, 20 August 2013 – presumed to be birds from one of the Yemen colonies. Thereafter uncommon in autumn with less than ten records, the highest count being ten at Khor Sirhan, 3 November 2007 and six at Wadi Hadiboh, 28 October 2008. In addition there have been very occasional winter records that have been identified to Common/White-cheeked Tern.

Whiskered Tern Chlidonias hybrida

Rare winter visitor. Recorded on 15 occasions from October to February between 1998 and 2021 at north coast wetlands, notably Khor Sirhan, Khor Hadiboh and Qalansiyah estuary. Most records were of single birds, occasionally two, but four at Khor Hadiboh on 29 October 2008.

White-winged Tern Chlidonias leucopterus

Rare passage migrant. Recorded on seven occasions, all in September and October. Three at Khor Sirhan, 1–2 September 2000, one–three there, 24 October to 3 November 2008 and one there, 31 October–1 November 2009; one on rain pool on Noged plain, 28 October 2007; one at Qalansiyah estuary, 15 October 2007; one at Khor Nojaar, 26 October 2008 and two at Khor Ghubbah, 19 October 2022.

Brown/South Polar Skua Stercorarius antarcticus/maccormicki

Vagrant. Although not identified to species this record is worthy of inclusion: one off Ras Di Hawlef, 27 October 2010 (R Felix).

Arctic Skua Stercorarius parasiticus

Vagrant. Two off the north coast, 14 October 2007 (OJ Campbell, S James & N Moran); one photographed at Qadeb, 13 December 2021 (MC Jennings *et al*).

Red-billed Tropicbird Phaethon aethereus

The subspecies *indicus* occurs which is found in the tropical Indian Ocean and coasts of Arabia and northeast Africa. Breeds in the archipelago (Figure 13) and occurs in small numbers in offshore waters throughout the year. Counts of individuals or pairs on the outer islands and sea stacks: Abd al Kuri 134 individuals, March 2004; Darsa 400–500 pairs, May 1999; Samha 6 adults, March 2004; Sabuniya 50 individuals, March/April 2005; Kal Farun 150 individuals, March 2004. On Socotra observed on the cliffs at several sites, the most being at Falang where 300, March/April 2011. These counts suggest a population *c*800 pairs, some 12% of the world population.

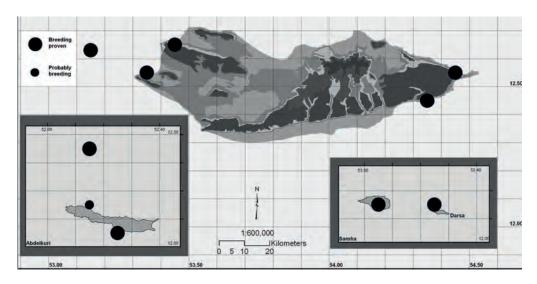


Figure 13. Breeding distribution of Red-billed Tropicbird Phaethon aethereus from Porter & Suleiman (2014).

Wilson's Storm Petrel Oceanites oceanicus

Summer visitor to offshore waters in large numbers as indicated by historic records: considerable numbers in the seas around Socotra on 5 September 1953, including rafts of several hundred north and west of the island (Phillips 1954) also a few north of the island on 30 September 1960 (Proud 1961). Recently the only records have been one off Hadiboh, 4 November 2007 (RF Porter) and two off Di Hamdh, 1 November 2009 (N Holmstrom & U Stahle) and at least 12 between Qalansiyah and Abd al Kuri, 20–22 October 2022 (M Beaman *et al*).

Black-bellied Storm Petrel Fregetta tropica

Vagrant. Historically, of note, are two recorded in nearby Somali waters in August 1964 (Kirwan 1998). Five observed off north coast of Socotra, 27 September 2007 (J-M & F Thiollay).

Swinhoe's Storm Petrel Hydrobates monorhis

Vagrant. One photographed at sea between Socotra and Abd al Kuri, 17 March 2022 (JA Eaton *et al*); one between Qalansiyah and Abd al Kuri on 20 October and a total of 19, photographed, between Abd al Kuri and Qalansiyah on 22 October 2022, including groups of four and seven together (M Beaman *et al*).

Streaked Shearwater Calonectris leucomelas

Status uncertain. Mackworth-Praed & Grant (1952) report that it is 'recorded in April from the seas just east of Socotra Island and may occur in the Gulf of Aden'. There are, however, no recent sightings.

Wedge-tailed Shearwater Ardenna pacifica

Status uncertain. Observations made in 1940s and 1950s in Socotran waters are best treated with caution given the potential confusion with the then undescribed Jouanin's Petrel. See Kirwan (1998) for discussion.

Flesh-footed Shearwater Ardenna carneipes (Near Threatened)

Recorded offshore in autumn. Historically large numbers seen in Socotran waters on 4 August 1951 (Norris 1952). Recently all records have been of birds observed from the north coast: one, 27 September 2007 (J-M & F Thiollay) and three, 14 October 2007 (OJ Campbell); a total of 12 sightings from 26 October to 1 November 2009 (N Holmström & U Ståhle).

Persian Shearwater Puffinus persicus (Plate 10)

Breeds on Socotra and the islands of Abd al Kuri, Darsa and Samha (Figure 14). Present in hundreds throughout the year in the seas around the archipelago with the highest count of *c*3000 off the northeast coast of the main island in November 2007. In March/April 2007 a total of 1544 was counted on transects to the outer islands. The breeding population is estimated at tens of thousands and the Socotra archipelago is the most important site for this Middle East endemic breeder (see Jennings 2000) and probably holds over 50% of the world breeding population, thus making it of global importance for the species.



Plate 10. Persian Shearwaters Puffinus persicus, Socotra, December 2021. © Tasso Leventis

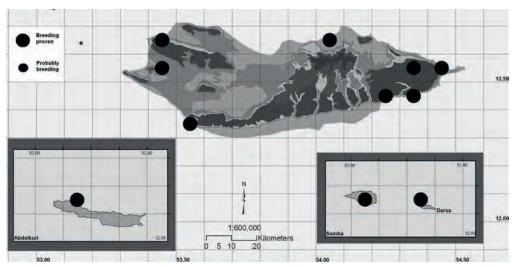


Figure 14. Breeding distribution of Persian Shearwater Puffinus persicus from Porter & Suleiman (2014).



Plate 11. Jouanin's Petrel Bulweria fallax at sea between Socotra and Abd al Kuri, March 2022. © Lars Petersson

Jouanin's Petrel Bulweria fallax (Plate 11) Endemic breeder (Near Threatened)

Breeds on Socotra, where the world's only known colony was discovered in July 2001 (Taleb 2002). The colony size is not known, but over 1000 birds have been observed offshore from the colony in the breeding season which suggests the population could be several thousand pairs. It is found in small numbers in the archipelago's seas throughout the year, though most beyond 4 km from the shore with the highest counts being 260 on a transect off northeast Socotra in April 1993, 980 between Socotra and Abd al Kuri, 17 March 2022 and 100 between Qalansiyah and Abd al Kuri, 20 October 2022.

White Stork Ciconia ciconia

Vagrant. One near the airport, 13 January 2006 (D Sargeant) and one at Khor Qadheb, 28 April 2010 (AS Suleiman).

Great Frigatebird Fregata minor

Vagrant. One seen out at sea off the north coast, 25–26 September 2007 (J-M & F Thiollay).

Masked Booby Sula dactylatra

The subspecies *melanops* occurs which is found in the northwest Arabian Sea. Breeds in the archipelago and occurs in offshore waters throughout the year. Only found breeding on the sea stacks of Sabuniya and Kal Farun where surveys by Al-Saghier *et al* (2000), Suleiman *et al* (2005, 2007) and Holmstrom & Stahle (2010) estimated *c*400 pairs on Sabuniya and 900-950 pairs on Kal Farun. This indicates an archipelago breeding population of *c*1300 pairs, some 10% of the Arabian breeding population. See Porter & Suleiman (2014) for further details of status and distribution map. Visits to these islands in December 2021 (Jennings *et al*) estimated 1300 birds on Sabuniya and 3500 on Kal Farun. Large chicks were observed and a single nest with an egg being incubated. This, together with the previous observations, suggests the breeding season is year round. Offshore from Socotra can be surprisingly uncommon and in some visits not seen at all. Highest counts: 15 off northwest Socotra, 27 November 1999; 48 off Ditwah, 2 January 2010 and 200 off Qalansiyah, 3 January 2014.

Brown Booby Sula leucogaster

The subspecies *plotus* occurs which is found in the Red Sea, Indian Ocean and western Pacific. Breeds on the outer islands in the archipelago and occurs in offshore waters throughout the year. Breeding surveys in May 1999 recorded the following pairs: Darsa 1500; Samha 100–150; Sabuniya 10 and Kal Farun 250–300 (Al-Saghier *et al* 2000), suggesting a total archipelago population of *c*1900 pairs. This represents *c*10% of the regional population. Birds have been recorded on suitable nesting cliffs on the main island but breeding has not been proven. The known breeding season is May to August. See Porter & Suleiman (2014) for further details of status and distribution map. In offshore waters observed in all months, regularly from the coast, in loose groups of up to 20 with the highest concentration being 400 off northwest Socotra, 27–28 November 1999.

African Darter Anhinga rufa

Vagrant. One photographed in Wadi Di Farho, 13 November 1999 is the only record for Yemen (K Šťastný *et al*).

Reed Cormorant Microcarbo africanus

Vagrant. One at Khor Sirhan, 12 November–2 December 1999. The first record for the Middle East (Aspinall *et al.* 2004).



Plate 12. Socotra Cormorants Phalacrocorax nigrogularis, Socotra, February 2007. © Richard Porter

Socotra Cormorant *Phalacrocorax nigrogularis* (Plate 12) (Vulnerable)

Resident and probably a winter visitor. Breeds on the islands of Kal Farun (>2500 pairs) and Subuniya (*c*250 pairs). The archipelago population of >2750 pairs is some 2.5% of the world population (Jennings 2010). Observed regularly in small to large flocks around the coast of Socotra and the outer isles throughout the year with notable concentrations being: 500 off Qalansiyah, March 2006; 1100 at Erher dunes, February 2007; 2000 off Di Shu'ub, October 2009; 3000 off Sherihen, February 2011 and 12 000 in rafts off Falang cliffs, March 2011. Although birds have been observed sitting on cliff ledges on the northwest coast of Socotra one can only speculate as to whether these indicate a breeding population on the main island. The known breeding season in the archipelago is August to February.

