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Rare Birds in Iran in 1980–2010

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Abstract
Following on from the major reviews of rare birds in Iran during the periods 1860s–1960s (Roselaar & Aliabadian 2009) and 1967–1978 (Scott 2008), records of rare birds in Iran during the period 1980–2010 have been evaluated by the Iran Bird Records Committee and are presented here. As there was relatively little ornithological activity in Iran in the 1980s and early 1990s, most of the records come from the late 1990s and 2000s. The 102 rare species recorded in 1980–2010 include 15 species that had not previously been recorded in Iran. Rare species have been categorised in three groups: genuine rarities (71 species), rare and local breeding birds (20 species), and former rarities that have been increasing in Iran in recent years (11 species). A total of 281 records of the 71 genuine rarities are listed here. Forty-nine species were recorded on fewer than four occasions, and only four were recorded on more than 10 occasions. Fifty-one species that are known to have occurred in Iran prior to 1980 were not observed during the period under review. Six of the increasing species are now recorded so frequently in Iran that they will be omitted from future lists of rare birds. Of the 153 species considered in this paper (including 20 species in the IUCN Red List categories), 95 have either been recorded on fewer than 10 occasions in the last 50 years or have not been recorded in Iran since 1980. These are considered to be extreme rarities, i.e. species for which detailed descriptions are required if records are to be considered for acceptance by the Iran Bird Records Committee and published in its future reports.

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1. Introduction

Around the world, there are many Rare Birds Committees that manage the collection of data on rarities and assess the validity of each report. What is a rarity or a rare bird species in a particular country? There is no definite answer to the question, but as a rule a bird species is rare when it cannot be expected to occur with any regularity. Many rarities are vagrants, far outside their normal distribution, but others may be scarce and irregular winter visitors, passage migrants or breeding species. What is Rarities Form? A Rarities Form is any kind of blank form that should be filled in when any birdwatcher/ornithologist sees one or more individuals of a rare bird species designated as such by a particular Rare Birds Committee. What types of information are required when observing and reporting rare birds? When a rare bird has been seen, the observer should take notes on its morphology, call and behaviour, the age and sex of the bird or birds, if known, the time and location of the sighting, the optical equipment used in the identification, whether or not the bird was trapped and/or photographed, and the weather conditions and light conditions at the time of the sighting. The observer should also note what other species of birds were present for comparison, and should mention any previous experience of the species or similar species. Why are we very interested in receiving well documented reports of rarities? Because there have been very few and irregular records of these species, and in some cases, their identification is very difficult. The acceptance of reports of rarities that have not been adequately documented and may therefore be erroneous could result in the publication of misleading information on the status of rare birds. The main purpose of recording rarities is to monitor isolated occurrences and range extensions, increases or decreases in frequency of occurrence and the status of rare breeding birds. Such information, gathered over a period of many years, can be of great value in identifying the conservation needs of rare species (Gaston 1994), especially species that are globally threatened according to the IUCN criteria.

The idea of compiling a list of rare birds in Iran originated in 2008, when the Iran Bird Records Committee was established. Two of the members of this committee, D.A. Scott and A. Khaleghizadeh, compiled a list of the 122 rarest species of birds in Iran, based on the number of records available, to help the committee focus on those species that were genuinely rare in the country. A standard form for the reporting of rarities was developed at this time (Khaleghizadeh 2009). Meanwhile, Scott (2008) compiled a report on all rare bird species recorded in Iran during the 12 years from 1967 to 1978, a busy period for ornithological surveys in Iran. Shortly after the publication of Scott's (2008) paper, Roselaar & Aliabadian (2009) produced a paper on rare birds in Iran between the 1860s and the 1960s, based on their extensive data-bank on Iranian birds. This paper covered the very important era for ornithological studies in Iran in the late 19th and early 20th centuries, and filled the gap between the very earliest ornithological studies in Iran, initiated by Gmelin & Habizil in the 1770s (Milkovsky 2008), and the period covered by Scott (2008).

The papers by Scott (2008) and Roselaar & Aliabadian (2009) drew attention to the large number of species that had been recorded in Iran on only a few occasions, and revealed that the status of many species, including a number of breeding species, was very poorly known. Scott's article provided details of all acceptable records of 96 rare birds (including four subspecies) during the period 1967 to 1978 (Scott 2008). Scott does not define ‘rare bird’ precisely, but, with very few exceptions, he confined his list of rare birds to those species that had been recorded on no more than 12 occasions during the 12-year period (i.e. on average, no more than one record per year). The number of records of each species ranged from 1 to 28, but for most species there were fewer than 10 records (almost 81% of the total). Roselaar & Aliabadian (2009) summarized all the records of 102 rare species in Iran between the 1860s and early 1960s. Again, these authors give no definition of ‘rare bird’, but mostly followed Scott (2008). For all but one of the species covered by Roselaar & Aliabadian (2009), there were fewer than 20 records during the period under review, the exception being Red Kite *Milvus milvus* with 22 records.

From the late 1970s to the late 1990s, few ornithological surveys and studies were carried out in Iran due mainly to problems caused by the Iran-Iraq War, a lack of skilled birdwatchers and a lack of scientific courses in universities to train new students. However, during the last decade, many young people in Iran have become interested in birds and their conservation, and birdwatching is rapidly becoming a popular pastime. Many of this new generation of keen ornithologists and birdwatchers are now highly experienced and conduct personal bird surveys or participate in national and provincial surveys which produce dozens of new reports on the birds of Iran and numerous records of rare birds.

The Iran Bird Records Committee decided to compile a list of all rarities recorded in Iran in the three decades from 1980 to 2010, to follow on, almost without break, from the period covered by Scott (2008). However, because of the paucity of information available from the 1980s and early 1990s, the great majority of records relate to birds observed in Iran since the late 1990s. We present this summary of observations of rare birds in Iran to provide further clarification of the status of these species in Iran and to serve as a basis for further monitoring and conservation action in the future.

2. Materials and Methods

Our first step in the compilation of a list of rarities during the period 1980–2010 was to gather as many records as possible from the published literature and unpublished reports of ornithological surveys and birdwatching trips. We also compiled a list of all those species listed as rarities by Scott (2008) and Roselaar & Aliabadian (2009). We then created a data-bank for those species for which no more than about 10 records were available during the period 1980–2010. This data-bank included columns for the number of individuals, date(s) of occurrence, location, province, observer(s) and references (if available). In order to maintain consistency in our presentation of the information on rare birds, we followed the taxonomic sequence adopted by Scott (2008) and Roselaar & Aliabadian (2009). We then invited experienced ornithologists and birdwatchers who had published papers on the birds of Iran to submit their records. We also extracted data on rare species from the Mid-winter Waterbird Census (MWWC) data-bank, deposited in the Department of the Environment in Tehran (abbreviated as DOE MWWC Data).

In the following systematic list, we give the number of records accepted by Roselaar & Aliabadian (2009), Scott (2008) and in this report (1980–2010), respectively, within brackets after the species name. For species included in the present report but not considered to be rarities by Scott (2008) and Roselaar & Aliabadian (2009), we have given the numbers of records in the periods 1967–1978 and 1860s–1960s in square brackets. Details of these records are given in Appendix I (1967–1978) and Appendix II (1860s–1960s), except for Pallid Scops Owl *Otus brucei*, Black-crowned Sparrow-lark *Eremopterix nigriceps* and Icterine Warbler *Hippolais icterina* (scarce and local breeding species that were recorded on 8–10 occasions during the period 1980–2010). Those species which have been recorded on fewer than 10 occasions in the last 50 years are considered as extreme rarities and are indicated with a '†' symbol. To make the presentation of records as clear as possible, we have placed each well-documented record in a separate row starting with an asterisk (*). Additional reports which lack proper documentation are mentioned after the list of well-documented records, but are not included in the total numbers of records. For all globally threatened or near-threatened species, we have indicated the relevant category of threat as assigned in the most recent IUCN list (IUCN 2011), in order to focus attention on these species. As far as possible, we have tried to include only those records for which full details are available, namely date or dates of occurrence, number of individuals, precise locality and names of principal observers. Furthermore, in the case of extreme rarities and species that pose special identification problems, we have tried to include only those records that are supported with a convincing detailed description and/or an identifiable photograph. This requirement of full details has meant that we have been able to ignore a large number of doubtful records of rare birds in Iran for which proper documentation is lacking. This

has been especially the case with records of rare species that have appeared only as unattributed counts in the Department of the Environment's Mid-winter Waterbird Census data. High counts of rare species that have appeared only as totals on a mid-winter count form, without further discussion or description, clearly do not meet the basic criteria for acceptance and have therefore been ignored. Thus, all records of Great Snipe *Gallinago media*, Slender-billed Curlew *Numenius tenuirostris* and Great Black-backed Gull *Larus marinus* that have appeared in the DOE MWWC Data without comment have been omitted from this review. All records of rare birds observed by persons other than the authors of the present paper have been checked and approved by at least one of the authors. For many rare birds, especially those that are easy to identify, we have accepted records without serious query, providing that they have come from an observer who is known to be reliable and are adequately documented with details of number, date and location. As regards date, as a basic minimum we have required that at least the month and the year are known. In the case of extreme rarities, we have insisted on a full detailed description. In a few cases, when we were convinced of the reliability of a record, e.g. because of the existence of a specimen or photograph, we have included the record even though some of the required data, such as precise date or locality, were incomplete. We have included photographs of some of the rare birds listed in this review, but we have not reproduced photographs of rare birds that have already been published in papers describing their occurrence in Iran.

We have classified the rare birds of Iran in three categories: genuine rarities, rare and local breeding species, and increasing species, i.e. species that were formerly very rare in Iran, but have been recorded in increasing numbers in recent years.

2.1. Genuine rarities

These species are mostly those that occur in Iran only as vagrants, far outside their normal range. In most cases, the individuals concerned are lost. Their occurrence in Iran is neither regular nor predictable. Usually, there will be only a few records a year, and in some years none at all. However, this category also includes a few regular winter visitors and/or passage migrants that occur in Iran in very small numbers (only a few individuals each year) either because they are at the very edge of their normal range, e.g. Red-footed Falcon *Falco vespertinus*, Demoiselle Crane *Grus virgo*, White-winged Lark *Melanocorypha leucoptera*, Richard's Pipit *Anthus richardi* and Wood Warbler *Phylloscopus sibilatrix*, or because their total populations are very small, e.g. Siberian Crane *Grus leucogeranus* and Sociable Lapwing *Vanellus gregarius*. In general, we have considered only those species for which there were no more than 10 records in 1980–2010 to be genuine rarities. However, we have ignored this criterion for four species, namely Red-breasted Goose *Branta ruficollis* (EN), Siberian Crane (CR), Sociable Lapwing (CR) and Pacific Golden Plover *Pluvialis fulva*, the first three species because they are globally threatened, and the last because of identification problems.

We have also included some very scarce and/or extremely local residents, summer visitors, winter visitors and passage migrants in our list of genuine rarities, as there have been very few records of these species in Iran in recent years. In many cases, these are species which occur in Iran only in very small numbers or in one tiny part of the country (e.g. Brown Fish Owl *Ketupa zeylonensis* and Turkestan Tit *Parus bokharensis*), but in other cases they may be under-recorded, either because they are inconspicuous and easily overlooked (e.g. Savi's Warbler *Locustella luscinioides* and Grasshopper Warbler *Locustella naevia*), or because they occur in parts of the country that are seldom visited (e.g. Hume's Leaf Warbler *Phylloscopus humei* in eastern Iran). By treating these species as genuine rarities, we hope to encourage observers to seek them out more diligently and take greater care in their identification, so that we can obtain a better understanding of their status in Iran.

The old records of seven species listed by Scott & Adhami (2006) and Scott (2008) as having occurred in Iran prior to the 1960s have recently been reassessed by Roselaar & Aliabadian (2009) and considered to be unacceptable. These are Falcated Duck *Anas falcata*, Indian Nightjar *Caprimulgus asiaticus,* White-winged Woodpecker *Dendrocopos*

leucopterus, Scaly-bellied Woodpecker *Picus squamatus*, Güldenstädt's Redstart *Phoenicurus erythrogaster*, Yellow-breasted Tit *Parus (cyanus) flavipectus* and Cirl Bunting *Emberiza cirlus*. As there have been no confirmed records of these species in Iran since the 1960s, they have been removed from the Iranian list and are not considered here.

2.2. Rare and local breeding species

There are a number of regular breeding species in Iran that are very seldom recorded, either because they have very small breeding ranges within Iran or are scarce throughout their ranges. We have identified 20 species in this category. Fourteen of these have very restricted breeding ranges in Iran. The Caucasian Black Grouse *Tetrao mlokosiewiczi* and Mountain Chiffchaff *Phylloscopus sindianus* are confined to the deciduous forests in northern Azarbaijan; the Black Woodpecker *Dryocopus martius* and Caspian Tit *Parus (lugubris) hyrcanus* occur only in the Hyrcanian forests of the south Caspian region; the Iraq Babbler *Turdoides altirostris,* Zitting Cisticola *Cisticola juncidis* and Basra Reed Warbler *Acrocephalus griseldis* are confined to the wetlands of Khuzestan; and the Socotra Cormorant *Phalacrocorax nigrogularis*, Black-crowned Finch-lark *Eremopterix nigriceps,* Red-vented Bulbul *Pycnonotus cafer* and Oriental White-eye *Zosterops palpebrosus* have very restricted ranges on the coasts and islands of the southern Persian Gulf and Strait of Hormoz. The Sooty Falcon *Falco concolor* is known to breed only in two widely separated localities, on Qeshm Island in the Persian Gulf and in the central desert near Tabas; the Black-headed Penduline Tit *Remiz macronyx* is confined to wetlands in the south-east Caspian region; and the White-winged Grosbeak *Mycerobas carnipes* occurs only in juniper forest in the eastern Alborz and mountains of northern Khorasan. The breeding ranges of the other six species, Grey Partridge *Perdix perdix,* Lichtenstein's Sandgrouse *Pterocles lichtensteinii,* Pallid Scops Owl *Otus brucei,* Lesser Spotted Woodpecker *Dendrocopos minor*, Icterine Warbler *Hippolais icterina* and Mongolian Trumpeter Finch *Rhodopechys mongolica*, remain poorly known. All appear to have fairly wide distributions in Iran, but are seldom reported, either because they are everywhere scarce or because they are inconspicuous and easily overlooked. For each of these 20 species we give a brief summary of the known distribution in Iran followed by a summary of records in the period 1980–2010.

2.3. Increasing species

This category is comprised of species that formerly occurred only as extreme rarities in Iran, but appear to have become much commoner in recent years. We have identified 11 species in this category, namely Striated Heron *Butorides striatus,* African Sacred Ibis *Threskiornis aethiopicus,* Crested Honey Buzzard *Pernis ptilorhynchus,* Black-winged Kite *Elanus caeruleus,* Spur-winged Lapwing *Vanellus spinosus*, Great Knot *Calidris tenuirostris,* Mediterranean Gull *Larus melanocephalus,* Barn Owl *Tyto alba,* Long-eared Owl *Asio otus*, Indian Silverbill *Lonchura malabarica* and House Crow *Corvus splendens*. For several of these species, we give only a summary of the recent records because reviews of their status have already been published (Osaei et al. 2007, Ayé & Salmanzadeh 2007, Behrouzi-Rad 2010, Tohidifar et al. 2011) or will be in the near future. Some of these species have become so common in Iran in recent years that they will now be deleted from the list of rare birds in Iran and will be omitted from future Rare Bird Reports.

Table 1. Rare birds in Iran not recorded during the period 1980–2010 (51 species).