White-breasted Cormorant Phalacrocorax lucidus

Vagrant. Two records of adults: One with an immature *lucidus/carbo* at Khor Sirhan, 28 November 2020 (AS Suleiman) and one at Khor Mouri, 13 December 2021 (NJ Redman *et al*).

Great Cormorant Phalacrocorax carbo

Rare winter visitor. First recorded at Khor Sheq on 6 February 2004, since when observed on eight occasions to 2011: two at Hadiboh, January 2006, when one also present at Qalansiyah; one at Khor Sirhan, February/March and one at Khor Ghubbah also in February 2006. Singletons seen at Khor Sheq in March 2008, Hadiboh and Khor Sirhan in October 2009 and at Qariyah lagoon in February 2011.

African Sacred Ibis Threskiornis aethiopicus

Vagrant. A sub-adult seen first at Khor Di Lishah and then at Qalansiyah estuary, 19 December 2005–8 March 2006, was photographed; two photographed at Khor Mouri, Qadheb and Khor Sirhan, 13–16 December 2021 and again at Khor Qadheb, 14–21 March 2022; two at Khor Mouri, 18–25 October 2022.

Glossy Ibis Plegadis falcinellus

Uncommon winter visitor and passage migrant. First recorded on 5 April 1993, since when observed on ten occasions at eight localities, most on the north coast, from July to April. Most records are of one or occasionally two birds, but three were counted on Khor Sirhan on 7 December 2008, 3 February 2009 and 17–19 December 2021, and four at Khor Mouri on 15 December 2021.

Eurasian Spoonbill Platalea leucorodia

Vagrant or rare visitor. In the late nineteenth century, recorded by IB Balfour on pools on the north coast (Sclater & Hartlaub 1881). Machworth-Praed & Grant (1952) state that both the Palearctic race *leucorodia* and the north-east African race *archeri* occur, but do not provide their source. There are just five records since 1999: one photographed at Khor Sirhan/Khor Sheq, 19 November–2 December 1999; one photographed at Qariyah lagoon, 18 March 2000; one at Wadi Hadiboh, 15 October 2011; two at Qariyah lagoon, 23 August 2013 and one at Khor Sirhan, 2 January 2014.

Little Bittern *Ixobrychus minutus*

Vagrant. One photographed at Di'Qat, 25–27 October 2008 (RF Porter); an immature photographed at Khor Dibnih, 23–24 October 2022 (M Beaman *et al*). [A juvenile recorded in December 1996 has now been withdrawn by the observer due to possible confusion with Yellow Bittern, which is now known to occur regularly (see Kirwan 1998)].

Yellow Bittern Ixobrychus sinensis

Status uncertain. A rare visitor that possibly now breeds. First recorded at Khor Sheq, 19–22 November 1999. A juvenile was seen at Khor Sirhan on 19 October 2007 and juveniles were also recorded there from March to December 2008 with two in December and an adult in April, and again in February 2009. Single juveniles were seen at Khor Sirhan in 2011 and at Khor Sheq, December 2021.

Black-crowned Night Heron Nycticorax nycticorax

Winter visitor and passage migrant. First recorded on 31 March 1993 when one at Wadi Hadiboh. Thereafter seen on over 20 occasions to 2021 from October to April at several north coast khors and lagoons, mostly singly. Counts of three or more birds were: Khor Sirhan three, January 2006, four, March 2007, three, February 2009, five, November 2010 and three, February & March 2011; Khor Dibnih three, October 2007 and six, 24 October 2022; a flock of 17 at Qalansiyah estuary, 7 March 2011.

Striated Heron Butorides striata

The subspecies *brivipes* is assumed to be the taxon that occurs; it is found on the coasts of the Red Sea and Somalia. Status uncertain; possibly an uncommon resident breeder. Recorded on less than ten occasions on four north coast wetlands, considered suitable for nesting: Khor Matyif, Khor Sirhan, Khor Sheq and Qalansiyah estuary, all January to April, 1993–2006.

Squacco Heron Ardeola ralloides

Winter visitor. Rather uncommon. First recorded 28 March 1996, since when seen, only occasionally, from October to March up to 2022 at Khor Sirhan, Qalansiyah estuary, Khor Sheq, Noged plain and Wadi Di Farho. Usually found singly, occasionally two together, with a count of three at Qalansiyah estuary, 11 November 2007 and four at Khor Hadiboh, 28 March 1996.

Indian Pond Heron Ardeola grayii

Winter visitor and possibly present throughout the year. Although breeding has not been proven it is strongly suspected to have occurred since 2007. First recorded in September 2000 when an adult in breeding plumage was observed at Wadi Schek. Then from 2006 to 2011, birds were seen regularly in increasing numbers throughout the year, with eight in March 2011 at two sites, Khor Sirhan and Qalansiyah estuary, two of which were in breeding plumage. A total of eight was recorded in December 2021 at four sites, Khor Sirhan, Khor Sheq, Khor Dibnih and Qalansiyah estuary; six at Khor Sirhan on 14 March 2022 were heavily moulting into summer plumage.

Malagasy Pond Heron Ardeola idea (Endangered)

Vagrant. One photographed at Khor Sheq, 19 November-2 December 1999 (Aspinall et al 2004).

Western Cattle Egret Bubulcus ibis

Status uncertain. Historically a vagrant or rare visitor, but now seen in increasing numbers. Although breeding has not been proven it is strongly suspected. First recorded in June 1964 when one present (Ripley & Bond 1966), then from 1993 to 2004 up to nine observed annually, mostly at Khor Sirhan. From 2006 to 2011 up to 25 were regularly recorded at Khor Sirhan and its environs from October to February with eight also observed at Qalansiyah estuary in February 2006. In 2007 and 2011 several adults were in breeding plumage. In 2021 a total of 14 were present at Khor Sirhan.

Grey Heron Ardea cinerea

Common winter visitor and passage migrant which may over-summer. Seen regularly in small numbers in all months at most estuaries, lagoons and inland wadis. Highest daily counts: 12 at Qariyah Lagoon, August 2000; ten at Khor Ghubbah, February 2001; nine at Ditwah lagoon, March 2000 and nine at Khor Sirhan, November 2007. The highest total counts on the north coast wetlands were 38 from 30 March to 6 April 1993 and 34 from 10 to 20 March 1998. Also recorded on Abd al Kuri.

Black-headed Heron Ardea melanocephala

Vagrant. One at Khor Sirhan, 30 December 1998 (D Stanton).

Purple Heron Ardea purpurea

Uncommon winter visitor. Historically, two recorded in May 1964 (Ripley & Bond 1996) and an immature collected in 1899 (Ogilvie-Grant & Forbes 1903). Seen from October to March in several years from 1996 to 2022 at most of the north coast khors and lagoons, usually singly, but three birds at Khor Sirhan in October 2007 and three at Khor Ghubbah, 19 October 2022.

Great Egret Ardea alba

Uncommon winter visitor. First recorded on 13 November 1999 and thereafter in most (but not all) years to 2022 at several north coast wetlands, notably Qariyah lagoon, Khor Sheq, Khor Sirhan, Khor Hadiboh, Khor Qadheb, Qalansiyah estuary and Riy Di Bedu. All records were between August and March and of single birds apart from two at Khor Qadheb, 29 February 2000, two at Khor Sirhan, 25 October 2008 and two at Khor Qadheb, 15–16 March 2022.

Intermediate Egret Ardea intermedia

Rare visitor. One at Qadeb lagoon, 24 December 2000; up to two at Khor Sirhan, 13 January to 4 March 2006; a singleton at Qalansiyah estuary, 21 January 2007; one at Wadi Hadiboh,

24 October 2008; one at Qalansiyah estuary, 25 October 2008 and one at Khor Sirhan, 4 January 2014.

Little Egret Egretta garzetta

Winter visitor and passage migrant. Seen regularly from October to April at most north coast khors and lagoons. Usually just singly with the highest count at a single wetland being four at Khor Sirhan, 30 December 1998. A total count at north coast wetlands produced 12 on 5 March 2000 and 20 on 14 October 2007. Eleven flew in off the sea from the north at Ras Irisseyl on 6 November 2007.

Western Reef Heron Egretta gularis

Winter visitor and passage migrant. Seen regularly in small numbers on the main island, mostly one to five birds, from October to April at all north coast khors and lagoons. Both white and dark morphs observed, the former being commonest. A total of 28 recoded on the central north coast wetlands, 15 March 2000, but highest counts at individual sites were: 14 at Qariyah lagoon, December 2010; ten at Ditwah, January 2006 and February 2009 and ten at Khor Sirhan, November 2007 and February 2009. Also seen on Abd al Kuri, Samha and Darsa.

Great White Pelican Pelecanus onocrotalus

Vagrant. An immature was seen and photographed at Khor Sirhan and Qalansiyah estuary in February and March 2003 (AS Suleiman).

Pink-backed Pelican Pelecanus rufescens

Vagrant. An immature photographed at Qariyah lagoon, 22 April 2022 (AS Suleiman).

Western Osprey Pandion haliaetus

The subspecies *haliaetus* of Europe and Asia occurs. Breeding resident (Figure 15). Although breeding has not been confirmed on the main island, counts suggest it holds a population of <10 pairs. Breeding proven on Abd al Kuri (where 26 counted in March/April 2007), Samha, Darsa and Kal Farun and the total archipelago population is estimated at <75 individuals. Further details of status are given in Porter & Suleiman (2014).