Common name	Scientific name	No. of records listed by Roselaar & Aliabadian (2009) and Scott (2008)	Notes
Cory's Shearwater	*Calonectris diomedea*	0, 1	The form concerned is most likely to have been *C. diomedea diomedea* (Scopoli's Shearwater).
Wedge-tailed Shearwater	*Puffinus pacificus*	0, 2	
Wilson's Storm Petrel	*Oceanites oceanicus*	3, 7+	
Red-billed Tropicbird	*Phaethon aethereus*	7, 15+	
Woolly-necked Stork	*Ciconia episcopus*	1, 0	There is a report of one individual from south of Iran-Shahr, Sistan & Baluchestan Province, in 1993 (J. Mansoori), but the record has not been accepted because of the lack of details.
Lesser Flamingo	*Phoenicopterus (Phoeniconaias) minor*	1, 0	(NT in IUCN) There is a report of two individuals at Govater Bay & Khoor, Sistan & Baluchestan Province, on 12 January 1994 (DOE MWWC Data), and a flock of 16 individuals was reported at Bandar Abbas coast, Hormozgan Province, in 1998 (J. Mansoori), but no detailed descriptions are available.
Brent Goose	*Branta bernicla hrota*	1, 0	The form *hrota* is known as Light-bellied Brent Goose. Roselaar & Aliabadian (2009) treat it as a full species, but few other authors accept this split.
Velvet Scoter	*Melanitta fusca*	2, 0	
Common Scoter	*Melanitta nigra*	1, 1	
White-rumped Vulture	*Gyps bengalensis*	2, 3	CR in IUCN
Eastern Marsh Harrier	*Circus spilonotus*	2, 0	
Upland Buzzard	*Buteo hemilasius*	1, 0	
Red-necked Falcon	*Falco chicquera*	1, 0	There is one specimen in the Taxidermy Unit at the DOE in Tehran, but no details of date or place of collection are available.
Laggar Falcon	*Falco jugger*	0, 1	NT in IUCN.
Common Buttonquail	*Turnix sylvaticus*	0, 1	
Small Pratincole	*Glareola lacteal*	0, 1	
Greater Painted Snipe	*Rostratula benghalensis*	0, 1	
Solitary Snipe	*Gallinago solitaria*	11, 0	Recent reports of this species in the MWWC data have been rejected because of the lack of any details.
Slender-billed Curlew	*Numenius tenuirostris*	8, 2	CR in IUCN. There have been very few records of this species anywhere in the world since the early 1990s and it may now be extinct. Any acceptable record in recent years would have to be supported by incontrovertible evidence, such as an identifiable photograph or a DNA sample. Therefore all reports during the 1980s, 1990s and 2000s (e.g. Vuosalo-Tavakoli (undated), Zehzad et al. 1997, Gretton 1991, Sadeghizadegan 1998, Behrouzi-Rad & Kiabi 2008) have been rejected because of insufficient evidence.
Eastern Curlew	*Numenius madagascariensis*	1, 0	
Red-necked Stint	*Calidris ruficollis*	1, 0	Recently added to the Iranian list by Kirwan (2007) on the basis of specimens collected in 1941.
Indian Skimmer	*Rynchops albicollis*	1, 0	VU in IUCN. A report of one individual near Bandar-e Lengeh in 2000 (J. Mansoori) has been rejected because of the lack of detailed information.
Sooty Tern	*Sterna fuscatus*	0, 1	
Long-tailed Jaeger	*Stercorarius longicaudus*	0, 1	
Great/Brown Skua	*Stercorarius skua/ antarcticus* complex	0, 3	The form most likely to occur in the Persian Gulf is the Brown Skua *Stercorarius (antarcticus) lonnbergi.*
Oriental Turtle Dove	*Streptopelia orientalis*	1, 5	

Common name	Scientific name	No. of records listed by Roselaar & Aliabadian (2009) and Scott (2008)	Notes
Oriental/Himalayan Cuckoo	*Cuculus optatus/ saturatus*	2, 0	Oriental Cuckoo *optatus* is much the most likely form to occur on passage in north-eastern Iran as it breeds as far west of European Russia
Sykes's Nightjar	*Caprimulgus mahrattensis*	16, 3	A report of a single bird around Kahir village in Sistan & Baluchestan Province in July 2004 (P. Bakhtiari) has not been accepted because of the lack of full details.
White-winged Woodpecker	*Dendrocopos leucopterus*	2, 0	
Black Lark	*Melanocorypha yeltoniensis*	1, 13	
Hume's Short-toed Lark	*Calandrella acutirostris*	1, 2	
Long-tailed Shrike	*Lanius schach*	6, 0	Records from Golestan N.P. (Rezaei 1999, 2002) have not been accepted because of lack of full details. Adhami (2005) also reported a bird at Mehrouyeh, Kerman Province, in May 1975, but this record was not accepted by Scott (2008).
Blue Whistling Thrush	*Myophonus caeruleus*	1, 0	
Red-throated Thrush	*Turdus ruficollis*	0, 2	This species was formerly treated as being conspecific with the Black-throated Thrush *T. atrogularis*.
White-crowned Wheatear	*Oenanthe leucopyga*	1, 0	
River Warbler	*Locustella fluviatilis*	1, 0	
Eastern Bonelli's Warbler	*Phylloscopus orientalis*	0, 1	A report of a bird near the Dez River, Khuzestan Province, on 14 February 2003 (H. Buck) has not been accepted because of the lack of a detailed description.
Yellow-browed Warbler	*Phylloscopus inornatus*	0, 10	
Rüppell's Warbler	*Sylvia ruppeli*	1, 0	
Cinereous Bunting	*Emberiza cineracea*	13, 5	NT in IUCN. A report from Bidoiyeh, Kerman Province, in spring 2002 (Shafiei et al. 2004) has not been accepted because of the lack of details.
White-capped Bunting	*Emberiza stewarti*	2, 1	
Rustic Bunting	*Emberiza rustica*	3, 4	
Yellow-breasted Bunting	*Emberiza aureola*	2, 1	
Little Bunting	*Emberiza pusilla*	2, 0	
Cretzschmar's Bunting	*Emberiza caesia*	0, 1	
Desert Sparrow	*Passer simplex*	3, 0	Records from Golestan N.P. (Rezaei 1999, 2002) and Siahkuh P.A., Yazd Province (Irannejad et al. 2006), have not been accepted because of the lack of details.
Afghan Scrub Sparrow	*Passer (moabiticus) yatii*	[61], 3	For taxonomic position and morphology see Kirwan (2004) and for details of old records from the 1860s to 1960s see Appendix II. There has been a dramatic decline in records of this species from 61 in 1860s–1960s (mostly in 1900 and 1901) to only three in the 1970s and none in recent decades.
Sind Sparrow	*Passer pyrrhonotus*	2, 4	There is a report of more than 15 near Chabahar, Sistan & Baluchestan Province, in July 2004 (P. Bakhtiari), and there are three mounted specimens in the bird collection at the Iranian Research Institute of Plant Protection (IRIPP) taken in the Zabol area in the late 1970s or early 1980s. Both records lack sufficient details to be acceptable.
Red Avadavat	*Amandava amandava*	0, 3	
Oriental Crow	*Corvus corone orientalis*	8, 3	This form was formerly known as Carrion Crow
Large-billed Crow	*Corvus macrorhynchos*	3, 0	

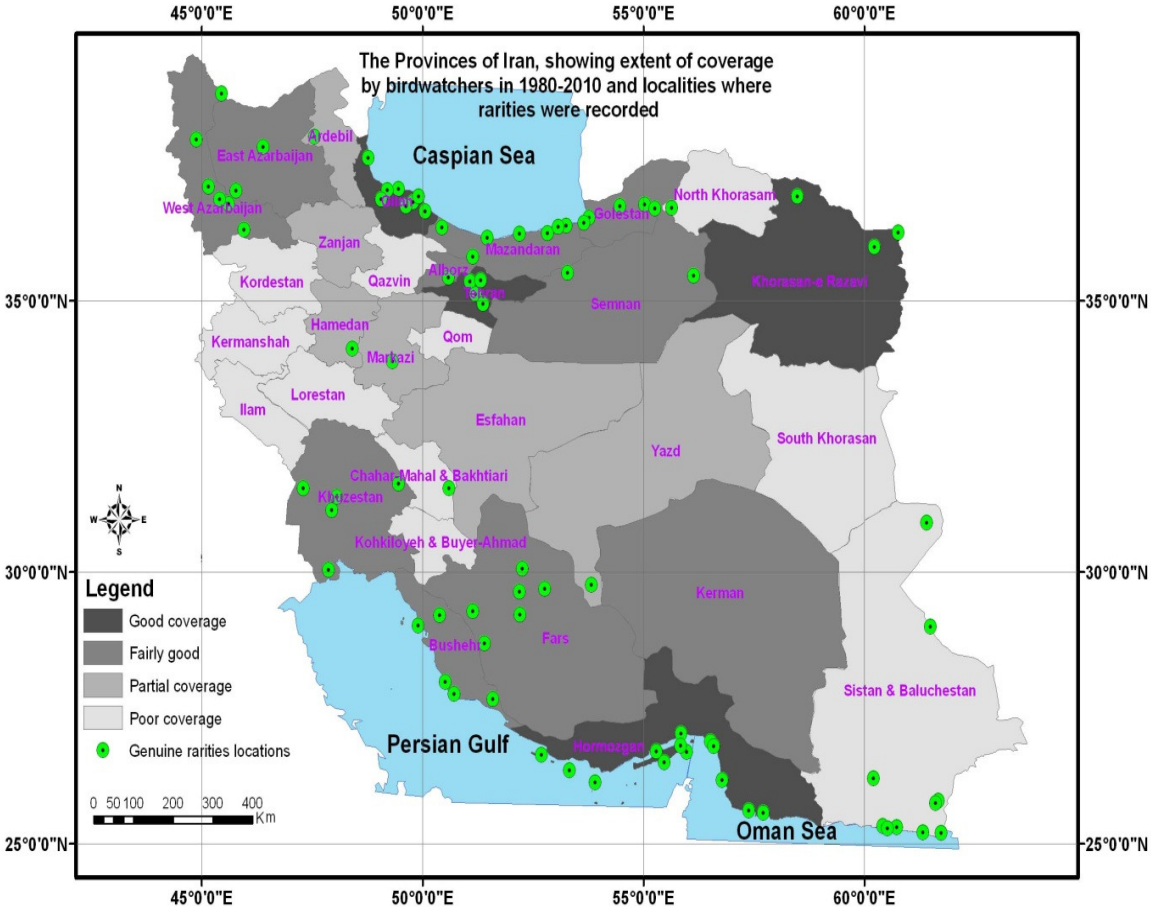

Fig. 1. Location of sites at which genuine rarities were recorded in 1980–2010. The map also shows the extent of coverage by birdwatchers during the period, © A. Khaleghizadeh.

3. Results

In total, 153 species have been identified as 'rare' birds in Iran for the purposes of this review. One hundred and two species were recorded at least once during the three decades from 1980 to 2010: 71 genuine rarities, 20 rare and local breeding species and 11 increasing species. Fourteen of the species presented here are listed as globally threatened or near threatened in the IUCN Red List (IUCN 2011). Fifty-one species currently accepted on the Iranian list were not recorded in 1980–2010 (Table 1). These include 14 species that were not recorded between the 1860s and 1960s (the period covered by Roselaar & Aliabadian 2009), and 21 species that were not recorded in the late 1960s and 1970s (the period covered by Scott 2008). Sixteen species were recorded in both these periods but have not been recorded since then.

3.1. Genuine rarities

There were at least 281 records of 71 species during the period 1980–2010. Twenty-four species were recorded on only one occasion, 13 species on two occasions and 12 species on three occasions. Of the remaining 22 species, four were recorded on more than ten occasions: Red-breasted Goose, Siberian Crane, Pacific Golden Plover and Sociable Lapwing. Figure 1 shows the localities at which most of the genuine rarities were recorded in 1980–2010.

Red-throated Diver (Loon) *Gavia stellata* (1, 3, 2)†
* One on 16 January 2007 at Daneshmand wetland, Golestan Province (E. Winkel and E. de Weerd; DOE MWWC Data; de Weerd et al. 2008).
* One on 22 January 2007 on the Caspian Sea between Chalus and Noor, Mazandaran Province (R. Hovinga, V. de Boer and K. Rabiee; DOE MWWC Data).

Black-throated Diver (Loon) *Gavia arctica* (1, 12, 7)
* Three on 12 January 1990 on the Caspian Sea between Astara and Bandar Anzali, Gilan Province (A. Adhami; DOE MWWC Data).
* Two on 9 January 1991 on the Caspian Sea between Hashtpar and Bandar Anzali, Gilan Province (A. Adhami; DOE MWWC Data).
* Two on 28 January 1997 on the Caspian Sea between Noor and Babolsar, Mazandaran Province (M.R. Bathaee; DOE MWWC Data).
* Five on 29 January 1997 on the Caspian Sea between Chalus and Noor, Mazandaran Province (M.R. Bathaee; DOE MWWC Data).
* One in breeding plumage in April 2007 in Langarud, Gilan Province (M. Borji per A. Ashoori). The bird had been caught in a fishing net but died the next day.
* One on 28 October 2007 in Boujagh N.P., Gilan Province (B. Nezami).
* One on 19 January 2009 in Khoor-e Markhazi, West Jask Protected Area, Hormozgan Province (J. Hullen, M. Zekhuis and M. Ghasemi; DOE MWWC Data).

Persian Shearwater *Puffinus persicus* (6, 12+, 2)
* 120 on 18 March 2001 around Larak Island in the Strait of Hormuz, Hormozgan Province (Karlsson et al. 2001, Roth et al. 2005).
* One on 16 April 2007, off Surgalm pier near Jask, Hormozgan Province (R. Ayé, A. Huber, E. Elmer, J. Kuhn, J. Spillmann, W. Reinhardt and S. Sigrist).

Sooty Shearwater *Puffinus griseus* (0, 0, 1)† (Near threatened)
* One found dead on 12 June 2008 on the beach at Bandar Abbas, Hormozgan Province (M. Ghasemi, F. Goudarzi and M. Ram; see Ghasemi et al. 2008).
This was the first fully substantiated record of the species in Iran. There is an old report of a bird flying west off Chabahar, Baluchestan, on 6 May 1978 (C.D.R. Heard per D.A. Scott), but the record was never properly documented.

Masked Booby *Sula dactylatra* (1, 1, 5)†
* One in July 2004 at Beris Port, Sistan & Baluchestan Province (P. Bakhtiari).
* One subadult on 16 April 2007 at Khoor-e Khalasi, east of Jask, Hormozgan Province (R. Ayé and I. Bayrami; see Ayé & Bayrami 2009).
* One on 15 January 2009 in Jegin and Gabrik Protected Area, east of Jask, Hormozgan Province (J. Hullen, M. Zekhuis and M. Ghasemi).
* One on 5 January 2010 in Jegin and Gabrik Protected Area, east of Jask, Hormozgan Province (M. Ghasemi and S.B. Musavi).
* One in June 2010 in Khoor-e Markhazi, West Jask Protected Area, Hormozgan Province (S.B. Musavi).

African Darter *Anhinga rufa* (0, 4, 8)
* One in January 2006 in the Hoor–al-Azim marshes, Khuzestan Province (P. Bakhtiari).
* 32 on 18 January 2007 at Moshemshieh in the Hoor-al-Azim marshes, Khuzestan Province (Willems et al. 2008; DOE MWWC Data).
* 12 on 20 January 2007 at Jarahieh in the Hoor-al-Azim marshes, Khuzestan Province (Willems et al. 2008; DOE MWWC Data).
* 48 on 22 January 2007 in the main part of the Hoor-al-Azim marshes, Khuzestan Province (Willems et al. 2008; DOE MWWC Data).
* Three on 16 January 2008 in the Hoor-al-Azim marshes, Khuzestan Province (A. Amini and R. Alvandi; DOE MWWC Data).
* Four on 24 January 2009 at Moshemshieh in the Hoor-al-Azim marshes, Khuzestan Province (Schelvis et al. 2009; DOE MWWC Data).
* Three on 24 January 2009 at Jarahieh in the Hoor-al-Azim marshes, Khuzestan Province (Schelvis et al. 2009; DOE MWWC Data)
* 11 on 18 January 2010 in the Hoor-al-Azim marshes, Khuzestan Province (A. Amini; DOE MWWC Data).
All eight records were from the Hoor-al-Azim marshes near the Iran/Iraq border. These marshes had been inaccessible to ornithologists and bird-watchers for security reasons until 2006, and it was not until January 2007 that a proper ornithological survey was carried out.

Goliath Heron *Ardea goliath* (1, 28, 10)
* Two on 20 January 2004 at Khoor-e Khalasi, eastern Hormuzgan Province (Willems & Felix 2004; DOE MWWC Data).
* One on 22 January 2004 at Khoor-e Neyzaei, eastern Hormuzgan Province (Willems & Felix 2004; DOE MWWC Data).
* Small numbers on several occasions from March to October 2004 at Khoor-e Khalasi, eastern Hormozgan Province (Musavi 2004a).
* Two adults between 8 and 11 April 2004 at Khoor-e Khalasi, eastern Hormozgan Province (R. Ayé et al. per D.A. Scott)
* One in July 2004 in Govater Bay, Sistan & Baluchestan Province (P. Bakhtiari).
* One on 17 January 2007 at Khoor-e Khalasi, eastern Hormuzgan Province (de Boer et al. 2008; DOE MWWC Data).
* Two on 19 January 2007 at Moshemshieh in the Hoor-al-Azim marshes, Khuzestan Province (Willems et al. 2008; DOE MWWC Data).
* Two on 20 January 2007 at Jarahieh in the Hoor-al-Azim marshes, Khuzestan Province (Willems et al. 2008; DOE MWWC Data).
* Eight on 22 January 2007 in the main part of the Hoor-al-Azim marshes, Khuzestan Province (Willems et al. 2008; DOE MWWC Data).
* One on 18 January 2009 at Khoor-e Shahreno, 20 km east of Jask, Hormozgan Province (Hullen et al. 2009; DOE MWWC Data).
There have been no records in recent decades from the Khouran Strait in central Hormozgan Province, where the species was found breeding in the 1970s (Scott 2007, 2008), but small numbers still survive further east along the coast and a small population has recently been discovered in the Hoor-al-Azim marshes in Khuzestan Province, in an area that had not previously been visited by ornithologists.

Taiga Bean Goose *Anser fabalis* (2, 1, 5)†
* Two from 19 January to 8 March 2004 in Boujagh National Park, Gilan Province (A. Ashoori). When first seen on 19 January 2004, these birds were with a flock of Greylag Geese *Anser anser* (de Boer et al. 2004, Ashoori & Zolfinejad 2006; DOE MWWC Data).
* One from 7 December 2004 to 13 March 2005 in Boujagh National Park, Gilan Province (A. Ashoori).
* One on 24 January 2008 in Boujagh N. P., Gilan Province (DOE MWWC Data).
* 50 on 16 January 2009 in Miankaleh W.R., Mazandaran Province (K. Rabiee, C. Smit and M. Roos; DOE MWWC Data).
* One on 19 January 2009 in Gorgan Bay, Mazandaran Province (K. Rabiee, C. Smit and M. Roos; DOE MWWC Data).

Barnacle Goose *Branta leucopsis* (0, 0, 1)†
* One on 13 January 2007 with Greylag Geese *Anser anser* at Gomishan Marsh, Golestan Province (E. Winkel and E. de Weerd; see Winkel & de Weerd 2007, DOE MWWC Data).
This was the first record of a Barnacle Goose in Iran.

Red-breasted Goose *Branta ruficollis* (5, 10, 15) (Endangered)
* One on 16 January 1995 at Dasht-e Arjan marsh, Fars Province (H. Farhadpour and H. Amini; DOE MWWC Data).
* Four on 14 January 1997 at Dasht-e Arjan marsh, Fars Province (H. Farhadpour and B.F. Darreh-Shoori; DOE MWWC Data).
* One on 15 January 1999 in Boujagh N.P., Gilan Province (H. Esmaeeli and Mr Haghighi; DOE MWWC Data).
* Two birds shot in the autumn of 1999 around Band-Ali-Khan wetland, Tehran Province (M.-A. Mazhari per M. Tohidifar).
* One in December 2002 at Fereidoun-Kenar, Mazandaran Province (P. Bakhtiari; see Sehhatisabet et al. 2006).
* One in December 2002 at Miankaleh W.R., Mazandaran Province (P. Bakhtiari; see Sehhatisabet et al. 2006).
* Four on 5 January 2003 at Miangaran marsh, Khuzestan Province (A. Amini and H. Amini; DOE MWWC Data).
* 12 on 20 January 2003 at Ghareh Gheshlagh marsh, East Azarbaijan Province (M.R. Masoud; DOE MWWC Data).
* One on 24 January 2004 at Fereidoun-Kenar, Mazandaran Province (per M.E. Sehhatisabet). The bird was captured by a local hunter and kept at his home.
* 2 in February 2004 at Fereidoun-Kenar and Ezbaran, Mazandaran Province (P. Bakhtiari).
* One on 8 January 2006 at Kaftar Lake, Fars Province (M.E. Sehhatisabet; DOE MWWC Data).
* Three on 25 January 2006 at Kani-Borazan marsh, West Azarbaijan Province (R. Salmanzadeh; DOE MWWC Data).
* One in January 2007 at Fereidoun-Kenar and Ezbaran, Mazandaran Province (P. Bakhtiari).
* Four in February 2009 at Fereidoun-Kenar, Mazandaran Province (Mr Ahmadi per B. Nezami).
* Two in February 2010 at Sorkh-Rud, Fereidoun-Kenar, Mazandaran Province (F. Eskandari).

Cotton Pygmy Goose *Nettapus coromandelianus* (0, 1, 3)†
* A female/immature on 31 August 1998 near Pozum, c. 5 km west of Konarak (Chabahar region) in southeast Baluchestan, Sistan & Baluchestan Province (K.A. Sachanowicz, P. Karczmarczyk and A. Olszewski; see Sachanowicz et al. 2002).

* One among Eurasian Teal *Anas crecca* on about 4 February 2008 in reedbeds at Helleh wetland, Bushehr Province (S.B. Musavi).
* Two female-type birds on 11 and 12 December 2010 at a pool near Keshari, Dargaz, Sistan & Baluchestan Province (T. Stalling, H. Keikha, T. Roth & R. Ayé; Fig. 2).

Fig. 2. Cotton Pygmy Goose *Nettapus coromandelianus* near Keshari, Dargaz, Sistan & Baluchestan Province, 12 December 2010, © T. Roth .

Fig. 3. Female Long-tailed Duck *Clangula hyemalis* at Khoor-e Tiab, Hormozgan Province, 21 January 2008, © M. Ghasemi.

Long-tailed Duck *Clangula hyemalis* (0, 1, 7)†
* One female first seen in December 2003 at Khoor-e Tiab, east of Bandar Abbas, Hormozgan Province (the late N. Hamidi per S.B. Musavi) and seen again on 15 January 2004 at the same locality (de Boer et al. 2004). The bird was photographed.
* One female at Lahijan Pond, Gilan Province, on 10 December 2004 (A. Ashoori) and again from 5 January to the middle of February 2005 (B. Nezami; see Sehhatisabet et al. 2006).
* Seven on 12 January 2005 at Gomishan marsh, Golestan Province (H. Foekens, J. Schelvis and M. Shakiba; DOE MWWC Data).
* One on 16 December 2005 in Boujagh N.P., Gilan Province (A. Ashoori; see Ashoori et al. 2008).
* One female in January 2006 at Khoor-e Tiab, Hormozgan Province (M. Ghasemi). It is possible that this bird and the female seen in January 2008 were the same long-staying individual first recorded at Khoor-e Tiab in the winter of 2003/2004.
* One female on 21 January 2008 at Khoor-e Tiab, Hormozgan Province (M. Ghasemi; DOE MWWC Data) (Fig. 3).
* Four flying past on 4 December 2008 at Amirkelayeh, Gilan Province (E. Hadipour per B. Nezami). The birds were photographed.

Red Kite *Milvus milvus* (22, 10, 3) (Near threatened)
* One flying over on 6 December 2004 in Boujagh N.P., Gilan Province (A. Ashoori).
* One flying over on 16 January 2007 east of Anzali wetland, Gilan Province (A. Ashoori and W.J. Beeren).
* One flying over on 2 October 2008 in Amlash paddyfields, Gilan Province (A. Ashoori).

Pallas's Fish Eagle *Haliaeetus leucoryphus* (7, 3, 3)† (Vulnerable)
* One adult on 13 December 1999 at Espand, Anzali wetland, Gilan Province (A. Khaleghizadeh; see Khaleghizadeh 2004).
* One adult on 25 February 2000 at Khoor-e Govater, Sistan & Baluchestan Province (P.J. Dubois, M. Duquet et al.; see Dubois et al. 2000). The bird was followed for 45 minutes as it flew over the Govater area.
* Two (adult and juvenile) on 30 January 2003 flying over the central part of Anzali wetland, Gilan Province (A. Ashoori).

White-eyed Buzzard *Butastur teesa* (10, 12, 2)
* One breeding pair on 11 April 2004 125 km south of Minab, Hormozgan Province (R. Ayé and C. & M. Spiess-Guggenbuehl). The birds were seen carrying food into a tree, but the nest and young were not seen. Video footage was obtained of the birds.
* One breeding pair on 15 April 2006 125 km south of Minab, Hormozgan Province (R. Ayé). This pair was breeding in the same area as the pair in April 2004. The birds were photographed at the nest.

Rough-legged Buzzard *Buteo lagopus* (1, 17, 5)
* One on 31 October 1997 at Persepolis, Fars Province (Darreh-Shoori et al. 2001).
* One juvenile on 21 February 2000 at Zagh-Marz, Mazandaran Province (P.J. Dubois, M. Duquet et al.; see Dubois et al. 2000).
* One on 24 January 2005 in Boujagh N.P., Gilan Province (A. Ashoori; see Ashoori et al. 2008).
* One flying over in February 2006 west of Bazangan Lake, Karizak village, Sarakhs, Khorasan-e Razavi Province (A. Khani).
* One on 13 April 2006 at Siahkal gardens, Gilan Province (A. Ashoori).

Tawny Eagle *Aquila rapax* (2, 5, 4)†
* One on 22 March 2001 between Chabahar and Beris, Sistan & Baluchestan Province (R. Ayé, T. Roth and R. Burri). Separation from Steppe Eagle was based, among other things, on the slightly smaller size and slimmer silhouette. The ground colour was pale cinnamon-sandy. The head was considerably darker than the body. In flight, the bird did not show the heavy barring on the remiges typical of Steppe Eagle, nor the dark trailing edge to the wing.
* One on 26 March 2001 a few km north of the junction of the Chabahar and Mumans roads, south-east Baluchestan, Sistan & Baluchestan Province (R. Ayé and T. Roth).
* Three on 17 January 2009 at Govater Bay, Sistan & Baluchestan Province (M.P. Lantsheer and R. Vermoolen; see Lantsheer & Vermoolen 2009).
* Two on 18 January 2009 at Khoor-e Bahu, east of Govater, Sistan & Baluchestan Province (M.P. Lantsheer and R. Vermoolen; see Lantsheer & Vermoolen 2009).

Red-footed Falcon *Falco vespertinus* (5, 7, 3) (Near threatened)
* 31 (in groups of 13, 7, 6 and 5) on 29 September 2000 along the roadside near Lake Orumiyeh, between Orumiyeh and Islamic Island, West Azarbaijan Province (A. Dees, R. Jalving and R. Vos; see Jalving & Vos 2003).
* One male on 6 October 2003 flying over the Sarhad-Abad quarter of Karaj, Alborz Province (R. Niks; see Niks 2003).
* Three on 26 October 2006 in Boujagh N.P., Gilan Province (A. Ashoori; see Ashoori et al. 2008).

Amur Falcon *Falco amurensis* (0, 0, 1)†
* One immature bird on 24 January 2009 at Lipar wetland, 15 km east of Chabahar, Sistan & Baluchestan Province (R. Vermoolen, H. Askari and M.P. Lantsheer; see Lantsheer et al. 2009).
This was the first record of an Amur Falcon in Iran.

Lanner Falcon *Falco biarmicus* (0, 10, 1)
* One on about 8 November 2008 at Kani-Borazan wetland, West Azarbaijan Province (S.B. Musavi).

Demoiselle Crane *Grus virgo* (2, 3, 8)
* Two on 9 January 1990 in Qare Qeshlagh marsh, East Azarbaijan Province (A. Adhami; DOE MWWC Data).
* A flock of 45 on 29 September 2000 at Shur-Gol, East Azarbaijan Province (A. Dees, R. Jalving and R. Vos per D.A. Scott). Another flock of 85 cranes in the same area were thought to be this species.
* A party of 10 on 29 September 2000 by the roadside near Lake Orumiyeh, West Azarbaijan Province (A. Dees, R. Jalving and R. Vos per D.A. Scott).
* 300 on 2 April 2000 near Aras Lake, West Azarbaijan Province (A.M. Ebrahimi; see Ra'naghad & Ebrahimi 2007).
* 270 on 1–3 April 2000 near Chah-e Artezian, West Azarbaijan Province (11 individuals remained a few days) (A.M. Ebrahimi; see Ra'naghad & Ebrahimi 2007).
* 400 feeding in April 2001 near Chah-e Artezian, West Azarbaijan Province (DOE personnel; see Ra'naghad & Ebrahimi 2007).
* 250 on 2 April 2002 near Chah-e Artezian, West Azarbaijan Province (A.M. Ebrahimi).
* 200 on 2 April 2003 near Chah-e Artezian, West Azarbaijan Province (A.M. Ebrahimi).

Siberian Crane *Grus leucogeranus* (3, 7, 27) (Critically endangered)
Siberian Cranes have continued to spend the winter in the Fereidoun-Kenar area in Mazandaran Province (Ashtiani 1987, Baher 2002). Table 2 presents details of the counts of Siberian Cranes between the winter of 1984/1985 and the winter of 2010/2011. Numbers fluctuated between 10 and 11 individuals during the 1980s and early 1990s, but then gradually declined to only four individuals in the winter of 2003/04 (Wetlands International 2006) and one individual in the winter of 2007/2008. Sadeghi Zadegan et al. (2009) have also provided details of the numbers of Siberian Cranes wintering in Iran in recent years. During the 1990s and 2000s, attempts were made to supplement this small population with birds reared in captivity, but the numbers continued to decline steadily. Sadeghi Zadegan et al. (2009) identified Boujagh/Sefid-Rud, Amirkelayeh and Paein Rud-Posht as other potential wintering sites for the Siberian Crane in northern Iran, and two individuals were kept in captivity in Boujagh National Park in the winter of 2002/2003, but one of these died on about 4 May 2003 and the other on about 3 November 2003. On 2 March 2004, one juvenile that had been reared in captivity and fitted with a transmitter was found in paddyfields in the eastern part of Anzali wetland. This bird was taken to Boujagh N.P., where it was kept for the summer, and then transported to Fereidoun-Kenar in the following autumn (A. Ashoori, unpubl. data).

Oriental Pratincole *Glareola maldivarum* (0, 0, 1)†
* One on 18 January 2004 at fish-ponds near the airstrip 5 km southeast of Bostan, Khuzestan Province (H. van Diek and M. Hornman; see van Diek et al. 2004).
This was the first record of an Oriental Pratincole in Iran.

Black-winged Pratincole *Glareola nordmanni* (4, 3, 7) (Near threatened)†

* Two on 20 November 2005 in Boujagh N.P., Gilan Province (A. Ashoori; see Ashoori et al. 2008).
* One in spring 2006 in Boujagh N.P., Gilan Province (A. Ashoori; see Ashoori et al. 2008, Mansoori 2009).
* Four on 20 April 2007 in the southern part of Shadegan marshes (between Bandar-e Emam Khomeini and Abadan), Khuzestan Province (R. Ayé, A. Huber, E. Elmer, J. Kuhn, J. Spillmann, W. Reinhardt and S. Sigrist).
* One in April–May 2008 at Pishva, Varamin, Tehran Province (F. Eskandari).
* Two on 29 September 2008 in Boujagh N.P., Gilan Province (A. Ashoori). The birds were photographed.
* Two in April-May 2009 at Pishva, Varamin, Tehran Province (F. Eskandari).
* Two in April-May 2010 at Pishva, Varamin, Tehran Province (F. Eskandari).

This species was always found amongst Collared Pratincoles *Glareola pratincola* at Pisha, Varamin, Tehran Province (F. Eskandari, pers. obs.).

Pacific Golden Plover *Pluvialis fulva* (1, 3, 23)

* One on 4 December 1999 in Hara Protected Area, Hormozgan Province (C.A. Richardson per D.A. Scott).
* Eight on 29 January 2000 on mudflats among mangroves in Hara P.A., Hormozgan Province (Keijl et al. 2001).
* Three on 27 February 2000 on a mudflat in Hara P.A., Hormozgan Province (P.J. Dubois, M. Duquet et al.; see Dubois et al. 2000).
* Three on 22 April 2000 at Bandar Abbas, Hormozgan Province (T. Sacher; see Roth et al. 2005).
* Two on 25 March 2001 at Baran Park near Chabahar, Sistan & Baluchestan Province (Roth et al. 2005).
* Three on 8 April 2003 in Hara P.A., Hormozgan Province (Breider et al. 2003).
* Three on 1 February 2004 near the visitor centre in Hara P.A., Qeshm Island, Hormozgan Province (B. Darreh-Shoori and D.A. Scott; see Scott et al. 2004).
* Three on 13 January 2007 at Gorgan Bay, Mazandaran Province (R. Hovinga, V. de Boer and K. Rabiee; DOE MWWC Data).
* One on 19 January 2007 at Khoor-e Kolahi, Hormozgan Province (A. Ouwerkerk and M. van Roomen; DOE MWWC Data).
* One on 20 January 2007 at Khoor-e Tiab, Hormozgan Province (A. Ouwerkerk and M. van Roomen; DOE MWWC Data).
* Four on 20 January 2007 in Mond P.A., Bushehr Province (M. Hornman, H. van Diek and F.H. Tayefeh; DOE MWWC Data).

Table 2. Numbers of Siberian Cranes *Grus leucogeranus* at Fereidoun-Kenar, Mazandaran Province, in winter and early spring, 1984/1985 to 2010/2011. * The last wild female was killed in a storm on 9 January 2008. ** One of the birds on 25 January 2009 was a bird reared in captivity and released at the site.

Year	Mid-winter count	Source	Early March count	Source
1984/1985	No data		10	E. Vuosalo-Tavakoli
1985/1986	No data		11	E. Vuosalo-Tavakoli
1986/1987	No data		11	E. Vuosalo-Tavakoli
1987/1988	8 on 15 January	DOE MWWC Data	10	E. Vuosalo-Tavakoli
1988/1989	7 on 24 January	DOE MWWC Data	10	E. Vuosalo-Tavakoli
1989/1990	8 on 16 January	DOE MWWC Data	8	E. Vuosalo-Tavakoli
1990/1991	9 on 13 January	DOE MWWC Data	9	E. Vuosalo-Tavakoli
1991/1992	11 on 11 January	DOE MWWC Data	9	E. Vuosalo-Tavakoli
1992/1993	11 on 17 January	DOE MWWC Data	10	E. Vuosalo-Tavakoli
1993/1994	9 on 20 January	DOE MWWC Data	10	E. Vuosalo-Tavakoli
1994/1995	No data		8	E. Vuosalo-Tavakoli
1995/1996	9 on 18 January	DOE MWWC Data	9	E. Vuosalo-Tavakoli
1996/1997	10 on 14 January	DOE MWWC Data	7	E. Vuosalo-Tavakoli
1997/1998	9	Sadeghi Zadegan et al. 2009	7	E. Vuosalo-Tavakoli
1998/1999	6 on 11 January	DOE MWWC Data	7	E. Vuosalo-Tavakoli
1999/2000	7 on 21 February	Dubois et al. (2000)	7	E. Vuosalo-Tavakoli
2000/2001	5 on 15 January	DOE MWWC Data	5	E. Vuosalo-Tavakoli
2001/2002	3 on 13 January	DOE MWWC Data	3	E. Vuosalo-Tavakoli
2002/2003	4 on 31 January	DOE MWWC Data	3	E. Vuosalo-Tavakoli
2003/2004	6 on 19 January	DOE MWWC Data	4	E. Vuosalo-Tavakoli
2004/2005	3 on 21 January	DOE MWWC Data	3	E. Vuosalo-Tavakoli
2005/2006	3 on 21 January	DOE MWWC Data	3	E. Vuosalo-Tavakoli
2006/2007	1 on 18 January	DOE MWWC Data	2	E. Vuosalo-Tavakoli
2007/2008	1 on 17 January*	DOE MWWC Data	1 male	E. Vuosalo-Tavakoli
2008/2009	2 on 25 January**	DOE MWWC Data	1 male	E. Vuosalo-Tavakoli
2009/2010	1 on 19 December 2009	E. Vuosalo-Tavakoli	None	E. Vuosalo-Tavakoli
2010/2011	1 from 25 October 2010	E. Vuosalo-Tavakoli, P. Bakhtiari	1 male	E. Vuosalo-Tavakoli

Table 3. Recent records of Sociable Lapwing *Vanellus gregarius* in Iran.