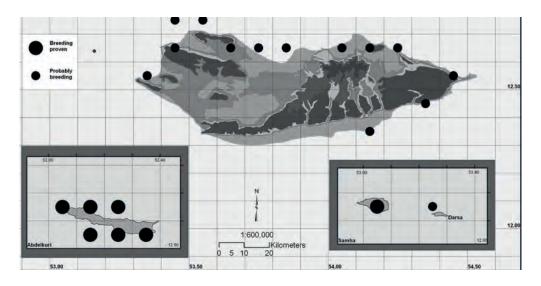


Figure 15. Breeding distribution of Western Osprey Pandion haliaetus from Porter & Suleiman (2014).



Plate 13. Egyptian Vulture Neophron percnopterus, Socotra, March 2022. © Lars Petersson

Egyptian Vulture Neophron percnopterus (Plate 13) (Endangered)

The subspecies *percnopterus* occurs which is found in Europe, the Middle East and Africa. Breeding resident (Figure 16). Very common and the most familiar bird on Socotra with a widespread breeding distribution on the limestone cliffs and escarpments. Also occurs on the island of Samha, where breeding suspected. Five recorded on Abd al Kuri, 21 October 2022. Based on detailed censuses the Socotra island population is estimated to be *c*1900 individuals (*c*800 pairs). This represents over 45% of the Arabian (including Socotra) population using the figure in Jennings (2010) and up to 9% of the global population. The known breeding season is from October to at least May. For full details of status see Porter & Suleiman (2012).

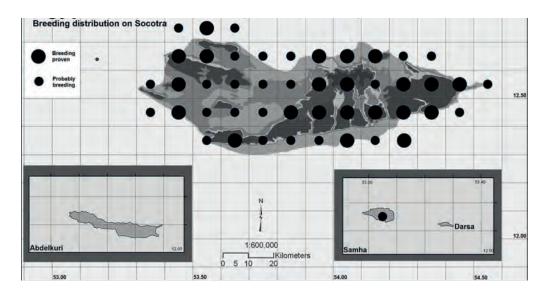


Figure 16. Breeding distribution of Egyptian Vulture Neophron percnopterus from Porter & Suleiman (2014).

Crested Honey Buzzard Pernis ptilorhynchus

Vagrant. One at Qalansiyah estuary, 28 February 2009 (R Felix et al).

Booted Eagle Hieraaetus pennatus

Vagrant. A pale morph at Diksam, 28 March 2020 (Nessing 2020).

Western Marsh Harrier Circus aeruginosus

Rare winter visitor. Recorded in March 1964 when a single bird seen in the Hadiboh area (Ripley & Bond 1966). Since then there have been ten records from 1999 to 2020, between October and March. All were of single females or immatures, except for two together at Di Shu'ub, 15 October 2007.

Pallid Harrier Circus macrourus (Near Threatened)

Vagrant. One juvenile chasing Black-crowned Sparrow-larks on the Noged plain, 7 February 2001 (RP Martins & RF Porter) and a juvenile near the airport, 7 November 2008 (RF Porter).

Black Kite Milvus migrans

Rare visitor. Singles recorded, all in or near Hadiboh, in November 1999; December 2004; November 2007; May and October 2008 and December 2009 to January 2010. In addition birds identified as either Black Kite or Yellow-billed Kite *Milvus aegyptius* were observed near Hadiboh on 12 December 2008 and 1 January 2014, when two were seen.



Plate 14. Socotra Buzzard Buteo socotraensis, Socotra, March 2022. © Lars Petersson

Socotra Buzzard Buteo socotraensis (Plate 14) Endemic (Vulnerable)

This Socotran endemic was first described taxonomically and given full species status in 2010 (Porter & Kirwan 2010). It only occurs on the main island where widespread but not common (Figure 17). Surveys between 1999 and 2011, which attempted to plot birds and pairs suggest that the population is <250 pairs and the breeding season September to April, possibly May.

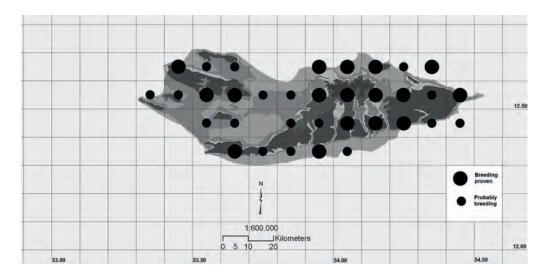


Figure 17. Breeding distribution of Socotra Buzzard Buteo socotraensis from Porter & Suleiman (2014).

Common Buzzard Buteo buteo

Vagrant. One, a dark morph of the subspecies *vulpinus*, was watched over Manafo, 26 November 1999 (SJ Aspinall & RF Porter).



Plate 15. Socotra Scops Owl Otus socotranus, Socotra, March 2022. © James Eaton

Socotra Scops Owl Otus socotranus (Plate 15) Endemic

A reappraisal of the taxonomy of the scops owls (Pons *et al* 2013) determined that this taxon be assigned full species status as originally cited by Ogilvie-Grant & Forbes (1903). Fairly widespread breeding endemic (Figure 18) and quite common up to 850 m asl in areas where good stands of mature trees, especially palms. Extrapolation from surveys suggest a population of c1000 pairs. Breeding season is probably January to mid-April.

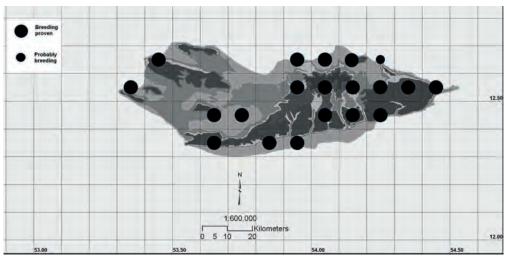


Figure 18. Breeding distribution of Socotra Scops Owl Otus socotranus from Porter & Suleiman (2014).

Short-eared Owl Asio flammeus

Vagrant. A freshly dead bird was found and photographed at Qalansiyah lagoon, 2 November 2007 (RF Porter & AS Suleiman).

Eurasian Hoopoe Upupa epops

Rare passage migrant. Historically one seen flying between Abd al Kuri and Socotra in 1899 (Ogilvie-Grant & Forbes 1903). Surprisingly few records from 1993 to 2022: one west Socotra, 7 October 1999; one at Wadi Di Farho, 20 February 2000; one on Noged plain, 12 September 2000; one west Socotra, 4 February 2001, one at Diksam, 17 October 2007 and one on Abd al Kuri, 20 October 2022.

Indian Roller Coracias benghalensis

Vagrant. One at Ilha, 21 December 1998, was videoed (D Stanton).

Abyssinian Roller Coracias abyssinicus

Vagrant. One historical record of a skeleton found on Abd al Kuri in 1899 (Ogilvie-Grant & Forbes 1903).

European Roller Coracias garrulus (Near Threatened)

Passage migrant. Apart from one at Hadiboh on 26 February 2000, only recorded in small numbers in October and November, and only in some years. In 1999 a total of 21 seen at ten localities, 13–29 November with four at Ditwah Lagoon, 28 November. In 2007 a total of 14 seen at eight localities, 17 October to 9 November. In 2008 five observed in the Qalansiyah area from 25 October to 2 November. In 2009 four at Diksam, 27 October and one at Hallah, 31 October. In 2022 singles at Khor Ghubbah, 19 October and Wadi Ayhaft, 23 October.

Common Kingfisher Alcedo atthis

Vagrant. One photographed in a small wadi at Erher dunes, 6 November 2007 (RF Porter).

Blue-cheeked Bee-eater Merops persicus

Unpredictable passage migrant. One on 5 April 1993 at Khor Sirhan was the first observed and the only one seen in spring. All other records are from just three autumns. In 1999 at total of over 100 seen at various localities, 12 November to 2 December; in 2007 seen from

18 October to 8 November at scattered localities, but mainly at Hadiboh, where numbers built up to 400 on 4 November; in 2008 present from 24 October to 4 November with up to 80 recorded at Hadiboh, 25 October. One or two seen at Abd al Kuri and near Di Shu'ub, 4 December 2021.

Common Kestrel Falco tinnunculus

The subspecies *archeri* occurs which is also found in Somalia and northeast Kenya. Breeding resident (Figure 19). Widespread in a variety of habitats, especially with cliffs. Surveys from 1999 to 2011 calculated the population on the main island at over 680 individuals. It also occurs on Abd al Kuri, Samha and Darsa. The breeding season is November proably to at least April

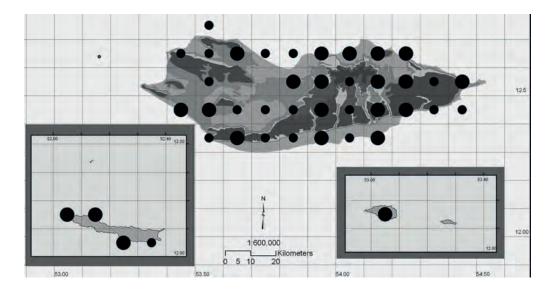


Figure 19. Breeding distribution of Common Kestrel Falco tinnunculus from Porter & Suleiman (2014).

Amur Falcon Falco amurensis

Vagrant. A flock of 14 over Hadiboh after heavy rain, 2 December 1999 (SJ Aspinall & RF Porter); a female, photographed, hunting grasshoppers on plains near Hadiboh, 1–2 March 2006 (RF Porter); two on Sabuniya, 26 November 2021 (MC Jennings *et al*) and up to three (male and two females) were photographed close to Hadiboh, 15–18 December 2021 (NJ Redman *et al*).

Eurasian Hobby Falco subbuteo

Vagrant. Not recorded until November 2007 when there was an influx of over 30 birds: on 3 November a total of 15 was recorded in the Hadiboh/Sirhan area, including two flying in off the sea; then from 6–9 November at least 14 were recorded at scattered localities with ten on 9 November. The only other record is one in western Socotra, 29 October 2009.

Peregrine Falcon Falco peregrinus (Plate 16)

The identification of the subspecies of Peregrine Falcon occurring on Socotra has been the subject of much debate and this account has been prepared following discussions with Dick Forsman who has examined all the photographs that we have received. Uncommon breeding resident (Figure 20) and probably rare passage migrant. Surveys on the main



Plate 16. Peregrine Falcon Falco peregrinus, probably of the subspecies pelegrinoides, feeding on a Somali Starling Onychognathus blythii, Socotra, January 2014. © David Fisher

island from 1999 to 2011 suggest a breeding population of *c*30 pairs, which is over 90% of the Arabian breeding population (Jennings 2010). All breeding birds seen well and/or photographed show strong traits of the subspecies *pelegrinoides* (Barbary Falcon). However further examination, including analysis of genetic material, is necessary before confirmation. Occasional birds recorded in autumn and winter have been suspected of being migrants of the subspecies *peregrinus* or *calidus*. Indeed, one collected on 7 March 1880 was *calidus* (skin in the Natural History Museum, UK).

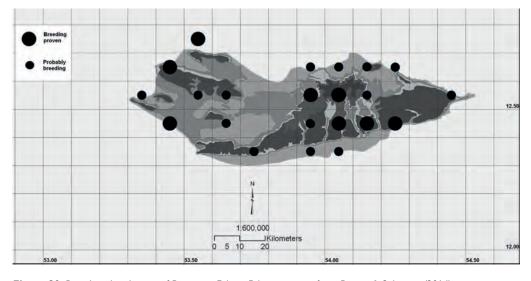


Figure 20. Breeding distribution of Peregrine Falcon Falco peregrinus from Porter & Suleiman (2014).

Red-backed Shrike Lanius collurio

Vagrant. Two immatures in September 2007 (J-M & F Thiollay) and an immature/ female at Di Shu'ub, 15 October 2007 (OJ Campbell, S James, NJ Moran) are the only records.

Red-tailed Shrike Lanius phoenicuroides

Vagrant. Two photographed at Bait al Ayuz on Abd al Kuri, 20–21 October 2022 (M Beaman *et al*).

Isabelline/Red-tailed Shrike Lanius isabellinus/phoenicuroides

Rare winter visitor or passage migrant. Birds not identified to species were: one in eastern Socotra, 14 November, two at Hayf, 18 November and one near Khor Ghubbah, 27 November 1999; one on Noged plain, 6 February 2001, one, photographed, on Ma'alah plateau, 30 October 2007 and one at Neet beach, 4 December 2021.

Great Grey Shrike Lanius excubitor

Two subspecies of Great Grey Shrike have been recorded: the resident endemic subspecies *uncinatus* (Socotra Grey Shrike) and the vagrant *pallidirostris* (Steppe Grey Shrike). For ease of reference they are treated separately below.



Plate 17. Socotra Grey Shrike Lanius excubitor uncinatus, Socotra, December 2021. © Tasso Leventis

Socotra Grey Shrike Lanius excubitor uncinatus (Plate 17)

This is treated as an endemic subspecies by Gill *et al* (2022). Breeding resident (Figure 21). Widespread in all habitats with trees up to 1500 m asl. Detailed surveys from 1999 to 2011 show a population of nearly 26 000 individuals and the breeding season from October to April.

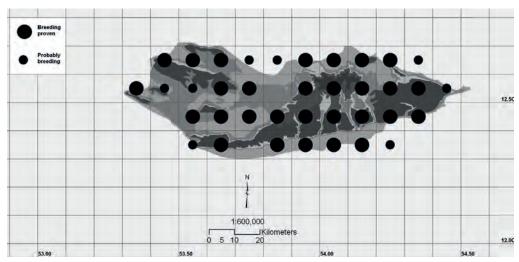


Figure 21. Breeding distribution of Socotra Grey Shrike Lanius excubitor uncinatus from Porter & Suleiman (2013).

Steppe Grey Shrike Lanius excubitor pallidirostris

Vagrant. One photographed on the plain east of Hadiboh, 2–4 March 2011 (RF Porter) and one there, 15 December 2021 (NJ Redman *et al*); one photographed on Abd al Kuri, 21 October 2022 (M Beaman *et al*).

Somali Fiscal Lanius somalicus

Vagrant. An adult photographed on Abd al Kuri, 30 November 2021 was the first record for Yemen and Arabia (MC Jennings *et al*). An adult also photographed on Abd al Kuri, 21 October 2022 (M Beaman *et al*).

Eurasian Golden Oriole Oriolus oriolus

Uncommon autumn migrant. A total of ten records, including on Abd al Kuri, between 15 September and 26 October in five years from 2000 to 2022: one at Hadiboh, 15 September and one at Diksam, 13 October 2007; one at Khor Sirhan, 18 October 2007; one at Hadiboh, 26 October 2008 and one there 15 September 2011, feeding on dates; three at Khor Sirhan, 18 October 2022, one on Diksam plateau and two at Skand, 19 October 2022. Two recorded on Abd al Kuri, 19 October 2022. All were females or immatures, except for an adult male on 18 October 2022.

House Crow Corvus splendens

Introduced. Two adults arrived on a boat from Aden in the mid-1990s leading to the formation of a small breeding colony in Hadiboh which reached a population of at least 15 individuals. This was successfully controlled and the birds were finally eradicated in 2009 (Suleiman & Taleb 2010). However in 2021 a single bird was discovered in a village near Hadiboh, presumably arriving by boat, and was still present in March 2022.

Brown-necked Raven Corvus ruficollis

Breeding resident (Figure 22). Only found on Socotra where it is widespread in a variety of habitats to 1050 m asl. Detailed surveys from 1999 to 2011 indicate a population of over 1500 individuals and the breeding season from November to March.

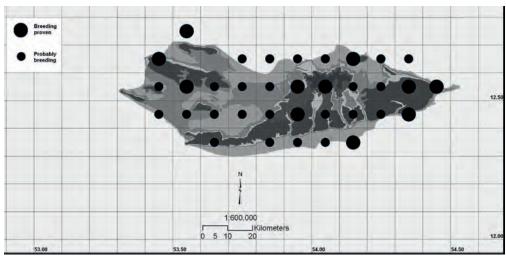


Figure 22. Breeding distribution of Brown-necked Raven Corvus ruficollis from Porter & Suleiman (2013).

Pied Crow Corvus albus

Vagrant. A single bird observed in western Socotra in May 2003 and may have been present since 2000 (AS Suleiman); a singleton was watched circling over the island of Kal Farun, 28 March 2007 (PG Ryan *et al*); one at Homhil, 15–16 May 2007 (C Hoots) and two at Di Hamdh, 25 August 2013 (MC Jennings).

Black-crowned Sparrow-lark Eremopterix nigriceps

Described as an endemic subspecies *forbeswatsoni* by Ripley & Bond (1966), but this was rejected by Kirwan (2007). Now assigned to the subspecies *melanauchen* which also occurs in mainland Africa, Arabia and Iran. Breeding resident (Figure 23). Widespread on Socotra and Abd al Kuri in open lowland habitats, rarely above 200 m asl. Often in flocks with the highest being 100 in March 1999. The second commonest breeding bird (after Socotra Sparrow) and detailed surveys from 1999 to 2011 calculated the population at over 190 500 individuals. The breeding season is November to April.

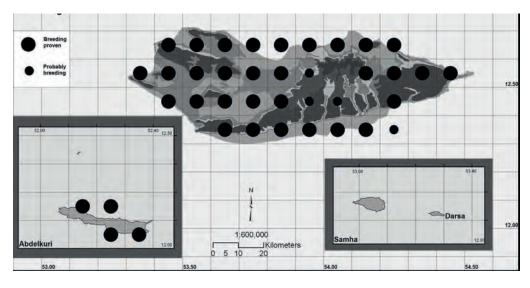


Figure 23. Breeding distribution of Black-crowned Sparrow-lark Eremopterix nigriceps from Porter & Suleiman (2013).

Greater Short-toed Lark Calandrella brachydactyla

Uncommon and irregular passage migrant. Not recorded annually and only in October and November and just once in spring, in February. Fewer than ten records with most being of fewer than ten birds, counts of more than ten being: flock of 15 on the Ma'alah plateau, 11 February 2004; flock of 90 with Black-crowned Sparrow-larks on plains near Hadiboh, 24 October 2008 and 30 there, 2 November 2008; 25 on Abd al Kuri, 29 November 2021.

Sand Martin Riparia riparia

Rare passage migrant. Recorded on fewer than ten occasions from August to November, 1999 to 2013. Usually singletons, but up to three at Khor Sirhan, November 1999, up to 15 there, mid-October 2007 and five at Neet, 29 October 2010. A single bird at Khor Sirhan, 16 January 2006 is the only winter record.

Barn Swallow Hirundo rustica

Passage migrant and winter visitor. Recorded, usually in small numbers, in most months from July to May in most years. Early autumn records were five at Hadiboh, 13 July 1998; two at Di Lishah, 9 August 1998; five at Hadiboh, 14 August 1998 and five at Khor Sirhan, 26 August 2000; also small numbers at Hadiboh, Qadeb and Qalansiyah in August 2013. Later in the autumn highest counts were 50 at Khor Sirhan with 20 elsewhere on the island, November 1999; 80 at Hadiboh, with 50 elsewhere on the island, October 2007. In December very few records with six at Khor Sirhan, 15 December 2021, the most seen. Only small numbers in spring, the highest count being 15 at Wadi Hadiboh, 20 February 2011. A total of 18 seen on Abd al Kuri, 20–22 October 2022.

Pale Crag Martin Ptyonoprogne obsoleta

The subspecies *arabica* occurs which is also found in southwest Arabia, Somalia and sub-Sarahran Africa. Uncommon breeding resident (Figure 24). The only martin that breeds on Socotra where it is uncommon in the ravines and wadis of the Haggeher mountains and their environs from 200–1000 m asl. Surveys from 1999 to 2011 put the population, conservatively, at 50–100 pairs. Away from Socotra island an unusual record was eight on Sabuniya, 22 October 2022.

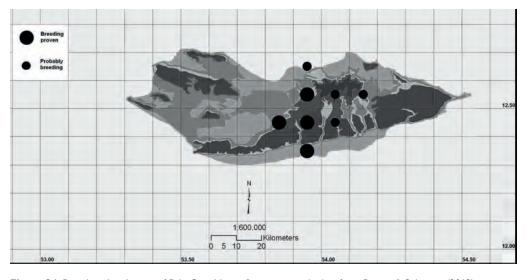


Figure 24. Breeding distribution of Pale Crag Martin Ptyonoprogne obsoleta from Porter & Suleiman (2013).