Number	Date	Habitat/Location	Province	Observer	Reference
1 adult	8 September 1998	Bandar Abbas	Hormozgan	(Found dead)	Sachanowicz et al. 2002
2	12 September 1998	Kolvir, Bandar-e Anzali	Gilan		Sachanowicz et al. 2002
4	April 1999	Gomishan wetland	Golestan		Ghaemi 2006 b
1	2 March 2001	Gomishan	Golestan		Karlsson et al. 2001, Roth et al. 2005
3	28 Oct. to 7 Dec. 2004	Boujagh National Park	Gilan	A. Ashoori	Ashoori et al. (in press)
3	October 2004	Bamdej wetland	Khuzestan		Khalilipour & Nabavi 2006
3	2 Oct. to 9 Dec. 2005	Boujagh National Park	Gilan	A. Ashoori	Ashoori et al. (in press)
3	13 February 2006	Mond Protected Area	Bushehr	M. Jamadi	Tohidifar & Zarei 2007
2	15 Oct. to 3 Dec. 2006	Boujagh National Park	Gilan	A. Ashoori	Ashoori et al. (in press)
4	1 December 2006	Meyghan	Markazi	M. Tohidifar & A. Zarei	Tohidifar & Zarei (2007)
1 adult	20 January 2007	Mond Protected Area	Bushehr	H. van Diek & M. Hornman	Tohidifar & Zarei 2007, DOE MWWC Data
2	14 November 2007	Gandoman wetland	Chahar-Mahal & Bakhtiari	M. Mansoori	Ashoori et al. (in press)
2	15 November 2007	Miankaleh W.R.	Mazandaran	K. Rabiee	
1	20 Oct. to 7 Dec. 2007	Boujagh National Park	Gilan	A. Ashoori	Ashoori et al. (in press)
1	8 January 2008	Khoor-e Bonji	Hormozgan	M. Ghasemi	DOE MWWC Data
1	1 August 2008	Jask, Bunji coast	Hormozgan	M. Ghasemi	
2	23–27 January 2009	Boujagh National Park	Gilan	A. Ashoori	MWWC data, Ashoori et al. (in press)
1	February 2009	agricultural fields near Eshgh-Abad village, SE Tehran	Tehran	F. Eskandari	
1	10 March 2009	Miankaleh W.R.	Mazandaran	K. Rabiee & M. Ghasemi	
1	July 2009	Kani-Borazan	West Azarbaijan	P. Bakhtiari	
1	1 Oct. to 1 Dec. 2009	Boujagh National Park	Gilan	A. Ashoori	Ashoori et al. (in press)
7	13–14 October 2010	alfa-alfa fields around Sarakhs	Khorasan-e Razavi	A. Khani & B. Musavi	
1	5 Nov. to 6 Dec. 2010	Boujagh National Park	Gilan	A. Ashoori	Ashoori et al. (in press)

* One in February 2007 around Bushehr, Bushehr Province (S.B. Musavi).
* Three on 15 May 2008 on the coast at Bandar Abbas, Hormozgan Province (M. Ghasemi).
* Two on 16 January 2009 in Miankaleh W.R., Mazandaran Province (K. Rabiee, C. Smit and M. Roos; DOE MWWC Data).
* 10 on 17 January 2009 in the western part of Gorgan Bay (9) and on the shore of Miankaleh Peninsula (1), Mazandaran Province (K. Rabiee, C. Smit and M. Roos; DOE MWWC Data).
* 7 on 18 January 2009 in the western part of Gorgan Bay, Mazandaran Province (K. Rabiee, C. Smit and M. Roos; DOE MWWC Data). These were considered to be different individuals from those observed on 17 January.
* Two on 25 January 2009 at Khoor-e Kolahi, Hormozgan Province (M. van Roomen, M. Ouwerkerk, M. Ram and H. Amini; DOE MWWC Data).
* Three on 20 January 2010 in Hara P. A., Hormozgan Province (M. Ghasemi).
* Two on 20 January 2010 near Tabl jetty, Qeshm Island, Hormozgan Province (M. Tohidifar and M. Ghasemi).
* Two on 12 February 2010 at Bandar Abbas, Hormozgan Province (M. Ghasemi).
* Three on 12 May 2010 at Bandar Abbas, Hormozgan Province (M. Ghasemi).
* Two on 5 December 2010 on the beach at Bandar Abbas, Hormozgan Province (M. Ghasemi, R. Ayé, T. Roth and T. Stalling).
* Four in December 2010 on Kish Island, Hormozgan Province (A. Jebeli per M. Ghasemi). Identifiable photographs are available.

The relatively large number of sightings in recent years has confirmed that this is a regular winter visitor in very small numbers to the south-east coast of Iran west to the Khouran Strait in Hormozgan, and the species is probably commoner in Iran than was previously thought (Keijl et al. 2001).

Sociable Lapwing *Vanellus gregarius* (5, 6, 23) (Critically endangered)

A. Ashoori and his colleagues (Ashoori et al., in prep.) have prepared a note summarising the recent observations of the Sociable Lapwing in Iran. Table 3 lists all records of the species in Iran during the period 1980–2010. It seems that this globally threatened and decreasing species has become commoner in Iran in recent years. Coverage of the Persian Gulf coast was much poorer in the 1970s than in recent years, and ground surveys were never carried out in the Mond delta. However, coverage in

the south Caspian region was good in the 1970s, and it seems that there has been a genuine increase in the species in northern Iran, but the reasons for this are unknown.

Pin-tailed Snipe *Gallinago stenura* (6, 0, 3)†
* Two in flight on 3 March 2000 at Doroodgah, Bushehr Province (P.J. Dubois, M. Duquet et al.; see Dubois et al. 2000).
* Two on 13 January 2004 at Lowlokdan marsh on the Pakistan border 155 km southeast of Zahedan, Sistan & Baluchestan Province (E. van Winden and B. Oosterbaan; see van Diek et al. 2004, de Boer et al. 2004, DOE MWWC Data)
* One on 11 January 2005 at Lowlakdan marsh, Sistan & Baluchestan Province (A. be Hoon and L. Hoogenstein; DOE MWWC Data)

Great Snipe *Gallinago media* ([8], [71], 7) (Near threatened)
* One on 23–25 September 2001 at Angouran W.R. and P.A., Zanjan Province (M.E. Sehhatisabet; see Sehhatisabet 2006).
* One in October-November 2001 or 2002 at Amlash paddyfields, Gilan Province (A. Ashoori).
* Two in December 2004 at Bamdej wetland, Khuzestan Province (Khalilipour & Nabavi 2006).
* One on 14 January 2005 at Daneshmand, Golestan Province (H. Foekens, J. Schelvis and M. Shakiba; DOE MWWC Data).
* Three in February 2005 at Bamdej wetland, Khuzestan Province (Khalilipour & Nabavi 2006).
* One in October 2005 at Boujagh N.P., Gilan Province (A. Ashoori).
* One on 15 January 2008 at Ezbaran Damgah, Mazandaran Province (M. Bathaee; DOE MWWC Data).

B. Nezami reports that over 100 individuals visit the paddyfields of Lasht-e Nesha, Gilan Province, from mid-September to mid-October every year and are hunted by local hunters. In this area, the Great Snipe is commoner than the Common Snipe *Gallinago gallinago*. Any high counts of Great Snipe in mid-winter are almost certainly erroneous, as this species winters almost exclusively in Africa south of the Sahara. All high counts of Great Snipe in January reported in the DOE MWWC Data have been rejected because of the lack of supporting documentation. Details of the old records are given in Appendices I and II.

Red Knot *Calidris canutus* (6, 0, 5)
* 12 on 26 January 2000 near Tiab, Hormozgan Province (Keijl et al. 2001, van der Have et al. 2002, DOE MWWC Data).
* One on 15 January 2004 at Khoor-e Tiab, Hormozgan Province (R. Felix and F. Willems; see de Boer et al. 2004, van Diek et al. 2004).
* One on 15 January 2005 at Khoor-e Tiab, Hormozgan Province (DOE MWWC Data).
* One on 17 January 2007 at Khoor-e Kontaki, Hormozgan Province (DOE MWWC Data).
* One on 15 April 2007 at Golshahr coast, Hormozgan Province (Ullman 2007).

Red Phalarope *Phalaropus fulicarius* (0, 8, 2)
* One on 14 November 2006 in Boujagh N.P., Gilan Province (A. Ashoori; see Ashoori et al. 2007).
* One on 16 October 2007 at Agh-Gol, near the village of Islam-Abad, Hamadan Province (H.-R. Reihanian; see Ashoori et al. 2007).

White-eyed Gull *Larus leucophthalmus* (0, 1, 1)† (Near threatened)
* One in February 2002 on the coast east of Chabahar, Sistan & Baluchestan Province (A. Khani).

Great Black-backed Gull *Larus marinus* (1, 2, 2)†
* A first-winter bird on 16 February 2002 in Miankaleh Wildlife Refuge, Mazandaran Province (Buck 2002).
* One on 19 January 2010 in the Rud-e Shur estuary, Tiab and Minab Protected Area east of Bandar Abbas, Hormozgan Province (M. Ghasemi and M. Tohidifar).

High counts of this species reported in the DOE MWWC Data have been rejected because of the likelihood of confusion with Heuglin's Gull *Larus heuglini* which is almost as large as *L. marinus* and can appear to have a very dark mantle.

Brown-headed Gull *Larus brunicephalus* (1, 2, 1)†
* One adult on 22 July 2001 at Jask, Hormozgan Province (Nowak & Sachanowicz 2002).

Black-legged Kittiwake *Rissa tridactyla* (0, 4, 1)†
* One immature on 20 January 2007 on the coast at Kiashahr, Gilan Province (W. Beeren, A. Ashoori and H. Alinejad).

River Tern *Sterna aurantia* (0, 0, 1)†
* Two on 18 January 2005 at Emer Ab-bandan (Lake Eymar), Golestan Province (Foekens & Schlevis 2006).

This was the first record of this south Asian species in Iran.

Pallas's Sandgrouse *Syrrhaptes paradoxus* (2, 1, 1)†
* Three mounted specimens obtained by hunters in December 2007 in the eastern part of the Gomishan area, Golestan Province (M. Shakiba, pers. comm.).

Local experts state that in recent years a few individuals have been seen together with Pin-tailed

Fig. 4. Yellow-eyed Pigeon *Columba eversmanni* near Sarakhs, Khorasan-e Razavi Province, 27 April 2004, © R. Ayé.

Fig. 5. Juvenile Great Spotted Cuckoo *Clamator glandarius* in Arsanjan, Fars Province, 22 June 2010, © M. Nemati.

Sandgrouse *Pterocles alchata* in this area every winter.

Yellow-eyed Pigeon *Columba eversmanni* (9, 5, 1)† (Vulnerable)
* Six on 27 April 2004 in a patch of forest on the River Tajan on the Turkmenistan border in the Hari-Rud valley near Sarakhs, Khorasan-e Razavi Province (R. Ayé et al.; Fig. 4).

Red Turtle Dove *Streptopelia tranquebarica* (0, 1, 1)†
* Two on 8 March 2000 in a public garden in Tehran city, Tehran Province (Darreh-Shoori et al. 2001). These birds had in all probability escaped from captivity.

Namaqua Dove *Oena capensis* (0, 0, 2)†
* A male observed and photographed on 9 May 2007 at Shoor-Ghaleh village in the vicinity of Payam Airport, southwest of Karaj, Alborz Province (A. Osaei; see Osaei & Jamadi 2008).
* A male on 8 September 2007 in Mond P.A., Bushehr Province (M. Jamadi; see Osaei & Jamadi 2008).
These were the first records of this species in Iran.

Jacobin Cuckoo *Clamator jacobinus* (2, 0, 2)†
* 2 on 28 April 2004 by the Gaz River near Minab, Hormozgan Province (S.B. Musavi; see Musavi 2004b).
* 1 in October 2009 on Kish Island, Hormozgan Province (M. Ghasemi). The bird was photographed.

Great Spotted Cuckoo *Clamator glandarius* (5, 1, 1)†
* One juvenile on 22 June 2010 in Arsanjan pistacio forest, Fars Province (M. Nemati per S.B. Musavi; Fig. 5).

Asian Koel *Eudynamys scolopaceus* (0, 2, 2)†
* One female on 21 November 2007 near the north coast of Hengam Island, Hormozgan Province (Ghoddousi & Ashayeri 2008). The bird appeared after a period of stormy weather with strong winds and was slightly injured. It was captured and photographed, and then released later the same day.
* One male on 4 May 2009 in Chabahar, Sistan & Baluchestan Province (A.A. Hosseini per A. Khaleghizadeh).

Brown Fish Owl *Ketupa zeylonensis* (6, 0, 3)†
* Two adults were discovered on 18 January 2004 in the Rud-e Gaz valley, south of Minab, Hormozgan Province (de Boer et al. 2004; van Diek et al. 2004). Four birds (2 adults and 2 chicks) were present at the site on 8 April 2004 (S.B. Musavi; see van Diek et al. 2004), and one adult and one chick were still present on 16 April 2004 (M. Ullman, S.B. Musavi et al.; see Ullman 2004). The birds were photographed.
* A breeding pair with a juvenile on 8 April 2005 in the Rud-e Gaz valley between Minab and Jask town, Hormozgan Province (S.B. Musavi). This was presumably the same pair as that found breeding in the same area in 2004.
* An injured bird found in autumn 2005 near Hengam village, Farashband District, Fars Province (reported by a local taxidermist per M. Tohidifar).
The species was rediscovered in Iran in January 2004 after a gap of almost 70 years. The birds found breeding in the Rud-e Gaz valley in 2004 were seen again in 2005, but there have been no records in Hormozgan since then. However, in autumn 2005, the species was also rediscovered in Fars Province, where it was last recorded in 1924. Sadly the injured bird found in 2005 subsequently died. A small population apparently survives in south-western Iran, as two individuals were shot or found dead in

2011; a bird near Farashband, Fars Province, in May, and a bird near Jam, Bushehr Province, in August (reported by a local taxidermist per M. Tohidifar).

Snowy Owl *Bubo scandiacus* (1, 1, 1)†
* One first-winter bird on 4 December 1996 in Gomishan wetland, about 1 km from the Caspian beach and about 6 km from Iran's border with Turkmenistan, Golestan Province (R.A. Ghaemi; see Ghaemi 2006a). Good photographs of the bird are available.

The occurrence of the Snowy Owl in Iran has recently been summarised by Ghaemi (2006a). This author mentions a report of a bird observed by J. Mansoori at Daneshmand wetland near the Turkmenistan border in the early 1990s.

White-winged Lark *Melanocorypha leucoptera* (2, 18, 5)
* One on 19 November 2005 on the coast in Boujagh N.P., Gilan Province (A. Ashoori).
* 15+ in December 2007 on the beach in Boujagh N.P, Gilan Province (P. Bakhtiari).
* Two on 17 January 2009 at the west end of Gorgan Bay, Mazandaran Province (C. Smit, M. Roos and K. Rabiee; see Smit et al. 2009).
* Two on 22 January 2009 on the coast at Lahijan, Gilan Province, together with 45 Eurasian Skylarks *Alauda arvensis* (A. Ashoori).
* Nine on 25 January 2009 on the eastern shore of Gomishan wetland, Golestan Province (M. Bunskoek, E. Winkel and M. Shakibah; see Bunskoek et al. 2009).

Plain Martin (Brown-throated Sand Martin) *Riparia paludicola* (0, 0, 3)†
* Four on 27 January 2000 near Azini harbor, Hormozgan Province (van der Have et al. 2001; Keijl et al. 2001).
* Four on 1 February 2000 in Hilleh Protected Area, Bushehr Province (van der Have et al. 2001; Keijl et al. 2001). The birds were considered to be of the small, pale form *chinensis*.
* One on 21 January 2004 at Jask harbour, Hormozgan Province (R. Felix and F. Willems; see van Diek et al. 2004).
These three records constitute the first records of this species in Iran.

Richard's Pipit *Anthus richardi* (4, 10, 5)
* One on 22 February 2000 in Miankaleh Wildlife Refuge, Mazandaran Province (P.J. Dubois, M. Duquet et al.; see Dubois et al. 2000).
* One on 21 March 2001 at Govater, Sistan & Baluchestan Province (Roth et al. 2005).
* One on 15 April 2008 at Ashuradeh, Golestan Province (Ullman & Ullman 2008).
* One on 10 December 2010 on rocky coast between Chabahar and Beris, Sistan & Baluchestan Province (R. Ayé, T. Stalling and T. Roth).
* One on 12 December 2010 in Keshari gardens, Dargaz, Sistan & Baluchestan Province (R. Ayé, T. Stalling & T. Roth).