Common House Martin Delichon urbicum

Vagrant or rare passage migrant. Historically observed over Hadiboh on several occasions in mid-May 1964 (Ripley & Bond 1966). Recently only three records: two at Wadi Hadiboh, 1 September 2000 (MI Evans); one at Khor Sirhan, January 2006 (I Sinclair) and one there, 19 October 2007 (OJ Campbell & NJ Moran).

Wood Warbler Phylloscopus sibilatrix

Vagrant. Two at Wadi Ayhaft, 15 March 2000 and two there, 28 October 2009; a singleton on Darsa, 1 April 2007 and one on Abd al Kuri, 21 October 2022.

Willow Warbler Phylloscopus trochilus

Vagrant. One at Di Shu'ub, 15 October 2007 (OJ Campbell, S James & NJ Moran); one on Abd al Kuri, 21 October 2022 (M Beaman *et al*).

Common Chiffchaff Phylloscopus collybita

Vagrant. Just one historical record: a bird collected on Abd al Kuri on 23 February 1899 (Ogilvie-Grant & Forbes 1903).

Sedge Warbler Acrocephalus schoenobaenus

Vagrant. One at Wadi Zirage, 17 October 2007 (OJ Campbell, S James, NJ Moran).

Eurasian Reed Warbler Acrocephalus scirpaceus

Vagrant. One entered a house in Hadiboh on 5 September 2006 and was photographed (P Scholte & AS Suleiman). An unidentified *Acrocephalus* suspected of being this species was see on Abd al Kuri, 20 October, 2022.

Icterine Warbler Hippolais icterina

Vagrant. An immature at Bait al Ayuz on Abd al Kuri, 21 October 2022 (M Beaman et al).

Socotra Cisticola Cisticola haesitatus (Plate 18) Endemic (Near Threatened)

A breeding resident (Figure 25) with a wide distribution, mostly on coastal plains and lowland areas dominated by dwarf shrubland. Also occurs in upland areas up to c650 m asl. Different surveys put the population at 9000 individuals or 3000-4000 pairs. The breeding season is mid-October to late April.



Plate 18. Socotra Cisticola Cisticola haesitatus, Socotra, January 2006. © Hanne & Jens Eriksen

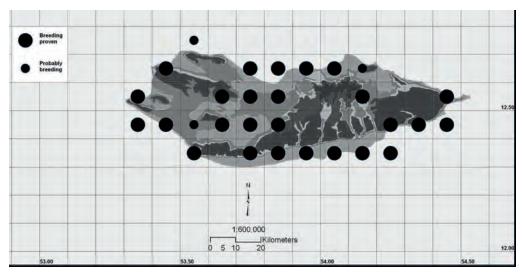


Figure 25. Breeding distribution of Socotra Cisticola Cisticola haesitatus from Porter & Suleiman (2013).



Plate 19. Socotra Warbler Incana incana, Socotra, March 2022. © Lars Petersson

Socotra Warbler Incana incana (Plate 19) Endemic

Fairly widespread breeding resident (Figure 26) found in a variety of habitats with trees and shrubs up to 1000 m asl. Detailed surveys from 1999 to 2011 calculated a population of over 26 600 individuals. The known breeding season is November to April.

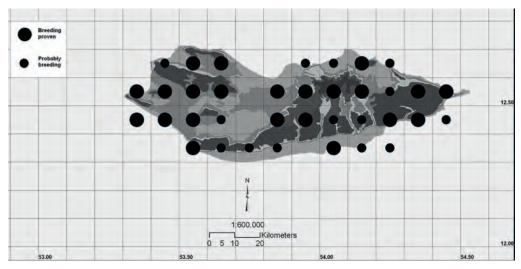


Figure 26. Breeding distribution of Socotra Warbler Incana incana from Porter & Suleiman (2013).

Eurasian Blackcap Sylvia atricapilla

Vagrant. Three females/immatures at Bait al Ayuz on Abd al Kuri, 20 October 2022 and one still there the following day; photographs taken (M Beaman *et al*).

Barred Warbler Curruca nisoria

Vagrant. Five immatures in the Bait al Ayuz area on Abd al Kuri, 21 October 2022; photographs taken (M Beaman *et al*).

Lesser Whitethroat Curruca curruca

None has been definitely identified to subspecies. Rare winter visitor. Nine records: three at Wadi Zirage/Diksam, 23–24 November 1999; two at Wadi Zirage, 19 February 2004; one at Wadi Di'Negehen, 12 January 2006 and one at Wadi Zirage, 19 January and 7 March 2006; one at Skand on 22 February 2006 and one at Khor Sirhan, 18 October 2007. On Abd al Kuri one, 20 October and two, photographed, 21 October 2022 were considered to be of the subspecies *curruca*.

Ménétries's Warbler Curruca mystacea

Vagrant. Five, including an adult male, seen and photographed in the Diksam/Wadi Zirage area, 23–25 November 1999 (S Aspinall & RF Porter); one at an unspecified location, January 2006 (I Sinclair).

Common Whitethroat Curruca communis

Vagrant. Just one historical record: one collected on Abd al Kuri on 23 February 1899 (Ogilvie-Grant & Forbes 1903).

Socotra White-eye Zosterops socotranus (Plate 20) Endemic

Hitherto the Socotran population was considered a subspecies of Abyssinian White-eye *Zosterops abyssinicus*. It was recently assigned full species status (Martins *et al* 2020). Breeding resident (Figure 27). Only occurs on Socotra where it is common and fairly widespread, occurring up to 1000 m asl in areas with flowering trees and shrubs, including mangroves (Hering & Hering 2022). Detailed surveys from 1999 to 2011 calculated the population at over 27 500 individuals. The known breeding season is late October–late May, one of the most extensive of the breeding birds on Socotra.



Plate 20. Socotra White-eye Zosterops socotranus, Socotra, December 2021. © Tasso Leventis

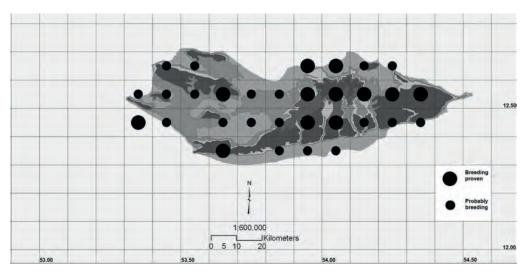


Figure 27. Breeding distribution of Socotra White-eye Zosterops socotranus from Porter & Suleiman (2013).

Somali Starling Onychognathus blythii

Listed as monotypic by Gill *et al* (2022). However the taxon occurring on Abd al Kuri is worthy of mention. When described by Ogilvie-Grant & Forbes (1903) it was assigned to the race *creaghi*. Although largely disregarded by subsequent authorities, Kirwan (2007) is more cautious and makes a case for awaiting further evidence before invalidating or upholding *creaghi*. Breeding resident (Figure 28). The fourth commonest breeding bird on Socotra where it is widespread and familiar, usually in flocks, in a wide range of habitats, including town gardens. It also occurs on Abd al Kuri and Samha. Detailed surveys on Socotra from 1999 to 2011 calculated the population at over 102 000 individuals. The known breeding season is November to April.

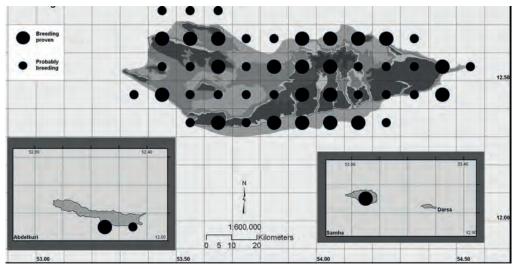


Figure 28. Breeding distribution of Somali Starling Onychognathus blythii from Porter & Suleiman (2013).



Plate 21. Socotra Starling Onychognathus frater, Socotra, December 2021. © Tasso Leventis

Socotra Starling Onychognathus frater (Plate 21) Endemic

Breeding resident (Figure 29). Only occurs on Socotra where it is fairly widespread, notably in upland areas with trees from 200–1000 m asl. The submontane shrubland on the slopes of the granite mountains are a particularly favoured habitat. Detailed surveys from 1999 to 2011 calculated the population at over 25 100 individuals. The known breeding season is November to April. See Gedeon & Neumann (2004) for further details of status.

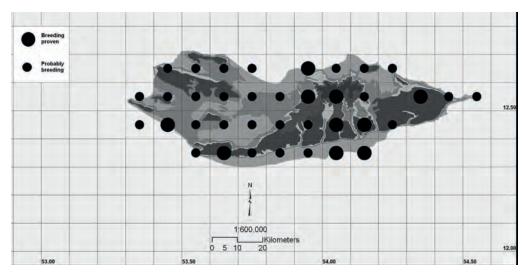


Figure 29. Breeding distribution of Socotra Starling Onychognathus frater from Porter & Suleiman (2013).

Eyebrowed Thrush Turdus obscurus

Vagrant. One photographed at Neet beach, 4 December 2021 was the first record for Yemen (MC Jennings *et al*).

Black-throated Thrush Turdus atrogularis

Vagrant. A male photographed at Qalansiyah estuary, 2 March 2011 (RF Porter & AS Suleiman).

Spotted Flycatcher Muscicapa striata

Vagrant. Historically two aboard a ship north of Abd aI Kuri, 21 October 1930 (Alexander 1931). Recently a total of eight recorded in various coastal and highland habitats on mainland Socotra, 13–18 October 2007 (OJ Campbell, S James & NJ Moran) and one at Erher, 4 November 2010 (R Felix). Four on Abd al Kuri, 20–21 October 2022 (M Beaman *et al*).

Bluethroat Luscinia svecica

Winter visitor and passage migrant. Surprisingly not recorded until 1999 when one at Wadi Di Farho, 14 November; later a total of ten seen in the Diksam/Wadi Zirage area, 22–24 November and three at Skand, 1 December 1999. Regularly observed at Wadi Zirage in February and March 2000 to 2011 with up to six birds present. Also one to three recorded there in October to January, 2006–2010. A single bird seen at Khor Sirhan, 7 March 2011.

Common Nightingale Luscinia megarhynchos

Vagrant. Three in the Diksam/Wadi Zirage area, 17 October 2007 (OJ Campbell, S James & NJ Moran).

Black Redstart Phoenicurus ochruros

Vagrant. Three seen and photographed at Diksam/Wadi Zirage, 24–25 November 1999 were of the subspecies *phoenicuroides* (S Aspinall & RF Porter); one at Diksam, 28 February 2020 (Nessing 2020).

Common Redstart Phoenicurus phoenicurus

Vagrant. Two on Abd al Kuri, 21 October 2022; at least one, photographed, showed the characters of the subspecies *samamisicus* (M Beaman *et al*).

Common Rock Thrush Monticola saxatilis

Rare visitor. A singleton east of Hadiboh, 12 October 2007 and two at Wadi Ayhaft, 16 October 2007; one on the Ma'alah plateau, 30 October 2007; one at Wadi Di Negehen, 1 November 2010; one on Abd al Kuri, 28 November 2021, one in the Haggeher mountains, 15 March 2022 and one on the Diksam plateau, 19 October. On Abd al Kuri three on 21 October 2022.

Blue Rock Thrush Monticola solitarius

Rare winter visitor. Recorded on ten occasions in widely scattered locations, mostly inland, from November to February between 1996 and 2011. All single birds and just two were adult males.

Siberian Stonechat Saxicola maurus

Vagrant. One male photographed on Lower Skand, 6 March 2006 (RF Porter); a female photographed at Khor Qadheb, 13 October 2007 (OJ Campbell, S James & NJ Moran).

Northern Wheatear Oenanthe oenanthe

Vagrant. One photographed at Di'Qat, 27 October 2008 (RF Porter)

Isabelline Wheatear Oenanthe isabellina

Winter visitor and passage migrant throughout the archipelago. Occurs in small numbers, mostly singly and rarely more than three together, throughout the island. The earliest date recorded in autumn is 12 October and the latest in spring 2 April. Highest counts: eight at Mahferhin, 21 February 2000; ten on Noged plain, 7 February 2001; 26 on Ma'alah plateau, 11 February 2004 and eleven there, 30 October 2007.

Desert Wheatear Oenanthe deserti

Vaurie (1959) gives the subspecies occurring as *atrogularis*. However Ripley & Bond (1966), following examination of specimens, considered the birds on Socotra to be of the subspecies *oreophila*. Our own observations and the examination of photographs concur with that. A very common winter visitor and passage migrant throughout the archipelago and the commonest wintering migrant. The earliest date recorded in autumn is 12 October and the latest in spring 9 March. Counts of over 100 have been made in a day on Socotra island and estimates based on numbers seen during transects from 1999 to 2011 suggest a wintering population in excess of 50 000.

Pied Wheatear Oenanthe pleschanka

Winter visitor and passage migrant, also recorded on Abd al Kuri. Seen in small numbers in most, but not all, years with the majority of sightings being in the lower areas of the Haggeher mountains, especially Wadi Zirage. Normally seen singly, but four observed at Wadi Zirage, 25 November 1999 and four in the Zirage-Diksam area, 18 February 2011. A bird of the morph *'vittata'* was recorded at Zirage, 10 February 2001. The earliest date recorded in autumn 20 October and the latest in spring, 9 March.

Socotra Sunbird Chalcomitra balfouri (Plate 22) Endemic

Breeding resident (Figure 30). The sixth commonest breeding bird on Socotra where it is widespread, especially where trees, shrubs and nectar producing plants are in flower, up to 1000 m asl. Detailed surveys from 1999 to 2011 calculated the population at over 66 800 individuals. The known breeding season is September to May.



Plate 22. Socotra Sunbird Chalcomitra balfouri, Socotra, March 2022. © James Eaton

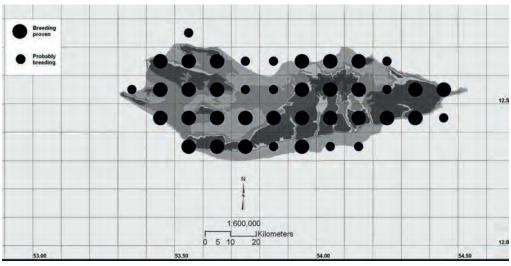


Figure 30. Breeding distribution of Socotra Sunbird Chalcomitra balfouri from Porter & Suleiman (2013).



Plate 23. Socotra Sparrow Passer insularis, male, Socotra, March 2022. © James Eaton

Socotra Sparrow *Passer insularis* (Plate 23) Endemic

Breeding resident (Figure 31). The commonest breeding bird on Socotra and widespread in a variety of habitats with trees, including towns and villages, up to 1000 m asl. Detailed surveys from 1999 to 2011 calculated the population at nearly 329 000 individuals. Also occurs on the islands of Samha and Darsa. The known breeding season is November to June.

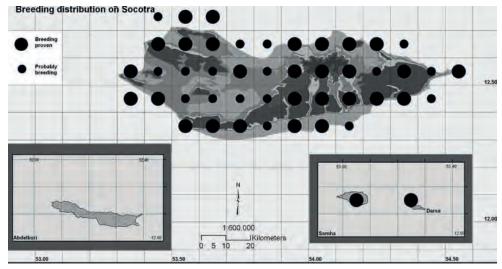


Figure 31. Breeding distribution of Socotra Sparrow Passer insularis from Porter & Suleiman (2013).



Plate 24. Abd-al Kuri Sparrow Passer hemileucus, male, Abd al Kuri, Socotra, March 2022. © James Eaton

Abd-al Kuri Sparrow Passer hemileucus (Plate 24) Endemic (Vulnerable)

Only recently split from *Passer insularis* and given full species status (see Kirwan 2008, Ryan *et al* 2010). It is only found on Abd al Kuri where the population was considered to be *c*400 pairs from visits made between 2000 and 2010, occurring mostly in and around the villages (AS Suleiman). A trip to the island in November 2021 did not visit the capital, KIlmia, and sparrows were only found in the village of Bait al Ayuz (40) and none in the nearby village of Bait Issa nor

anywhere else on the island. A visit in March 2022 counted 17 at the village of Khissa Saleh whilst 100 were observed there on 21 October 2022 when eight were seen in the desert east of Khissa Saleh.

Western Yellow Wagtail Motacilla flava

Passage migrant and winter visitor. Birds of indeterminate subspecies seen regularly in small numbers (usually just one or two individuals) from August to March on most north coast khors and lagoons, also on Abd al Kuri. Highest counts: total of 12 at various north coast wetlands, November 1999; 18 at these wetlands, notably Qadeb lagoon, October 2009, and nine at Khor Sirhan, February 2001 and 2006. Identification at subspecies level was rarely possible or attempted, but birds showing recognisable characters were:

beema (Sykes's Wagtail), six on four dates in February and March 2006 and 2011.

lutea (Yellow-headed Wagtail), single, February 2006.

flava (Blue-headed Wagtail), singles, March 2011 and December 2021.

thunbergi (Grey-headed Wagtail), two, March 2011.

feldegg (Black-headed Wagtail), single, February 2006.

Citrine Wagtail Motacilla citreola

Rare winter visitor. One at Wadi Hadiboh, 30 November 1999; one at Khor Sirhan, 23–25 February 2006, 21 February 2009, 2–4 January 2014 and 15 December 2021; one at Qalansiyah estuary, 25 February 2006 and one at Qadeb lagoon, 24 December 2009–2 January 2010.

Grey Wagtail Motacilla cinerea

Uncommon winter visitor and passage migrant. First recorded 5 April 1993. Thereafter nearly 20 records from October to April, usually singly, but also up to three, on inland wadis flowing from the Haggeher mountains. Also recorded on Abd al Kuri where three, 21 October 2022.

White Wagtail Motacilla alba

Common winter visitor and passage migrant, recorded from 19 October–15 March. Widespread, including on the outer islands, in a variety of habitats, mainly near water, including wadis. Counts of over ten birds: total of 23 on north coast wetlands, 25 December 1998; 15 at Khor Sirhan, 21 November 1999; eleven at Wadi Di Farho, 21 February 2000; 15 on Noged plain, 22 February 2000; 18 at Khor Ghubbah, 29 February 2000 and 26 Khor Nojaar, 28 February 2006. A total of 55 was counted at a pre-dusk gathering at Khor Sirhan, 26 February 2004.

Tawny Pipit Anthus campestris

Rare winter visitor. Historically two on Abd al Kuri, 23 February 1899 (Ogilvie-Grant & Forbes 1903). More recently seven at Ditwah lagoon, 28 November 1999 was the largest number recorded. Thereafter just ten records, all December to March, in widely scattered localities, including Abd al Kuri, usually singly, but also two (twice) and three (once).

Long-billed Pipit Anthus similis

The endemic subspecies *sokotrae* occurs which was validated and discussed by Kirwan & Grieve (2007). Breeding resident (Figure 32). Only occurs on the island of Socotra where it is the fifth commonest breeding bird. Widespread in a variety of habitats, often with trees, up 1000 m asl. Detailed surveys from 1999 to 2011 calculated the population at over 94 500 individuals. The known breeding season is November to April.

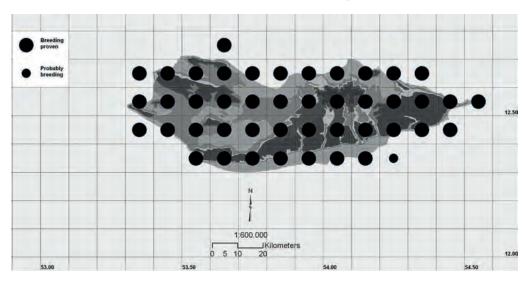


Figure 32. Breeding distribution of Long-billed Pipit Anthus similis from Porter & Suleiman (2013).

Tree Pipit Anthus trivialis

Rare winter visitor and passage migrant. Recorded very infrequently: one at Wadi Zirage, 24 November 1999 where two, 2–3 March 2000; singletons at Hadiboh, 10 September 2000 and 31 October 2009; a total of 15 recorded at various localities, 12–19 October 2007 and one on Abd al Kuri, 21 October 2022.