Olive-backed Pipit *Anthus hodgsoni* (0, 0, 2)†
* One on 21 January 1992 in a public park in Zabol, Sistan & Baluchestan Province (M. Smart and D.A. Scott; see Scott 1994).
* One on 27 March 2001 in Nik-Shahr, Sistan & Baluchestan Province (Roth et al. 2005).
These two records constitute the first records of this species in Iran.

Buff-bellied Pipit *Anthus rubescens* (0, 0, 2)†
* Two on 4 November 2000 at Lake Maharlu, Fars Province (I. Green and J. Overfeld per D.A. Scott).
* One on 5 November 2000 at Barm-e Shur spring near Lake Maharlu, Fars Province (I. Green and J. Overfeld per D.A. Scott).
These two records constitute the first records of *A. rubescens* in Iran. Until recently, this form was considered to be a subspecies of the Water Pipit *A. spinoletta* and has probably been overlooked in the past.

Bohemian Waxwing *Bombycilla garrulus* (1, 2, 4)†
* 18 in January 2004 at Bazangan Lake, Khorasan-e Razavi Province. A dead individual was found one month later in the same area (A. Khani).

Fig. 6. Bohemian Waxwing *Bombycilla garrulus,* south of Gorgan city, Golestan Province, November 2005, © M. Shakiba.

* One on 7 January 2005 at Arablou village near Meshkin-Shahr, Ardabil Province (F. Ahmadzadeh; see Ahmadzadeh & Khaleghizadeh 2006). The bird was found in a weakened condition during a day of heavy snowfall and subsequently died.
* Four in February 2005 at Golha Park, Vakil-Abad, Mashhad, Khorasan-e Razavi Province (A. Khani). Video footage of the birds was obtained.
* Three individuals in November 2005 south of Gorgan city (M. Shakiba, pers. comm.; Fig. 6).

The occurrence of the Bohemian Waxwing in Iran has recently been summarised by Ahmadzadeh & Khaleghizadeh (2006). These authors mention a number of reports since the 1970s for which precise dates are lacking. There are reports of the species in the Arasbaran area, East Azarbaijan Province, in 1982 and in spring 1984 (B. Behrouzi-Rad); a dead bird was found at Dasht-e Naz Wildlife Refuge, Mazandaran Province, in 1989 (H. Ziaie); a single bird was seen in Chabahar, Sistan & Baluchestan Province, in 1997 (R.A. Ghaemi); one was seen at Tange-Gol in Golestan National Park, Golestan Province, in about 1999 (B. Darreh-Shoori); there was one in Zabol, Sistan & Baluchestan Province, in 2004 (J. Mansoori); and one was seen at the Department of the Environment's station at Mobarakeh in the Kavir National Park, Tehran Province, in 2004 (J. Mansoori). According to R.A. Ghaemi (pers. comm.), the species has been observed on several occasions in Golestan National Park, Golestan Province.

Black-throated Accentor *Prunella atrogularis* (6, 3, 1)†

* 20+ on 15 April 2006 migrating through Boujagh N.P., Gilan Province (B. Nezami). The birds were not present on the following day.

Bearded Reedling *Panurus biarmicus* (14, 8, 3)

* At least 16 on 24 January 2009 in reedbeds at the mouth of the Gorgan River, Golestan Province (M. Bunskoek, E. Winkel and M. Shakibah; see Bunskoek et al. 2009).
* A flock of about 15 on 8 February 2009 in Boujagh N.P., Gilan Province (B. Nezami and P. Bakhtiari).
* 10 on 26 November 2009 in Boujagh N.P., Gilan Province (A. Ashoori).

Common Grasshopper Warbler *Locustella naevia* ([13], [23], 2)

* One on about 4 October 2002 in Amlash paddyfields, Gilan Province (A. Ashoori).
* One on about 7 October 2003 in Amlash paddyfields, Gilan Province (A. Ashoori).

This and the next species are very secretive on passage and easily overlooked. Details of the old records are given in Appendices I and II.

Savi's Warbler *Locustella luscinioides* ([11], [28], 1)

* One on 6 October 2009 at Espand station, Siahkeshim P.A., Gilan Province (A. Ashoori).

Details of the old records are given in Appendices I and II.

Paddyfield Warbler *Acrocephalus agricola* (4, 11, 5)

* Two on 29 March 2001 at Garmbit ponds near Bahu-Kalat, south-east Baluchestan, Sistan & Baluchestan Province (R. Ayé, T. Roth and R. Burri). The bird was photographed.
* At least one on 5 April 2005 at the edge of Tandoureh N.P., Khorasan-e Razavi Province (S.B. Musavi).
* One in June 2006 near Sarakhs, Khorasan-e Razavi Province (A. Khani and S.B. Musavi).
* One on 3 May 2010 near Sarakhs, Khorasan-e Razavi Province (A. Khani, M. Ghasemi, A. Ashoori et al.).
* Two on 11 and 12 December 2010 (possibly the same individuals) at Dargaz, Rud-e Sarbaz, Sistan & Baluchestan Province (R. Ayé, T. Stalling and T. Roth).

Blyth's Reed Warbler *Acrocephalus dumetorum* ([9], [18], 5)

* At least three on 22 April 1998 at a small pool on the coastal plain 10 km north of Khormuj, Bushehr Province (D.A. Scott et al.; see Scott 1998).
* One singing on 27 April 2004 near Sarakhs (Tajan River), Khorasan-e Razavi Province (R. Ayé, L. Frutig, C. and M. Spiess-Guggenbuehl)
* One singing on 25 April 2007 in a hotel garden in Minudasht, Golestan Province (Ullman 2007).
* At least two on 14 May 2009 at Bazangan Lake, Khorasan-e Razavi Province (S.B. Musavi). One of the birds was photographed (Fig. 7).
* About four on 4 May 2010 at Bazangan Lake,

Fig. 7. Blyth's Reed Warbler *Acrocephalus dumetorum* at Bazangan wetland, Khorasan-e Razavi Province, 14 May 2009, © S.B. Musavi.

Khorasan-e Razavi Province (M.E. Sehhatisabet, A. Ashoori, A. Khani, B. Nezami and M. Ghasemi). One of the birds was caught in a mistnet.
Details of the old records are given in Appendices I and II.

Marsh Warbler *Acrocephalus palustris* ([43], 6, 3)†
* One on 6 May 2001 in a freshwater wetland in Harat, Yazd Province (Le Neve & Paillat 2002).
* One on 7 November 2003 in Solduz wetland, West Azarbaijan Province (M.E. Sehhatisabet).
* One on 6 May 2010 near Sarakhs, Khorasan-e Razavi Province (A. Ashoori with other DOE experts).
Details of all records from the 1860s to the 1960s are given in Appendix II. This species is extremely difficult to identify from the local form of the Eurasian Reed Warbler *Acrocephalus scirpaceus fuscus*, even in the hand, and reports of birds on passage should always be treated with caution.

Wood Warbler *Phylloscopus sibilatrix* (0, 7, 2)†
* One on 20 April 2007 at Mazrae Seh, Khuzestan Province (Ullman 2007).
* Six on 26 April 2007 in Khar-Touran, Semnan Province (Ullman 2007).

Hume's Leaf Warbler (Hume's Yellow-browed Warbler) *Phylloscopus humei* (1, [37], 1)
* One on 31 January 2000 at Bord-e Khun, Bushehr Province (Keijl et al. 2001, van der Have et al. 2001).
Details of the old records are given in Appendices I and II. The numerous records from the 1970s suggest that this species is a fairly common winter visitor to Persian Baluchistan and Hormozgan Province west to the region of Bandar Abbas.

Greenish Warbler *Phylloscopus trochiloides* (5, 4, 1)†
* One on 12–14 September 1998 at Kolvir near Bandar Anzali, Gilan Province (K.A. Sachanowicz, P. Karczmarczyk and A. Olszewski; see Sachanowicz et al. 1998).
The form concerned is presumably *viridanus* which breeds in Eastern Europe and Western Siberia.

European Pied Flycatcher *Ficedula hypoleuca* ([4], 11, 1)
* One on 8 April 2005 at Latian and Lashgarak, Tehran Province (M.E. Sehhatisabet and A. Khaleghizadeh; see Khaleghizadeh & Sehhatisabet 2007).
Details of the records from the 1860s to the 1960s are given in Appendix II.

Fig. 8. Red Crossbill *Loxia curvirostra* at Mirza-Baylou plain, Golestan National Park, Golestan Province, 26 October 2009. © A. Khani.

Ultramarine Flycatcher *Ficedula superciliaris* (0, 0, 1)†
* At least two individuals on 25 April 2009 at Delbar, Touran Protected Area, Semnan Province (S. Cheraghi; see Cheraghi & Tohidifar 2010).
This was the first record of Ultramarine Flycatcher in Iran.

Verditer Flycatcher *Eumyias thalassinus* (0, 0, 1)†
* One male on 28 March 2001 in a small oasis near Garmbit, Rud-e Sarbaz region, Sistan & Baluchestan Province (R. Ayé, T. Roth et al.; see Roth et al. 2005).
This was the first record of a Verditer Flycatcher in Iran.

White-crowned Penduline Tit *Remiz coronatus* ([18], 1, 3)†
* At least two in a flock of ten penduline tits on 26 February 2001 in Miankaleh Wildlife Refuge, Mazandaran Province (M. Schweizer, R. Ayé, T. Roth et al.).
* Some in a party of 10 penduline tits on 16 February 2002 in Miankaleh Wildlife Refuge, Mazandaran Province (H. Buck; see Buck 2002).
* Seven on 14 December 2010 on the Hirmand River near Zahedan, Sistan & Baluchestan Province (R. Ayé, T. Stalling, T. Roth).
Details of all records from the 1860s to the 1960s are given in Appendix II.

Turkestan Tit *Parus major bokharensis* (2, 4, 3)†
* One on 27 April 2004 near Sarakhs (Tajan River), Khorasan-e Razavi Province (R. Ayé, L. Frutig, C. and M. Spiess-Guggenbuehl).
* Three together on 25 October 2006 near Sarakhs, Khorasan-e Razavi Province (A. Khani and S.B. Musavi).

* One in June 2007 around Dousti Hotel, Sarakhs, Khorasan-e Razavi Province (A. Khani and S.B. Musavi).

European Serin *Serinus serinus* (1, 1, 1)†
* One flying over on 23 April 2007 at Ashuradeh, Golestan Province (M. Ullman, S.B. Musavi et al.; see Ullman 2007).

Red Crossbill *Loxia curvirostra* (0, 2, 1)†
* Four males and three females on 26 October 2009 at Mirza-Baylou plain, east of Golestan N.P., Golestan Province (A. Khani, S.B. Musavi and M. Ghasemi; Fig. 8).

Eurasian Bullfinch *Pyrrhula pyrrhula* ([16], 8, 5)
* One male on 18 November 2004 in Boujagh N.P., Gilan Province (Ashoori et al. 2008).
* Two (male and female) on 1 August 2007 in Golestanak Core Zone, Central Alborz P.A., Mazandaran Province (B. Nezami).
* Two in August 2007 in Parvar Protected Area, Semnan Province (P. Bakhtiari).
* Two on 29 December 2009 in gardens around Rahim-Abad, Gilan Province (A. Ashoori).
* Two (male and female) on 30 July 2010 in Golestanak Core Zone, Central Alborz P.A., Mazandaran Province (B. Nezami).
Details of all records from the 1860s to the 1960s are given in Appendix II.

Saxaul Sparrow *Passer ammodendri* (1, 0, 1)†
* Two males on 27 April 2004 in a patch of forest on the Turkmenistan border near Sarakhs, Khorasan-e Razavi Province (R. Ayé, L. Frutig, C. Guggenbühl-Spiess and M. Spiess; see Ayé 2008).

Black Drongo *Dicrurus macrocercus* (1, 0, 3)†
* One on 26–29 December 2003 in Qeshm town, Qeshm Island, Hormozgan Province (B. Darreh-Shoori per D.A. Scott). The bird was photographed.
* One on 11 February 2010 on Farour Island, Hormozgan Province (M. Ghasemi).
* One on 12 December 2010 in Keshari gardens, Dargaz, Sistan & Baluchestan Province (T. Stalling, T. Roth and R. Ayé).

Spotted Nutcracker *Nucifraga caryocatactes* (0, 0, 2)†
* One in March 2005 in the forest around Fouman, Gilan Province (P. Bakhtiari; see Sehhatisabet et al. 2006a, Khani & Bakhtiari 2010).
* 18 in mid-February 2006 at Shorak-Maleki village, 65 km north-east of Mashad, Khorasan-e Razavi Province. (A. Khani; see Khani & Bakhtiari 2010).
Roselaar and Aliabadian (2009) cast doubt on the occurrence of this species in Iran as all the old reports are based solely on the list of Zarudny (1911), and there do not appear to be any adequately documented records. Thus the records of Spotted Nutcracker in March 2005 and February 2006 constitute the first records of this species in Iran.

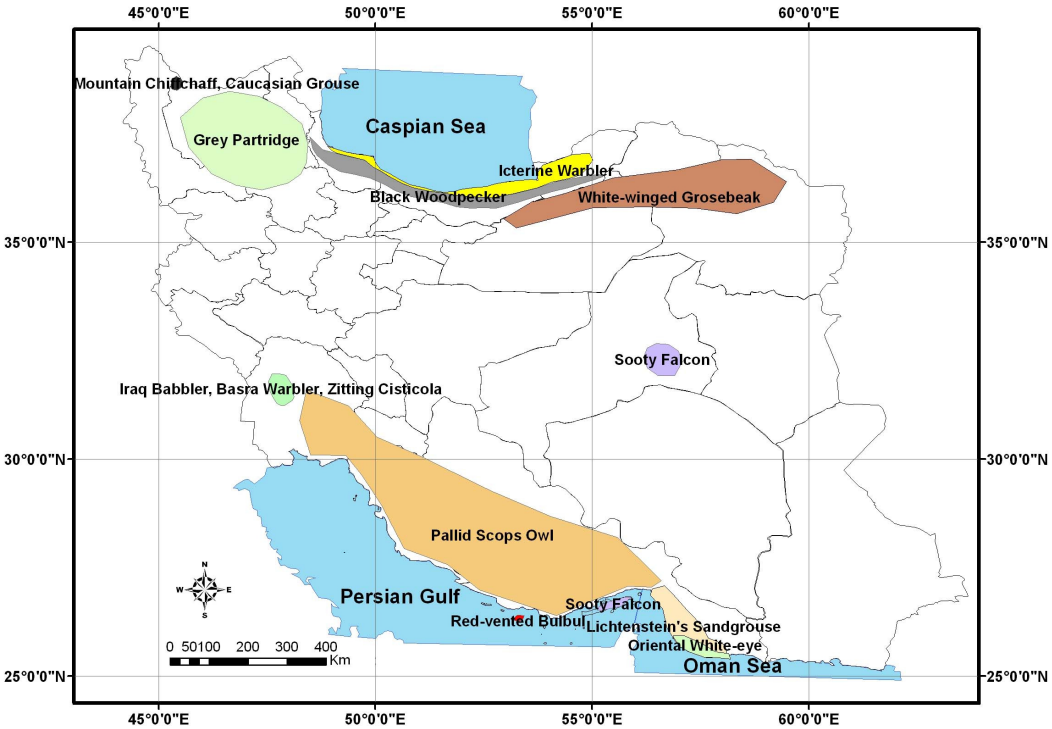

Fig. 9. Distribution of some scarce and local breeding birds in Iran, © A. Khaleghizadeh.

3.2. Rare and local breeding species

This category includes 20 species which are regular breeding species in Iran, but are very scarce and in many cases extremely local. The distribution of 14 of these species is shown in Fig. 9.

Socotra Cormorant *Phalacrocorax nigrogularis* (9, 9, 22+) (Vulnerable)
The Socotra Cormorant is a regular breeding species on Sheedvar Island, Hormozgan Province, where a survey in June/July 1997 found 120 adults and 45 juveniles (S. Sadeghizadegan). Outside the breeding season, it has been recorded in small numbers in the Khouran Strait, at Jask, Bandar Mogham, Khoor-e Kuh-Mobarak, Khoor-e Kolahi, Khoor-e Surgalm, Khoor-e Sedich and Khoor-e Pahnoo, and around Kish, Qeshm, Farur, Bani-Farur, Abumusa, Siri, Hengam and Larak islands in Hormozgan Province (M. Ghasemi, S.B. Musavi, DOE MWWC Data, Scott et al. 2004, Mansoori 1987, Ziaie 1988, 1989). Outside Hormozgan Province, it has also been observed in Helleh Protected Area and Bushehr Bay, Bushehr Province, and at Beris, Pozm and Khoor-e Galak, Sistan & Baluchestan Province (DOE MWWC Data).

Sooty Falcon *Falco concolor* (1, 0, 4+)
Prior to 2000, there had been only one record of Sooty Falcon in Iran: a male collected and another bird seen at Chabahar, Sistan & Baluchestan Province, in 1912 (Roselaar & Aliabadian 2009). On 1 November 2000, one was seen flying over the beachfront at Bandar Abbas, Hormozgan Province, by a Greentours bird-watching group (I. Green & J. Overfeld), and then in the summer of 2002, B. Darreh-Shoori (pers. comm.) discovered three pairs breeding in barren hills in the western part of Qeshm Island, Hormozgan Province. In the summer of 2005, single birds were seen on several occasions in the Naybandan area near Tabas, Yazd Province, and the birds were believed to be breeding in the area (Fahimi & Jowkar 2010). Single birds were found again in the same area on 21 July 2008 and 1 August 2010 (Fahimi & Jowkar 2010).

Caucasian Grouse *Tetrao (Lyrurus) mlokosiewiczi* (0, 9, 7+) (Near threatened)
This is a scarce and extremely local resident in the Kalibar Mountains in West Azarbaijan Province. In the 1970s and 1980s, the population was estimated at about 200–250 individuals (Toufighi 1994), and it seems that numbers remained relatively stable until 2001, when 215 individuals were counted in Arasbaran Protected Area and adjacent areas (59 individuals in the Kalan core zone of the Protected Area, 52 individuals elsewhere in the Protected Area, and 106 individuals in an area to the west of the Protected Area) (Masoud & Mehdizadeh Fanid 2006). Since then, the population has apparently increased, as in a census in 2008, about 300 individuals were counted in an area of 30,000 ha, including c.10,000 ha within Arasbaran P.A., while in a census in 2009, 350 individuals were recorded, comprising about 190 individuals in the Kalan core zone and 160 individuals outside the Protected Area (M. Masoud, unpubl. data).

Grey Partridge *Perdix perdix* (15, 8, 8+)
The Grey Partridge is a scarce resident in the uplands of north-western Iran (Fig. 9). In recent decades, it has been recorded from Angouran Protected Area, Zanjan Province, around Neur Lake and in the Khalkhal Mountains, Ardabil Province, at Boukan, West Azarbaijan Province, at Ghori-Gol near Tabriz, East Azarbaijan Province, and in the Tonekabon Mountains and Central Alborz, Mazandaran Province (S.B. Musavi, A. Osaei, M.E. Sehhatisabet, A. Ashoori, B. Nezami and A. Khani).

Lichtenstein's Sandgrouse *Pterocles lichtensteinii* (2, [12], 8+)
Lichtenstein's Sandgrouse is a scarce and inconspicuous resident in south-eastern Iran (Fig. 9). Scott (2008) did not consider the species to be a rarity, but Roselaar & Aliabadian (2009) were aware of only one record prior to the 1960s. There have been very few records in recent decades. One was seen on 7 April 2003 north of Minab, Hormozgan Province (Breider et al. 2003); two were seen in April 2007 north of Minab, Hormozgan Province (R. Ayé); four were seen on 27 January 2009 near the Rud-e Shur, east of Bandar Abbas, Hormozgan Province (M. van Roomen, A. Ouwerkerk, M. Ram and H. Amini; see van Roomen et al. 2009); and seven were seen on 11 December 2010 at Dargaz, Rud-e Sarbaz, Sistan & Baluchestan Province (R. Ayé, T. Stalling and T. Roth). It has also been observed in the Jask, Gabrik, Geno and Bandar Abbas areas, Hormozgan Province (S.B. Musavi and M. Ghasemi). This rather secretive sandgrouse, which comes in to drink only after dark, is obviously much overlooked. Details of all records in the late 1960s and 1970s are given in Appendix I.

Pallid Scops Owl (Striated Scops Owl) *Otus brucei* ([39], [9], 10+)
The Pallid Scops Owl appears to be a widespread breeding bird in southern Iran, from Sistan & Baluchestan Province west through Hormozgan, Kerman, Fars and Bushehr provinces to Khuzestan and Lorestan (Fig. 9). There have also been old records from Khorasan and Tehran provinces. However, it is an inconspicuous species and seldom reported. Neither Scott (2008) nor Roselaar & Aliabadian (2009) included it in their list of rarities.

In the last three decades, the species has been observed in the Ahwaz, Mahshar and Izeh areas in Khuzestan Province, at Bamu, Bahram-e Gur and Arsanjan in Fars Province, and in Geno Protected Area, around Minab and between Tarom and Tashkoiyeh in Hormozgan Province.

Lesser Spotted Woodpecker *Dendrocopos minor* ([32], [10], 2)
The Lesser Spotted Woodpecker is a scarce and unobtrusive resident in the Hyrcanian forest of the south Caspian region and in the oak forest of the western Zagros from southern Azarbaijan south-east to Lorestan and northern Khuzestan. Neither Scott (2008) nor Roselaar & Aliabadian (2009) included it in their list of rarities. There have been only two reports of the species in recent decades: a bird captured in Noor forest, Mazandaran Province, between 1997 and 2000 (M.E. Sehhatisabet), and four individuals in Noor forest on 21 February 2000 (Dubois et al. 2000). Details of the old records are given in Appendices I and II.

Black Woodpecker *Dryocopus martius* (8, 5, 10+)
The Black Woodpecker is a rare resident in the Hyrcanian forest in the south Caspian region, favouring undisturbed stands of tall forest (Fig. 9). The species was observed on a number of occasions in Golestan National Park, Golestan Province, in 1995-1998 (Rezaei 1999), and more recently there have been records from this national park in May 2001 (Petutsschnig et al. 2002), May 2006 (R. Ayé & W. Müller), April 2007 (R. Ayé et al., Ullman 2007) and February 2009 (P. Bakhtiari). Black Woodpeckers were seen on three occasions in Kheirud-Kenar forest near Now-Shahr, Mazandaran Province, in November 2008, and were recorded on a total of 21 occasions during a survey of this forest between 21April and 21 May 2009 (M. Ghadiri, M. Shariati and A Farashi). Elsewhere, a single bird was seen in the Jungle Park near Noor, Mazandaran Province, on 9 August 2001 (Nowak & Sachanowicz 2002), and there have been two records from Siahkal, Gilan Province in October 2007 and May 2009 (A. Ashoori).

Black-crowned Sparrow-lark *Eremopterix nigriceps* ([2], [19], 10+)
This is a locally fairly common breeding bird on the coastal plains of Hormozgan and Sistan & Baluchestan provinces, from the region of Bandar-e Mogham and Lavan Island in the west to the Pakistan border in the east. It appears to be mainly a summer visitor, although there have been a few records of wintering birds in Hormozgan Province. Neither Scott (2008) nor Roselaar & Aliabadian (2009) included it in their list of rarities, although, there were only two records during the period covered by the latter reference: one on 6 February 1872 in Bahu-Kalat, Sistan & Baluchestan (Ticehurst 1926–27), and a male on 10 December 1956 near Bandar Abbas, Hormozgan Province (Berlioz 1958). In recent years it has been observed around Bandar Abbas and on Qeshm, Kish and Sheedvar islands in Hormozgan Province, and in the Sarbaz, Beris and Chabahar areas, Sistan & Baluchestan Province (R. Ayé, M. Ghasemi, Dubois et al. 2000, Richardson & Diskin 2001).

Red-vented Bulbul *Pycnonotus cafer* (0, 0, 5+)
This South Asian species was first recorded in Iran on 7 March 2007, when S.M. Nosrati observed several birds on Kish Island, Hormozgan Province (Azin et al. 2008). About 25 individuals were located during a survey of Kish Island on 15–18 October 2007 (Azin et al. 2008), and since then, the species has been recorded commonly on the island. The Red-vented Bulbul is native to the Indian subcontinent, but also occurs widely as an introduced species in the Arabian Peninsula and is common in urban areas in the United Arab Emirates. Its presence in Iran is almost certainly a result of accidental or deliberate introduction by man, possibly of birds from the Emirates.

Iraq Babbler *Turdoides altirostris* (4, 6, 19+)
This species is a locally common resident in Khuzestan Province, favouring tall reed-beds (Fig. 9). In recent decades, it has been recorded in a marsh near Karim, at Shileh Sheikh Yaghob oxbow lake near the Dez River, at an oxbow lake by the Karkheh River near Abdolkhan, at Aflok fishponds near Susangerd, at Karun fishponds near Shushtar, in Bamdej Marshes, in Sade Shavar Marshes, at Mazrae Seh, at Karkheh Koor, in the Hoor-al-Azim marshes, and at Jarahieh and Moshemshieh-Ramezan marshes near Hoor-al-Azim (H. Buck, R. Ayé et al., , de Boer *et al.* 2004, Ullman 2004, 2005, 2007, Amini & Willems 2008; Fig. 10). During the mid-winter waterbird census in Khuzestan in January 2009, the species was reported to be fairly common in the wetlands, and was occasionally

Fig. 10. Iraq Babbler *Turdoides altirostris* near the Karkheh River, Khuzestan Province, © F. Eskandari.

found in other habitats including stubble fields and rubbish tips (Schelvis et al. 2009). A possible Iraq Babbler was seen in reed-beds in Helleh Protected Area, Bushehr Province, on 3 February 2000 (Keijl et al. 2001), and two family groups of babblers totalling some ten birds, also thought to be *altirostris*, were seen in the reed-beds in the western part of this protected area on 25 January 2002 (Willems et al. 2002). If confirmed, the occurrence of Iraq Babbler in this area would constitute a significant extension in the known distribution of the species.

Zitting Cisticola *Cisticola juncidis* (1, 8, 2)
In the 1970s, the Zitting Cisticola was found to be a scarce and very local resident in Khuzestan, with most records coming from Shadegan Marshes (Scott 2008; Fig. 9). There have been only two records of this species in recent decades: a single bird seen in Bamdej Marshes, Khuzestan Province, on 16 April 2005 (Ullman 2005) and two in Shadegan Marshes, Khuzestan Province, on 30 November 2010 (R. Ayé).

Basra Reed Warbler *Acrocephalus griseldis* (0, 0, 7+) (Endangered)
On 13 February 2003, H. Buck (pers. comm.) observed a bird he believed to be this species in a reed-bed at Karim village near the Dez River, Khuzestan Province, and a year later, on 17 January 2004, M. Hornman and H. van Diek saw a bird which they identified as a Basra Reed Warbler at Aflok fishponds, 9 km north-east of Susangerd, also in Khuzestan Province (van Diek et al. 2004; de Boer et al. 2004). However, the first fully documented record of this species in Iran was not until May 2004. Four birds, including two or three birds in song, were observed in the northern part of Shadegan Marshes, Khuzestan Province, in the evening of 2 May 2004, and two were heard singing in the same area at dawn the next day (Ayé 2006). There have been at least four records in Khuzestan Province since then: a nest was found near Rofa'ye in April/May 2006 (R. Ayé & W. Müller); two were seen in song at Mazrae Seh in June 2006 (P. Bakhtiari); one was seen in song at Mazrae Seh on 20 April 2007 (Ullman 2007); and one was photographed in the Hoor-al-Azim marshes in spring 2008 (S.B. Musavi) (Fig. 9). Prior to 2004, the Basra Reed Warbler was known to breed only in the Mesopotamian Marshes within Iraq. However, it presumably breeds in the extensive marshes of the Hoor-al-Azim, the eastern portion of which lies within Iran. These marshes have until recently been inaccessible for security reasons, and have never been properly surveyed by ornithologists during the breeding season (Scott & Adhami 2006).

Icterine Warbler *Hippolais icterina* ([14], [17], 10)
The Icterine Warbler is a scarce summer visitor to the forests of the south Caspian region from Ardabil Province to Golestan Province, and also a scarce passage migrant in northern and western Iran. There is a possible breeding record from the western Zagros in Lorestan Province in the 1970s (Scott 2008). In recent decades, the species has been observed in Golestan National Park and at Aji-Gol wetland, Golestan Province, in Miankaleh Wildlife Refuge and at Noor forest, Mazandaran Province, in Boujagh National Park and at Lavandavil, Gilan Province, and at Golestanak in the Alborz Protected Area, Tehran Province (B. Nezami, Sehhatisabet & Khaleghizadeh 2004, Ullman 2007, Ashoori et al. 2008, Mansoori 2009). A single migrant observed on 4 May 2002 in Harat, Yazd Province (Tsagarakis et al. 2002), was unusually far to the south-east. Neither Scott (2008) nor Roselaar & Aliabadian (2009) included Icterine Warbler in their list of rarities.

Mountain Chiffchaff *Phylloscopus (sindianus) lorenzii* (0, 2, 3+)
This is a locally common summer visitor to the forests of the Kalibar Mountains in West Azarbaijan Province (Scott 2008), but there have been very few records of the bird elsewhere in Iran. In recent years, it has again been found in the breeding season in Arasbaran Protected Area in the Kalibar Mountains (M. Tohidifar), and has also been recorded on two occasions outside the breeding season in southern Iran: two were observed on 5 March 2000 at Abpakhsh, Bushehr Province (Dubois et al. 2000), and four were observed on 21 January 2005 in the Rud-e Jegin forest east of Jask, Hormozgan Province (A. Rabiee, S.B. Musavi, A. de Horn and L. Hoogenstein).

Black-headed Penduline Tit *Remiz macronyx* ([22], [3], 4)
Penduline tits of the black-headed *macronyx* group occur as locally common residents in wetlands in the south Caspian region east to Golestan Province (nominate *macronyx*). Specimens of *Remiz macronyx nigricans*, endemic to the Sistan basin and virtually restricted to Iran, were collected by Zarudny in 1896–1900, but this subspecies has not been recorded since then and is likely to be extinct (C.S. Roselaar, unpubl. data). Penduline Tits of the grey-headed *pendulinus* group are fairly common and widespread breeding birds in western Iran from West and East Azarbaijan provinces south to Kordestan and Kermanshah provinces (form *menzbieri*). Many of these birds are migratory, appearing in winter in central and southern Iran south-east to Sistan & Baluchistan Province. The *pendulinus* and *macronyx* groups are very closely

related, and there appears to be some hybridization between the forms *menzbieri* and *macronyx* in the south Caspian region. This has caused problems with identification, and many of the records of penduline tits in the south Caspian region, especially in the late 1960s and 1970s, were not assigned to form. The status of the two forms in the south Caspian region thus remains uncertain, although it appears that birds in the extreme south-east Caspian and Golestan Province are mostly, if not all, typical *macronyx*. There have been only four records of the Black-headed Penduline Tit in recent decades: a pair on 22 February 2000 at Seyed-Mahalleh, Mazandaran Province (Dubois et al. 2000); c.10 on 16 February 2002 in Miankaleh Wildlife Refuge, Mazandaran Province (Buck 2002); four on 17 January 2004 at Aflok fishponds, Khuzestan Province (M. Hornman and H. van Diek; see Hornman & van Diek 2004); and three on 22 January 2007 at the mouth of Gorgan Bay, Golestan Province (E. de Weerd and E. Winkel; see de Weerd et al. 2008). The record from Khuzestan is of special interest as it suggests that some birds at least are migratory, as does an old record of a bird collected on 6 September 1942 near Borujerd, Lorestan Province (C.S. Roselaar, unpubl. data). Details of the old records are given in Appendices I and II.

Caspian Tit *Parus (lugubris) hyrcanus* ([5], 11, 10+)

The Caspian Tit is a scarce resident in the forests of the south Caspian region. During recent decades, the species has been observed at Asalem, Eshkevarat and Rudbar in Gilan Province, at Kelar-Dasht and the Aju region of the Central Alborz Protected Area in Mazandaran Province, in Golestan National Park in Golestan Province, and in Abr forest near Shahrud and Parvar Protected Area in Semnan Province (H. Buck, B. Nezami, Rezaei 1999). A 'Sombre Tit' reported by G. Baptie (pers. comm.) at Khojir National Park near Tehran on 22 December 2001 is more likely to have been *hyrcanus* than *lugubris*. Details of all records from the 1860s to the 1960s are given in Appendix II.

Oriental White-eye *Zosterops palpebrosus* (0, 1, 7+)

After its discovery in mangrove forest near Jask, Hormozgan Province, in 1978, there were no further records of this species in Iran until late July 2005, when the late Nader Hamidi found four birds in mangroves at Khoor-e Khalasi east of Jask, close to where Reynolds (1978) had found the birds almost 30 years earlier (Hamidi 2006). Since then, groups of 2–4 individuals have been found on several occasions at Khalasi, Azini, Neizaei and Nok-Tarash khoors in central Jask Protected Area (M. Ghasemi, S.B. Musavi, Zekhuis & Ghasemi 2009).

Mongolian Trumpeter Finch *Rhodopechys mongolica* ([35], [29], 1)

The old records of Mongolian Trumpeter Finch in Iran indicate that this is a scarce and local breeding bird of semi-arid hills and mountains at medium elevations from the Central Alborz east through northern Khorasan to the Hari-Rud valley and south to the region of Birjand (C.S. Roselaar, unpubl. data; D.A. Scott, unpubl. data). It is a partial migrant, moving to lower elevations in winter and extending south into Kerman and Yazd provinces and occasionally to the Sistan basin in Sistan & Baluchestan Province. There has been only one record of the species in Iran in recent decades: a single bird in June 2008 in Marakan Protected Area in West Azarbaijan Province (S.B. Musavi). The paucity of records in recent years is puzzling, but it may be that as this is a shy and inconspicuous bird of barren habitats that are seldom visited by birdwatchers, it has been much overlooked.

White-winged Grosbeak *Mycerobas carnipes* (18, 6, 10+)

The White-winged Grosbeak is a scarce and local resident in old juniper forest in the eastern Alborz and Kopet-Dagh mountains (Figs. 9 & 11). In recent decades, it has been observed at Ghare-Chagheh, Ghouchan, Goloul-e Sarani, Sarani Protected Area and Tandoureh National Park in Khorasan-e Razavi Province, and in Abr forest near Shahrud and Parvar Protected Area in Semnan Province (A. Khani, S.B. Musavi, Scott 1998, 2001, Breider et al. 2003, Ullman 2004).

Fig. 11. White-winged Grosbeaks *Mycerobas carnipes* at Ghar-Chagheh, Ghouchan, Khorasan-e Razavi Province, © A. Khani.