Red-throated Pipit Anthus cervinus

Vagrant. Two singletons in November 1999: one at Wadi Zirage and one, photographed, in western Socotra (SJ Aspinall & RF Porter). Three records in October/November 2007: two on the Noged plain, 28 October and three, one photographed, at Qalanasiya estuary, 2 November (RF Porter); one at Diksam, 10–11 November (H Buck *et al*).

Socotra Golden-winged Grosbeak Rhynchostruthus socotranus (Plate 25) Endemic

Recently the golden-winged grosbeaks in Somalia, Arabia and on Socotra have been split into three species (see Kirwan & Grieve 2007), thus the population on Socotra is now regarded as an endemic species. Breeding resident (Figure 33). Fairly widespread on Socotra occurring in many areas with trees up to 1050 m asl, but with most in the altitude range 200–800 m. Detailed surveys from 1999 to 2011 calculated the population at over 16 800 individuals. The known breeding is October to March.



Plate 25. Socotra Golden-winged Grosbeak Rhynchostruthus socotranus, Socotra, October 2007. © Richard Porter

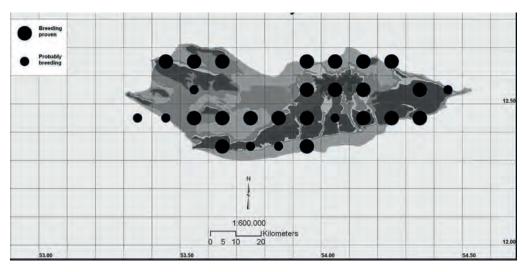


Figure 33. Breeding distribution of Socotra Golden-winged Grosbeak Rhynchostruthus socotranus from Porter & Suleiman (2013).

Ortolan Bunting Emberiza hortulana

Vagrant. One in the dunes on the north coast, 12 October and one at Di Hamdh, 18 October 2007 (OJ Campbell, S James & NJ Moran). Two immatures on Abd al Kuri, 21 October 2022 (M Beaman *et al*).

Cinnamon-breasted Bunting Emberiza tahapisi

The subspecies *tahapisi*, which is also found from Ethiopia to South Africa, is ascribed as the race occurring in the Socotran archipelago by Gill *et al* (2022). This is supported by Kirwan (2007) who rejected previous support for the taxon being an endemic subspecies *insularis*. Breeding resident (Figure 34). Widespread and common on the main island in the higher elevations, notably 500–800 m asl. Detailed surveys from 1999 to 2011 calculated the population at over 38 200 individuals. Also recorded on Abd al Kuri, but breeding not proven. The known breeding season is November to March.

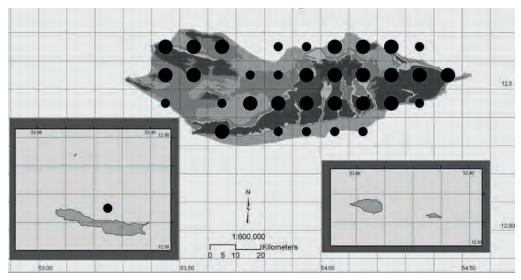


Figure 34. Breeding distribution of Cinnamon-breasted Bunting Emberiza tahapisi from Porter & Suleiman (2013).



Plate 26. Socotra Bunting Emberiza socotrana, Socotra, December 2006. © Hanne & Jens Eriksen

Socotra Bunting Emberiza socotrana (Plate 26) Endemic (Near Threatened)

Breeding resident (Figure 35) and the rarest endemic on the main island where its strongholds are the Haggeher mountains and the plateau in the extreme west with the typical breeding elevation being $c600\,\mathrm{m}$ asl. Detailed surveys from 1999 to 2011 calculated the population at over 3750 individuals. The known breeding season appears to be November to February, the shortest of any of the breeding birds on Socotra. The nest and eggs have never been described.

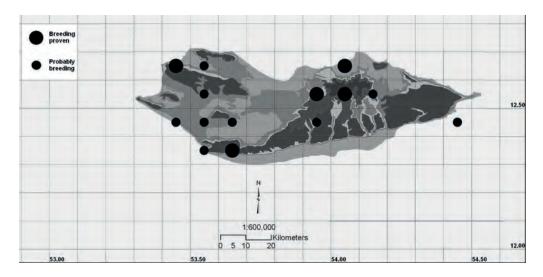


Figure 35. Breeding distribution of Socotra Bunting Emberiza socotrana from Porter & Suleiman (2013).

UNSUBSTANTIATED REPORTS

The following species have been cited in publications and correspondence, but without supporting details. They are listed for completeness. Should details become available that substantiate the observation then an appropriate correction will be published.

Egyptian Goose *Alopochen aegyptiacus*. There is an historic record of a flock of geese that were probably of this species (Kirwan 1998). Its occurrence is possible.

Common Swift *Apus apus.* Although very likely to occur, occasional reports have not provided evidence of separation from the very similar Forbes-Watson's Swift.

Pallid Swift Apus pallidus. Although this species is very likely to occur, occasional reports have not provided evidence of separation from the very similar Forbes-Watson's Swift.

Painted Snipe *Rostratula benghalensis*. An old, undated record may have been in error (Kirwan 1998). This species could conceivably occur on Socotra.

Red-footed Booby *Sula sula*. Historic claims may be the result of misidentification of Masked Booby (Kirwan 1998). Its occurrence, however, is possible.

African Spoonbill *Platalea alba*. Claims of this species have, on examination, been shown to be Eurasian Spoonbills. However it is a species likely to occur.

Levant Sparrowhawk Accipiter brevipes. A possible was seen in September 2007.

Desert Owl *Strix hadorami*. Ogilvie-Grant & Forbes (1903) mention the presence of a large owl on Socotra, with a call most closely approaching Tawny Owl *Strix aluco*. Presumably the species involved was the now named Desert Owl (previously Hume's Tawny Owl *S. butleri*), but subsequent visits to the island have failed to locate this or any resident large owl species, despite much searching.

Eleonora's Falcon *Falco eleonorae*. One recorded on 27 September and up to four in November 2007 but without any supporting details. This species has not been recorded in Yemen and is a vagrant in Oman.

Lanner Falcon *Falco biarmicus*. Kirwan (2006) states that two pairs of possible Lanners were recorded in 1898–99 (Ogilvy-Grant & Forbes 1903) but comprehensive views were not obtained. This species has not been recorded since and confusion with Peregrine Falcon seems likely.

Eurasian Crag Martin *Ptyonoprogne rupestris*. One recorded in April 1993 should best be discounted because of the possibility of confusion with Pale Crag Martin (Kirwan 1996).

Little Rock Thrush *Monticola rufocinerea*. A claim of three together in October 2001 is considered unproven because of possible confusion with Black Redstart and the fact it is a resident species where it occurs in Yemen and NE Africa.

ACKNOWLEDGEMENTS

We would like to thank all the observers who submitted records, without whom this checklist would have been very much poorer. Oscar Campbell and Nick Moran read the manuscript and made valuable comments as did Mark Beaman. Dick Forsman gave much guidance on the text for Peregrine Falcon. We would especially like to acknowledge the help given by Guy Kirwan who, in addition to making comments and corrections, helped with literature searches and suggestions for ways to improve the presentation of the systematic list