3.3. Increasing species

This category includes 11 species which have been recorded on numerous occasions during the period under review, but were considered to be great rarities in Iran prior to 1980. Two species, Crested Honey Buzzard *Pernis ptilorhynchus* and Black-winged Kite *Elanus caeruleus*, had never been recorded in Iran, and most of the others had been recorded on fewer than 10 occasions. All eleven appear to be commoner in Iran than they used to be, and several have greatly expanded their breeding ranges. Six species (Striated Heron *Butorides striata*, African Sacred Ibis *Threskiornis aethiopicus*, Barn Owl *Tyto alba*, Long-eared Owl *Asio otus*, Indian Silverbill *Lonchura malabarica* and House Crow *Corvus splendens*) are now reported so frequently that they will no longer be considered in future rare bird reports.

Striated Heron *Butorides striata* (1, 9, 30+)
After the first record of three birds on Sheedvar Island, Hormozgan Province, on 9 April 1939 (Roselaar & Aliabadian 2009), there were no further records of this species in Iran until a small population was found breeding on Sheedvar Island and nearby Lavan Island in June 1972 (Scott 2007). The only records away from these breeding sites in the 1970s were of single individuals near Jask, in October 1973, on Qeshm Island in February 1974 and in Hara Protected Area in June 1976, all in Hormozgan Province (Scott 2008). No Striated Herons were found on Sheedvar Island during DOE surveys in July 1981, July 1982 and June 1990, and the only record of the species in the 1980s was of a single bird at Khoor-e Konarak, Sistan & Baluchestan Province, on 10 January 1989 (DOE MWWC Data). However, a single adult was found on Sheedvar Island in late June/early July 1997 (S. Sadeghizadegan), and since then, there have been at least 28 records in Hormozgan and Sistan & Baluchestan provinces. The species has been seen regularly in small numbers in Hara Protected Area, on the coast of Qeshm Island and in the Bandar Abbas area in central Hormozgan Province (B. Darreh-Shoori, C.A. Richardson, D.A. Scott, DOE MWWC Data, Breider et al. 2003), and has also been recorded in Jask Bay and at several of the large khoors in eastern Hormozgan Province, including Tiab, Khalasi, Nehor, Pahnoo, Had-e Gabrik, Azini, Surgalm and Neizaei (S.B. Musavi, DOE MWWC Data). A bird was seen on Sheedvar Island on 17 April 2004 (N. Hamidi), and the species has also been recorded from Kish Island, Hormozgan Province (M. Sehhatisabet). In Sistan & Baluchestan Province, three were seen at Govater Bay on 6 January 2007; no less than 35 were recorded at this site on 6 January 2008, and a single bird was seen at Chabahar on 22 January 2009 (DOE MWWC Data). There have been several reports of Striated Herons from other parts of Iran, but none of these has been adequately documented and all have been rejected. In view of the recent range expansion of this species and great increase in the number of records, the Striated Heron will be omitted from future reviews of rare birds in Iran.

African Sacred Ibis *Threskiornis aethiopicus* (0, 19, 31+)
Prior to the 1970s, there had been no definite record of this species in Iran (Roselaar & Aliabadian 2009). In the early 1970s, small numbers were found in each winter from 1970/1971 to 1974/1975 in the wetlands of Khuzestan Province, and it is possible that a few pairs bred somewhere in the province in 1972 and 1974 (Scott 2007, 2008). In recent decades, small groups of Sacred Ibises have been recorded in most years during the mid-winter waterbird censuses in Khuzestan (DOE MWWC Data). Numbers have varied widely from year to year, but much of this variation may have been due to variations in coverage. The highest annual totals were 30 in 1989, 41 in 1993, 57 in 1994, 54 in 2003, 41 in 2005 and 26 in 2007. The most regular wintering sites have been Bamdej Marshes (up to 30), Hoor-al-Azim and adjacent marshes (up to 17) and Shadegan Marshes (up to 13), but the species has also been observed at Mian-Ab Shushtar, Hamidieh plain, Dasht-e Shoeybieh, the Dez River Marshes, the Susangerd-Bostan area and Seheyn Mahmieh. All records have been between December and February, and there has been no further suggestion of breeding in Iran. A single individual observed at Tabl jetty, Qeshm Island, Hormozgan Province, on 11 December 2007 (K. Tabari) was well outside the normal range of the species, and could have been a straggler from the feral population in the United Arab Emirates. In view of the frequency with which this species is now being recorded, it will be omitted from future reviews of rare birds in Iran.

Crested Honey Buzzard *Pernis ptilorhynchus* (0, 0, 23)
This species was first recorded in Iran as recently as 1999. Duquet & Richardson (2000) give details of two birds on Hormoz Island, Hormozgan Province, on 30 November 1999 (I.A. Green), one, possibly two, on the south coast of Qeshm Island, Hormozgan, on 3 December 1999 (C.A. Richardson), and an adult near Abpakhsh on the Hilleh River north-west of Bushehr, Bushehr Province, on 5 March 2000 (M. Duquet and P. Dubois; see Dubois et al. 2000). Since then, there have been 15 records in Hormozgan Province, three

records in Sistan & Baluchestan Province, one record in Bushehr Province and one record in Semnan Province. It would seem that the Crested Honey Buzzard is now a regular winter visitor in small numbers to the coastal lowlands and islands of the southern Persian Gulf and Persian Baluchestan. A bird seen at Khosh Yeilagh Protected Area in the eastern Alborz, Semnan Province, on 26 April 2004 (Ullman 2004) was presumably a migrant on its way north. Details of all 23 records are given below.

* Two on 30 November 1999 on Hormoz Island, Hormozgan Province (I.A. Green).
* One, possibly two, on 3 December 1999 on the south coast of Qeshm Island, Hormozgan Province (C.A. Richardson).
* An adult on 5 March 2000 near Abpakhsh on the Hilleh River north-west of Bushire, Bushehr Province (M. Duquet and P. Dubois; see Dubois et al. 2000).
* Three on 19 April 2000 near Bushehr, Bushehr Province (T. Sacher).
* An adult on 15 April 2001 in a large date garden at Rudan near Minab, Hormozgan Province (M. Beaman, D.A. Scott et al.).
* An immature on 15 April 2001 on the plains to the east of Bandar Abbas, Hormozgan Province (M. Beaman, D.A. Scott et al.).
* One in September 2003 at Chabahar, Sistan & Baluchestan Province (P. Bakhtiari; see Sehhatisabet et al. 2006).
* One on 1 and 5 February 2004 near Suza, Qeshm Island, Hormozgan Province (B. Darreh-Shoori and D.A. Scott; see Scott et al. 2004).
* One (a different individual from the above) on 2 February 2004 near Dargahan, Qeshm Island, Hormozgan Province (B. Darreh-Shoori and D.A. Scott; see Scott et al. 2004).
* A juvenile at Khoor-e Khalasi, Hormozgan Province on 10 April 2004 (R. Ayé, C. & M. Spiess-Guggenbuehl).
* Two on 15 April 2004 near Minab, Hormozgan Province (Ullman 2004).
* Eight on 17 April 2004 in Geno Protected Area near Bandar Abbas, Hormozgan Province (Ullman 2004).
* One on 26 April 2004 in Khosh Yeilagh Protected Area, Semnan Province (Ullman 2004).
* One in March 2007 in a garden in Minab, Hormozgan Province (A. Ashoori et al.).
* Two on 13 April 2007 near Minab, Hormozgan Province (Ullman 2007).
* One on 14 April 2007 near Minab, Hormozgan Province (Ullman 2007).
* One on 14 April 2007 at Khoor-e Tiab, Hormozgan Province (Ullman 2004).
* Two on 16 April 2007 in Geno Protected Area near Bandar Abbas, Hormozgan Province (Ullman 2007).
* One on 24 January 2009 at Parak Dam near Chabahar, Sistan & Baluchestan Province (Lantsheer & Vermoolen 2009).
* An adult male on 24 January 2009 at Khoor-e Bandzark, Hormozgan Province (van Roomen et al. 2009).
* Three first-winter birds on 25 January 2009 between Minab and Bandar Abbas, Hormozgan Province (van Roomen et al. 2009).
* One in February 2010 near Minab, Hormozgan Province (A. Khani and M. Ghasemi).
* One juvenile on 9 December 2010 at Parak Khaki water reservoir, near Chahbahar, Sistan & Baluchestan Province (R. Ayé, T. Stalling & T. Roth; Fig. 12).

Fig. 12. A juvenile Crested Honey Buzzard *Pernis ptilorhynchus* near Chabahar, Sistan & Baluchestan Province, 9 December 2010, © R. Ayé.

Black-winged Kite *Elanus caeruleus* (0, 0, 18)

The Black-winged Kite was first recorded in Iran as recently as 25 April 1998, when a Birdquest tour group located at least four individuals in an area of open woodland and cultivation about 25 km east of Minab, Hormozgan Province (D.A. Scott et al.). A display flight was observed, and it was thought likely that the species was breeding in the area. R Ayé and T. Roth saw an adult 20 km north-west of Minab on 13 March 2001 (Roth et al. 2005), and the second Birdquest tour to Iran recorded a single individual in the original area 25 km east of Minab on 15 April 2001 (M. Beaman, D.A. Scott et al.). H. Buck (pers. comm.) observed a bird near Mohamed City, Khuzestan Province, on 14 February 2003, and one was photographed at Karun fishponds west of Shushtar, also in Khuzestan Province, on 22 January 2004 (Hornmann & van Diek 2004). Since then the species has been recorded on a number of occasions in the Minab area in Hormozgan and is probably breeding there in small numbers. There have also been two further records of wintering birds at Karun fishponds in Khuzestan: two birds in February (or

January) 2005 and one in January 2009. At least ten were reported around Bam and Kahnuj in Kerman Province in February 2007 (Balmer & Betton 2007), and up to three were seen in this area in autumn 2010 (Kerman DOE staff). Local people report having found a nest with chicks in this part of Kerman Province (M. Ghasemi, unpubl. data), and it seems that the species is rapidly extending its breeding range in Iran. Elsewhere, there have been three records of individuals in northern Iran: a bird in the Hari-Rud valley near Sarakhs, Khorasan-e Razavi Province, in April 2004 (R. Ayé et al.); and a bird at Ashuradeh, Golestan Province, on 17 April 2008 (Ullman & Ullman 2008, 2010). Details of all 19 records are given below. This species was first recorded in Iraq as recently as October 2000, and was found breeding near Kirkuk in the following year (Salim 2002).

* At least four on 25 April 1998 in open woodland and cultivation 25 km east of Minab, Hormozgan Province (D.A. Scott et al.).
* An adult on 13 March 2001 20 km north-west of Minab, Hormozgan Province (Roth et al. 2005).
* An adult on 15 April 2001 25 km east of Minab, Hormozgan Province (M. Beaman, D.A. Scott et al.).
* One on 14 February 2003 near Mohamed City, Khuzestan Province (H. Buck).
* One on 22 January 2004 at Karun fishponds west of Shushtar, Khuzestan Province (Hornmann & van Diek 2004).
* One on 15 April 2004 near Minab, Hormozgan Province (Ullman 2004).
* One on 16 April 2004 near Minab, Hormozgan Province (S.B. Musavi).
* One on 25 April 2004 near Minab, Hormozgan Province (S.B. Musavi).
* One in April 2004 in the Hari-Rud valley near Sarakhs, Khorasan-e Razavi Province (R. Ayé et al.).
* Two in February 2005 at Karun fishponds west of Shushtar, Khuzestan Province (See Balmer & Betton 2007).
* One in January 2007 near Minab, Hormozgan Province (M. Ghasemi).
* At least ten in February 2007 between Jiroft and Kahnuj, Kerman Province (See Balmer & Betton 2007)
* One second calendar-year bird on 17 April 2008 at Ashuradeh, Golestan Province (Ullman & Ullman 2008, 2010).
* One on 26 January 2009 at Karun fishponds west of Shushtar, Khuzestan Province (Schelvis et al. 2009).
* At least one on 12 May 2009 at Rudan, near Minab, Hormozgan Province (M. Ghasemi).
* One in February 2010 near Minab, Hormozgan Province (M. Ghasemi and A. Khani).
* One in March 2010 near Minab, Hormozgan Province (A. Ashoori et al.)
* Up to three in autumn 2010 between Bam and Kahnuj, Kerman Province (Kerman DOE staff).

Spur-winged Lapwing *Vanellus spinosus* (2, 0, 16)
Prior to 2000, the only report of the Spur-winged Lapwing in Iran was that of Zarudny (1911), who noted it as a rare winter visitor to the plains of Khuzestan Province. None was observed in Khuzestan during numerous waterbird surveys in the 1970s. However, there have been at least 16 records of Spur-winged Lapwings in Iran since January 2000, including several probable breeding records, and it seems that the species is in the process of extending its range north-eastwards into the country from Iraq. Three were seen by V.V. Morozov and J. Mansoori at a refuse dump on the outskirts of Ahwaz, Khuzestan Province, on 14 January 2000 (Keijl et al. 2001), and two were seen in this area on 10 January 2004 (Hornmann & van Diek 2004). Counts of up to 18 were recorded in Bamdej Marshes, Khuzestan, during the years 2001–2004 (Khalilipour & Nabavi 2006). R. Ayé (pers. obs.) observed four birds showing typical breeding behaviour in the southern part of Shadegan Marshes, Khuzestan, on 2 and 3 May 2004. Since 2005, Spur-winged Lapwings have been recorded regularly in Khuzestan, both in mid-winter and in spring, and breeding was suspected at Rofa'ye near Susangerd in April 2006. Birds have been reported from the Ahvaz area, Bamdej Marshes, Shadegan Marshes, Rofa'ye near Susangerd, Hoveizeh, Bandar-e Emam Khomeini, Naseri, Hoor-al-Azim and the nearby Beni-Nameh area. The highest single counts have been 18 in Bamdej Marshes in January 2004, 15 at Hoveizeh in January 2007 and seven at Rofa'ye near Susangerd in April 2007. There have also been several records of Spur-winged Lapwings in West Azarbaijan Province in north-western Iran in recent years. Two were seen at Kani-Borazan wetland near Mahabad on 9 March 2006 (Ayé & Salmanzadeh 2007); four were seen at Hasanlu wetland near Naghadeh on 23 May 2007 (A. Khani and M. Ghasemi); and two were seen at Kani-Borazan wetland in July 2009 (P. Bakhtiari). The dates of the last two observations suggest that the birds might be breeding in the area. Elsewhere in Iran, two birds were seen at Meyghan wetland, Markazi Province, on 4 May 2009 (M. Tohidifar). Details of all records of this species in Iran in recent years are given below.

* Three on 14 January 2000 at a refuse dump on the outskirts of Ahwaz, Khuzestan Province (V.V. Morozov and J. Mansoori; see Keijl et al. 2001).
* Up to 18 during the period 2001-2004 at Bamdej Marshes, Khuzestan Province (Khalilipour & Nabavi 2006).

* Two on 10 January 2004 near Ahwaz, Khuzestan Province (Hornmann & van Diek 2004).
* Four on 2 & 3 May 2004 in the southern part of Shadegan Marshes, Khuzestan Province (R. Ayé; see Ayé & Salmanzadeh 2007). These birds were thought to be breeding.
* Two on 9 March 2006 at Kani-Borazan wetland, 40 km north-west of Mahabad, West Azarbaijan Province (R. Salmanzadeh; see Ayé & Salmanzadeh 2007).
* Four on 28 April 2006 at Rofa'ye near Susangerd, Khuzestan Province (R. Ayé; see Ayé & Salmanzadeh 2007). These birds were thought to be breeding.
* 15 on 19 January 2007 at Hoveizeh, Khuzestan Province (F.J. Willems et al.; see Amini & Willems 2008, Ayé & Salmanzadeh 2007).
* Four on 22 January 2007 in Hoor-al-Azim marshes, Khuzestan Province (F.J. Willems et al.; see Amini & Willems 2008, Ayé & Salmanzadeh 2007).
* Three on 20 April 2007 at Bandar-e Emam Khomeini, Khuzestan Province (R. Ayé; see Ayé & Salmanzadeh 2007).
* Seven on 21 April 2007 at Rofa'ye near Susangerd, Khuzestan Province (R. Ayé; see Ayé & Salmanzadeh 2007).
* Four on 23 May 2007 at Hasanlu wetland, Naghadeh, West Azarbaijan Province (A. Khani and M. Ghasemi).
* One on 22 April 2008 at Naseri wetland, Khuzestan Province (M. Ghasemi).
* Two on 18 or 19 January 2009 in Shadegan Marshes, Khuzestan Province (Schelvis et al. 2009).
* Five on 24 January 2009 in the Beni-Nameh area, Hoor-al-Azim, Khuzestan Province (Schelvis et al. 2009).
* Two on 4 May 2009 at Meyghan wetland, Markazi Province (M. Tohidifar).
* Two in July 2009 at Kani-Borazan wetland, near Mahabad, West Azarbaijan Province (P. Bakhtiari).