LITERATURE CITED

- Al-Saghier, O, A Alsuhaibany & P Symens. 2000. The status of breeding seabirds. *In*: Hariri, KI & F Krupp (eds). *Conservation and Sustainable Use of Biodiversity of Socotra Archipelago. Marine Habitat, Biodiversity and Fisheries Surveys and Management. Report of Phase II.* Senckenberg Research Institute, Frankfurt am Main/Hariri & Associates, Sana'a, pp97–104.
- Alexander, HG. 1931. Shearwaters in the Arabian Sea. Ibis Ser 13 (1): 579-581.
- Archer, G & EM Godman. 1961. The Birds of British Somaliland and the Gulf of Aden. Vol 3. Oliver & Boyd, London.
- Aspinall, SJ, RF Porter & O Al-Saghier. 2004. Four new bird species in Yemen from Socotra. *Sandgrouse* 26: 48–51.
- Banfield, LM, K Van Damme & AG Miller. 2011. Evolution and biogeography of the flora of the Socotra Archipelago (Yemen). *In*: Bramwell, D & J Caujapé-Castells (eds). *The Biology of Island Floras*. Cambridge University Press, UK, pp197–225.
- Bent, JT. The island of Socotra. Nineteenth Century 41: 975-992.
- Bezdek, J, L Purchart, K Kral & V Hula. 2012. List of local Socotran geographical names used in entomological literature. *Acta Entomologica Musei Nationalis Pragae* 52: 27-67.
- Cheung, C & L DeVantier. 2006. Socotra A Natural History of the Islands and their People. Odyssey, Hong Kong.
- Demey, R. 2008. Recent reports. Bull Afr Bird Club 15: 126-139.
- Dowsett, RJ & F Dowsett-Lemaire. 1993. *Afrotropical avifauna: annotated country checklists*. Tauraco Research Report 5. Tauraco Press, Liege.
- Gedeon, K & V Neumann. 2004. Notes on Socotra Starling *Onychognathus frater* Sclater & Hartlaub, 1881 and Somali Starling *O. blythii* Hartlaub, 1859 (Aves) on Socotra Island. *Fauna of Arabia* 20: 535–548.
- Gill F, D Donsker & P Rasmussen (eds). 2022. IOC World Bird List (v12.1).
- Grieve, A & GM Kirwan. 2012. Studies of Socotran birds VII. Forbes-Watson's Swift *Apus berliozi* in Arabia—the answer to the mystery of the 'Dhofar swift'. *Bulletin of the British Ornithologists' Club* 132: 194–206.
- Hering, J & H Hering. 2022. First description of the nest and eggs, as well as notes on vocalization of the endemic Socotra White-eye *Zosterops socotranus*. *Sandgrouse* 44: 351-358.
- Holmstrom, N & U Stahle. 2010. Yemen & Socotra; 18 October to 2 November 2009. http://Socotra2009.blogspot.com.
- Kirwan, GM. 1998. Additions to the avifauna of Socotra and Abd Al-Kuri, with notes on the occurrence of some resident and migrant species. *Bull Afr Bird Club* 5: 17–21.
- Kirwan, GM. 2004. Some remarks on the taxonomy of Nubian Nightjar *Caprimulgus nubicus*, with particular reference to *C. n. jonesi* Ogilvie-Grant & Forbes, 1899. *Bull Afr Bird Club* 11: 117–125.
- Kirwan, GM. 2007. Studies of Socotran birds IV. Synonymization of six endemic bird taxa, with comments on the name *Onychognathus blythii creaghi*. *Sandgrouse* 29: 135–148.
- Kirwan, GM. 2008. Studies of Socotran birds III. Morphological and mensural evidence for a 'new' species in the Rufous Sparrow *Passer motitensis* complex endemic to the island of Abd 'Al-Kuri, with the validation of *Passer insularis* Sclater & Hartlaub, 1881. *Bulletin of the British Ornithologists' Club* 128: 83–93.
- Kirwan, GM & A Grieve. 2007. Studies of Socotran birds II. One, two or three species: towards a rational taxonomy for the Golden-winged Grosbeak *Rhynchostruthus socotranus*. Bull Afr Bird Club 14: 159–169.
- Kirwan, GM & A Grieve. 2010. Studies of Socotran birds V. On the validity of *Anthus similis sokotrae* and a few remarks on Arabian and northeast African populations of Long-billed Pipit *A. similis. Sandgrouse* 32: 43–49.
- Kirwan, GM, RP Martins, KM Morton & DA Showler. 1996. The status of birds in Socotra and 'Abd Al-Kuri and the records of the OSME survey in spring 1993. *Sandgrouse* 17: 83–101.
- Mackworth-Praed, CW & CH Grant. 1952. Birds of Eastern and North-eastern Africa. Vol. 1. Longmans, London.
- Martins, RP. 1996. Taxonomic treatment of endemic taxa in Socotra. Sandgrouse 17: 81-82.
- Martins, FC, SC Cox, M Irestedt, RP Prŷs-Jones and JJ Day. 2020. A comprehensive molecular phylogeny of Afrotropical white-eyes (Aves: Zosteropidae) highlights prior underestimation of mainland diversity and complex colonisation history. *Mol Phyl & Evol*: doi.org/10.1016/j.ympev.2020.106843.
- Miller, AG & M Morris. 2004. Ethnoflora of the Socotra Archipelago. Royal Botanic Garden, Edinburgh.
- Mullarney, K & O Campbell. 2022. Identification of Saunders's Tern and Little Tern, with special emphasis on juvenile and winter plumages. *Dutch Birding* 44: 165-198.
- Nessing, R. 2020. Bemerkenswerte Beobachtungen auf der Insel Sokotra, Yemen. *Ornithologische Mitteilungen Jahrgang* 72 No 3/4: 1–4.
- Norris, CE. 1952. Oceanic and other birds seen on two recent trips between Colombo and Aden in 1951. *J Bombay Nat Hist Soc* 50: 671–674.
- Ogilvie-Grant, WR & HO Forbes. 1899. Descriptions of the new species of birds. Bull Liverpool Mus 2: 2-4.

- Ogilvie-Grant, WR & HO Forbes.1903. Birds of Sokotra and Abd-el-Kuri. pp. 21–63. *In* Forbes, HO (ed) *The Natural History of Sokotra and Abd-el-Kuri*. Porter, London.
- Phillips, WA. 1954. Petrels, shearwaters and other oceanic birds in the north Indian Ocean. *J Bombay Nat Hist Soc* 52: 334–348.
- Pons, J-M, G Kirwan, R Porter & J Fuchs. 2013. A reappraisal of the systematic affinities of Socotran, Arabian and East African scops-owls (Otus, Strigidae) using a combination of molecular, biometric and acoustic data. *Ibis* 155: 518–533.
- Porter, RF & RP Martins. 1996. Southern Yemen and Socotra: the report of the OSME survey in spring 1993. Sandgrouse 17: 3-188.
- Porter, R & S Aspinall. 2010. Birds of the Middle East. Christopher Helm, London.
- Porter, RF & GM Kirwan. 2010. Studies of Socotran Birds VI. The taxonomic status of the Socotra Buzzard. Bulletin of the British Ornithologists' Club 130: 116–131.
- Porter, RF & AS Suleiman. 2011. Watercock *Gallicrex cinerea* on Socotra, a new bird for Yemen. *Sandgrouse* 33: 132–133.
- Porter, RF & AS Suleiman. 2012. The Egyptian Vulture *Neophron percnopterus* on Socotra, Yemen: population, ecology, conservation and ethno-ornithology. *Sandgrouse* 34: 44–62.
- Porter, RF & AS Suleiman. 2013. The populations and distribution of the breeding birds of the Socotra archipelago, Yemen: 1. Sandgrouse to Buntings. *Sandgrouse* 35: 43–81.
- Porter, RF & AS Suleiman. 2014. The populations and distribution of the breeding birds of the Socotra archipelago, Yemen: 2. Shearwaters to Terns. *Sandgrouse* 36: 8–33.
- Porter, RF & AS Suleiman. 2016. The Important Bird and Biodiversity Areas of the Socotra Archipelago, Yemen. Sandgrouse 38: 169–191.
- Porter, R. 2020. As the Cuckoo flies. Tayf 17: 26–27.
- Proud, D. 1961. Notes on bird migration during a voyage from England to India in September 1960. *J Bombay Nat Hist Soc* 58: 517–523.
- Ripley, SD & GM Bond. 1966. The Birds of Socotra and 'Abd al-Kuri. *Smithsonian Miscellaneous Collections* 151 (7): 1–37.
- Ryan, PG, L Nupen, B Rose & AS Suleiman. 2010. Geographic variation in Socotra Sparrows *Passer insularis*. *Bulletin of the British Ornithologists' Club* 130: 75–82.
- Sclater, PL & G Hartlaub. 1881. On the Birds collected in Socotra by Prof. I.B. Balfour. *Proceedings of the Zoological Society of London*: 165-175.
- Stattersfield, AJ, MJ Crosby, AJ Long & DC Wege. 1998. Endemic Bird Areas of the World. Priorities for biodiversity conservation. BirdLife Conservation Series 7. BirdLife International, Cambridge, UK.
- Suleiman, AS. 2009. First breeding of Black-winged Stilts *Himantopus himantopus* on Socotra, Yemen. *Sandgrouse* 31: 65–67.
- Suleiman, AS. 2020. White-faced Whistling Ducks *Dendrocygna viduata* and breeding Red-knobbed Coots *Fulica cristata* the first records for Yemen. *Sandgrouse* 42: 282–285.
- Suleiman, AS, A Bolen, AY Al Hassan & A Shamsan. 2005. *Expedition to outer islands, 22–29 March 2005*. Internal report, Yemen's Environment Protection Authority.
- Suleiman, AS, B Rose, PG Ryan. 2007. Visit to outer islands, 27 March–2 April 2007. Internal Report, Yemen's Environment Protection Authority.
- Taleb, NMA. 2002. The discovery of a breeding colony of Jouanin's Petrel *Bulweria fallax* on Socotra, Yemen. *Sandgrouse* 24: 105–108.
- Vaurie, C. 1959. Birds of the Palearctic Fauna. Vol 1: Passeriformes. HF & G Witherby, London.
- Wellsted, JR. 1835. Memoir on the Island of Socotra. *The Journal of the Royal Geographical Society of London* 5: 129-229.
- Wranik, W. 2003. Fauna of the Socotra Archipelago. Rostock University, Germany.

APPENDIX: PLACE NAMES

As an aid to the location of place names for the main island of Socotra, they are given below followed by the key to the recording unit where they are found (see Figure 36).

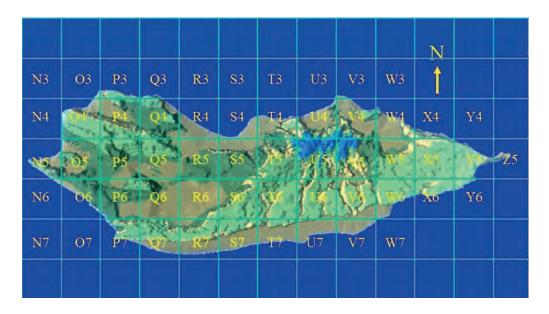


Figure 36. Recording units for bird observations on Socotra island

Airport (T4), Amak (U7).

Di Hamdh (S4), Di Hamri (V4), Di Lisha (V4), Di Qat (P4), Di Selmeho (R3), Di Shu'ub (N5), Didoem (Y5), Diksam (T6), Ditwah lagoon (P3).

Erihan (V4), Erher dunes (Y5).

Falang (X6)

Ghubbah (R4)

Haggeher mountains (U5), Hadiboh (U4), Hallah (W4), Hayf (U7), Homhil (W5)

Ilha (U4)

Khor Dibnih (V4), Khor Di Hamdh (S4), Khor Di Lisha (V4), Khor Ghubbah (R4), Khor Hadiboh (Hadiboh lagoon) (U4), Khor Qadheb (T4) Khor Matyif (X6), Khor Mouri (T4), Khor Nojaar (T4), Khor Sheq (U4), Khor Sirhan (Sirhan lagoon) (U4).

Ma'alah cliffs (O4), Ma'alah plateau (O4), Mahferhin (W6), Manafo (U4)

Neet (O6), Noged plain (Q7, R7, S7, T7, U7, V7)

Qalansiyah estuary (O4), Qariyah lagoon (W4)

Ras Di Hawlef (V3), Ras Diblih (U7), Ras Hebak (T4), Ras Irisseyl (Z5), Ras Momi (Y5), Riy Di Bedu (N4)

Sanadaf creek (R4), Sherihen (Y6), Khor Sirhan (U4), Skand (T5).

Wadi Ayhaft (T5), Wadi Di Farho (V5), Wadi Di Negehen (U4), (U4), Wadi Zirage (T6)