Great Knot *Calidris tenuirostris* (1, 0, 30+)

Prior to 2000, the only record of a Great Knot in Iran was of a bird collected by Zarudny on the coast at Chabahar, Sistan & Baluchestan Province, on 26 March 1901. This record was dismissed by Kratochwill & Kirwan (2004) and Scott (2008), but accepted by Roselaar & Aliabadian (2009), who admitted the species to the Iranian list. During the mid-winter waterbird census in Hormozgan Province in January 2000, Keijl et al. (2001) observed two Great Knots on the mudflats at Khoor-e Tiab, east of Bandar Abbas, on 26 January. Since then, the mid-winter waterbird censuses along the south coast of Iran have revealed that the Great Knot is a regular winter visitor in significant numbers to the coastal mudflats of Hormozgan Province, with smaller numbers also occurring further north in Bushehr Province. The highest January counts in Hormozgan have been 133 in 2004, 432 in 2005, 138 in 2007 and 142 in 2009, and birds have been observed at a number of sites notably Khoor-e Tiab, the Khargi and Namaki areas in Tiab and Minab Protected Area, Khoor-e Bandzark, Khoor-e Kargan, mudflats at the mouth of the Rud-e Shur, and mudflats east of Bandar Abbas. There have also been several records in Hormozgan Province outside the mid-winter period, including two birds on the beach at Bandar Abbas on 12 April 2004 (R. Ayé et al.), and one bird in the same area on 17 April 2004 (Ullman 2004). Small numbers of Great Knots have been recorded on three occasions in Bushehr Province: 12 in Bushehr Bay on 13 January 2002 (DOE MWWC Data); three in Mond Protected Area on 18 January 2003 (DOE MWWC Data); and 17 in Helleh Protected Area on 12 January 2007 (Amini & Willems 2008). There has also been one record from Sistan & Baluchestan Province: a bird seen at Konarak Bay west of Chabahar on 21 January 2009 (Lantsheer & Vermoolen 2009). Details of all records of this species in Iran in recent years are given in Table 4 (excluding records in January 2010 in the MWWC Data). It is likely that this recent increase in records of Great Knot is largely a result of the excellent coverage achieved during the mid-winter waterbird censuses on the south coast of Iran since 2000, especially from the ground and by boat. Previous waterbird censuses along the coasts of Hormozgan and Baluchestan have been carried out almost entirely from the air and would have overlooked small numbers of Great Knot. The high counts in 2005, 2007 and 2009 suggest that there may have been a real increase in the wintering population of this species in south-eastern Iran in recent years. However, the species is still listed as a rarity.

Mediterranean Gull *Larus melanocephalus* (1, 5, 10)

This species has definitely become commoner in Iran in recent years, as there have been ten sightings since the late 1990s, compared with only five in the late 1960s and 1970s and only one before that. Most records have been in the south Caspian region in autumn and winter, and all have involved only one or two individuals. The only spring record was of an immature bird at Miankaleh Peninsula, Mazandaran Province, on 23 April 2007 (Ullman 2007). The only record away from the south Caspian region was of two adults at Lake Orumiyeh, West Azarbaijan Province, on 28 September 2008 (A. Dees, R. Jalving & R. Vos). Details of all records since the 1970s are given below.

Table 4. Recent records of Great Knot *Calidris tenuirostris* in Iran.

Number	Date	Habitat/Location	Province	Reference
2	2000/01/26	Mudflats near Tiab, east of Bandar Abbas,	Hormozgan	Keijl et al. 2001, van der Have et al. 2002
12	2002/01/13	Bushehr Bay & surroundings	Bushehr	DOE MWWC Data
3	2003/01/18	Mond P.A.	Bushehr	DOE MWWC Data
2	2004/01/13	Rud-e Shur	Hormozgan	DOE MWWC Data
131	2004/01/15	Khoor-e Tiab east of the Rud-e Shur	Hormozgan	R. Felix & F. WIliams per DOE MWWC Data
2	2004/04/12 (approx.)	On the beach at Bandar Abbas	Hormozgan	R. Aye et al. (unpublished data)
1	2004/04/17	On the beach at Bandar Abbas	Hormozgan	Ullman 2004
31	2005/01/11	Rud-e Shur	Hormozgan	DOE MWWC Data
11	2005/01/15	Khoor-e Tiab	Hormozgan	DOE MWWC Data
4	2005/01/16	Khoor-e Kolahi	Hormozgan	DOE MWWC Data
93	2005/01/24	Tiab & Minab P.A.: Khargi	Hormozgan	DOE MWWC Data
291	2005/01/24	Tiab & Minab P.A.: Namaki	Hormozgan	DOE MWWC Data
2	2005/01/25	Khoor-e Neyzei	Hormozgan	DOE MWWC Data
12	2006/01/12	Khoor-e Gavbandi (Jaso)	Hormozgan	DOE MWWC Data
17	2007/01/12	Helleh P.A.	Bushehr	DOE MWWC Data
1	2007/01/18	Jask-e Gharbi P.A.	Hormozgan	DOE MWWC Data
13	2007/01/19	Khoor-e Bandzark	Hormozgan	DOE MWWC Data
6	2007/01/19	Khoor-e Kargan	Hormozgan	DOE MWWC Data
1	2007/01/20	Khoor-e Tiab	Hormozgan	DOE MWWC Data
7	2007/01/20	Tiab & Minab P.A.: Khargi	Hormozgan	DOE MWWC Data
110	2007/01/20	Tiab & Minab P.A.: Namaki	Hormozgan	DOE MWWC Data
14	2008/01/21	Tiab & Minab P.A.: Namaki	Hormozgan	DOE MWWC Data
6	2008/01/21	Khoor-e Kolahi	Hormozgan	DOE MWWC Data
4	2008/01/22	Tiab & Minab P.A.: Takhteriz	Hormozgan	DOE MWWC Data
14	2008/01/22	Tiab & Minab P.A.: Khargi	Hormozgan	DOE MWWC Data
1	2009/01/21	Konarak Bay	Sistan & Baluchistan	DOE MWWC Data
16	2009/01/22	Tiab & Minab P.A.: Namaki	Hormozgan	DOE MWWC Data
22	2009/01/24	Khoor-e Kargan	Hormozgan	DOE MWWC Data
17	2009/01/24	Khoor-e Bandzark	Hormozgan	DOE MWWC Data
87	2009/01/26	Mudflats east of Bandar Abbas	Hormozgan	DOE MWWC Data

* An adult on 12 September 1998 on the Caspian coast near Kolvir (near Bandar Anzali), Gilan Province (Sachanowicz et al. 2002).
* An adult and an immature on 14 September 1998 on the Caspian coast near Kolvir, Gilan Province (Sachanowicz et al. 2002).
* Two adults on 28 September 2000 on a peninsula in Salmas Bay in Lake Orumiyeh, West Azarbaijan Province (A. Dees, R. Jalving & R. Vos).
* An adult on 11 January 2004 at Lavandavil Marsh, Gilan Province (P. de Boer and M. van Straaten; see de Boer et al. 2004).
* An adult on 20 January 2004 on the Caspian shore at Tonekabon, Mazandaran Province (P. L. Meininger and M. Zekhuis; see de Boer et al. 2004).
* An adult and a second-winter bird on 21 January 2004 on the Caspian shore at Now-Shahr, Mazandaran Province (P. L. Meininger and M. Zekhuis; see de Boer et al. 2004).
* A third calendar-year bird on 21 January 2007 at Seyed-Mahalleh Ab-bandans, Mazandaran Province (V. de Boer, R Hovinga and K. Rabiee; see Amini & Willems 2008).
* An adult and a second-winter bird on 23 January 2007 on the Caspian coast between Tonekabon and Chalus, Mazandaran Province (V. de Boer, R Hovinga and K. Rabiee; see Amini & Willems 2008).
* A second calendar-year bird on 23 April 2007 at Miankaleh Peninsula, Mazandaran Province (Ullman 2007).
* Two on 15 January 2009 in the central part of Anzali Marsh, Gilan Province (H. Alinejad, A. Ashoori, M. de Bont and N. Noordhof; see Amini & van Roomen 2009).

Barn Owl *Tyto alba* (2, 3, 70+)

Prior to the 1990s, there had been very few records of the Barn Owl in Iran, and all were from the south-western part of the country in Kermanshah, Lorestan, Khuzestan, Bushehr and Fars provinces (Scott 2008, Roselaar & Aliabadian 2009). However, during the 1990s and 2000s, there was a rapid expansion in the range of this species in Iran, and by the late 2000s, it had spread to many parts of the country from Ardebil, Gilan and Mazandaran provinces in the north to Hormozgan and Sistan & Baluchestan provinces in the south. By 2010, there had been records of Barn Owls from the following locations: Moghan (Ardebil Province); Chaboksar, Anzali, Amlash, Siahkal, Rasht, Boujagh, Selkeh, Shaft and Langarud (Gilan Province); Sari (Mazandaran Province); Garmsar (Semnan Province); Tehran, Varamin, Damavand, Emamzadeh Davood, Shahriayar and Kavir National Park (Tehran Province); Zaviyeh (Markazi Province); Meybod and Harat (Yazd Province); Bisotun and Kermanshah (Kermanshah Province); Shush, Shushtar, Masjed Soleyman, Karkheh, Haft-

Tappeh, Choqa-Zanbil and Shadegan (Khuzestan Province); Bahram-e Gur, Sivand, Persepolis, Firuz-Abad, Shiraz and Kharameh (Fars Province): Bandar-e Genaveh and Mond (Bushehr Province); Kish Island, Issin, Bandar Abbas, Qeshm Island and Tujak near Minab (Hormozgan Province); Bam, Jiroft, Kahnuj, Shahdad and Khabr National Park (Kerman Province); and Iran-Shahr, Bampur and Chabahar (Sistan & Baluchestan Province) (Khaleghizadeh & Sehhati 2004, Moghadas & Rabiee 2006, Sehhatisabet et al. 2006a, Bakhtiari & Tohidifar 2007, Osaei et al. 2007, Ashoori et al. 2011). A review of the present status and distribution of the Barn Owl in Iran is currently in preparation (Obuch & Khaleghizadeh, in prep.). In view of the recent range expansion of the Barn Owl and great increase in number of records, this species will be omitted from future reviews of rare birds in Iran.

Long-eared Owl *Asio otus* (15, 10, 17+)

Scott (2008) and Roselaar & Aliabadian (2009) concluded that the Long-eared Owl was a scarce winter visitor to much of Iran south to Fars and Sistan & Baluchestan provinces, and a possible breeding species in Khorasan-e Razavi and West Azarbaijan provinces. In recent decades, the Long-eared Owl has been found wintering in good numbers around Zabol, Sistan & Baluchestan Province (Noori et al. 2007). It has also been found on several occasions in winter around Karaj, Alborz Province (A. Khaleghizadeh, P. Bakhtiari, H.-R. Rezaei and M. Tohidifar), and M. Ullman recorded it many times at Bastam, Semnan Province (Breider et al. 2003, Ullman 2004, 2005, 2007). A breeding site was found near Khan-Gormaz Protected Area, Malayer, Hamedan Province, with 10 nests in 2007 and 2008 (S.B. Musavi) and 4–5 nest in 2009 and 2010 (M. Ram). The recent increase in records may indicate that there has been a real increase in the numbers of Long-eared Owls occurring in Iran in winter, but it is perhaps more likely that the increase is a result of increased observer activity in recent years, especially in the sorts of habitats in which Long-eared Owls occur. In view of the increase in number of records, the Long-eared Owl will be omitted from future reviews of rare birds in Iran.

Indian Silverbill *Lonchura malabarica* (2, 7, 20+)

Prior to 1969, there had been only two old records of Indian Silverbill in Iran, both in Hormozgan Province: a bird collected on Greater Tunb Island in April 1921, and four birds collected at Izin (Issin) near Bandar Abbas in December 1939 (Roselaar & Aliabadian 2009). J. Vielliard observed the species again in the Izin area in February 1969 (Érard & Etchécopar 1970), but suspected that the birds were derived from escaped cage-birds. However, in the early 1970s, a small, apparently resident population was discovered in Gandu (Bahu-Kalat) Protected Area in extreme south-eastern Sistan & Baluchestan, and in October 1973, a small flock was observed in Minab, Hormozgan Province (Scott 2008). Since then, the species has extended its range considerably in Iran, and now occurs commonly almost as far west as Bandar-e Lengeh in Hormozgan Province and as far north as Bam in Kerman Province. In 1998, small groups of Indian Silverbills were observed on a number of occasions in southern Hormozgan Province: on the coast east of Bandar-e Lengeh, in the Bandar Abbas area, in the Minab area, in Kuh-e Geno, Geno Protected Area, and at Dejgan near the Mehran River (D.A. Scott et al.; Sachanowicz et al. 2002). There was also one record from Sistan & Baluchestan Province: a small group in cultivation at Nik-Shahr in August 1998 (Sachanowicz et al. 2002). In October 2000, a roost of Indian Silverbills was found in a garden in Bandar Abbas, Hormozgan Province (I. Green and J. Overfeld), while in 2001, the species was recorded from Geno Protected Area, Rudan, Minab and Jask in Hormozgan Province, Bam in Kerman Province, and Dambodab, Shahdad, Garmabit and Beris in south-eastern Sistan & Baluchestan Province (M. Beaman, D.A. Scott et al.; R. Ayé, T. Roth et al.; Nowak & Sachanowicz 2002). Three were seen in agricultural land near Haji-Abad in northern Hormozgan Province, in June 2002. There have been numerous records of the species since 2002, with new sites including Tiab in Hormozgan Province. In view of the recent range expansion of this species and great increase in the number of records, the Indian Silverbill will be omitted from future reviews of rare birds in Iran.

House Crow *Corvus splendens* (0, 6, 20+)

In the 1970s, the House Crow was known only from Khark Island, Bushehr Province, where there was a small breeding population presumably derived from escaped cage-birds or ship-assisted birds, and Bandar-e Lengeh, Hormozgan Province, where a single bird was observed in June 1978 (Scott 2008). Since then, the population on Khark Island has increased dramatically from about 10 pairs in 1970 to an estimated 5,500 individuals in 2010, and the species has become widespread along the south coast of Iran from Bandar-e Genaveh in Bushehr Province to Chabahar and Govater Bay in Sistan & Baluchestan Province (Behrouzi-Rad 2010). The House Crow was found commonly in and around Bushehr town and south along the coast for at least 70 km in April 1998 (D.A. Scott et al.), and was already fairly common in Bandar Abbas, Hormozgan Province, in late 2000 (I. Green & J. Overfeld) and early April 2001 (M. Beaman, D.A. Scott et al.). It was first recorded at Govater in

south-eastern Sistan & Baluchestan Province in March 2001 (R. Ayé, T. Roth et al.), and had become abundant in Bandar Abbas by January 2004, when a concentration of 200 was observed on the mudflats along the seafront (de Boer et al. 2004). It has also appeared on Qeshm Island in recent years, although so far only as an occasional visitor from the nearby mainland (B. Darreh-Shoori, pers. comm.). In view of the recent range expansion of this species and great increase in the number of records, the House Crow will be omitted from future reviews of rare birds in Iran.

4. Discussion

During the compilation of the present list of rare birds in Iran, we realised that there were several problems facing anyone attempting to gather records of bird observations in Iran.

First of all, there is no national authority for the collection of bird records. However, the Iran Bird Records Committee has built up its own data-bank of bird records based on the available published and unpublished information, and has focused on rare species as recognised in the rare bird reports compiled by Scott (2008) and Roselaar & Aliabadian (2009). The priority now is to strengthen the current data-bank built up by the Iran Bird Records Committee and gather more of the data available in unpublished survey reports, trip reports and field note-books. As regards the Mid-winter Waterbird Census data-bank deposited in the DOE, this data-bank contains a number of errors and some of the data are unreliable. In particular, some of the very high counts in the DOE MWWC Data for species such as Socotra Cormorant, Long-tailed Duck, Black-winged Pratincole, Sociable Lapwing, Great Snipe and Great Black-backed Gull are thought to be erroneous. Steps should be taken as soon as possible to refine the data in the DOE MWWC Data-bank so that these data can be relied upon by ornithologists and birdwatchers in the future.

A second problem has been great regional differences in the level of birdwatching activity during the 1980s, 1990s and 2000s (Fig. 1). While Tehran, Gilan, Hormozgan and Khorasan-e Razavi provinces have been covered very well, coverage has been poor in the provinces of Qazvin, Qom, Kordestan, Kermanshah, Ilam, Lorestan, Chahar-Mahal & Bakhtiari, Kohkiluyeh & Buyer-Ahmad, North Khorasan, South Khorasan and Sistan & Baluchestan. We therefore strongly recommend that the Department of the Environment and NGOs increase their ornithological activities in these poorly known provinces as soon as possible. One way to achieve better coverage would be through international, national and provincial projects on the avifauna of IBAs and protected areas. Even single trips of just a few days to provinces with little coverage can lead to the discovery of several rarities and possibly even new species for Iran, as was demonstrated by a trip to Sistan & Baluchestan Province in December 2010 (Ayé et al., in prep.).

A third problem arises from inconsistencies in the manner in which Iranian ornithologists and birdwatchers keep their records. Some birdwatchers go into the field very often, but scarcely write any notes on what they have seen. Their interesting records of rare birds are stored only in their memories, and inevitably as the years go by, these become increasingly vague. Occasionally, the date imprinted on a photograph will provide an accurate date for a record, but photographs are seldom available and often only the approximate time of year has been remembered. Some birdwatchers do maintain a written record of their interesting observations, but often the information is very sketchy and omits certain important details. The best option for every birdwatcher is to keep his or her records in a standardised format that includes all the relevant details (number of individuals, age/sex where known, date, time, locality etc.). Ideally this should be in an Excel file so that useful information can easily be extracted for a variety of purposes in the future. We therefore strongly encourage Iranian birdwatchers to spend more of their time writing up the details of their bird observations so that their valuable data can contribute to our knowledge of Iran's rich avifauna. Well documented records of rarities can be published within weeks or months in bird magazines, and thanks to modern technology, news of the discovery of a rare bird can be released to a wide audience almost immediately on birding web-sites. The rapid advances in digital photography in recent years have made it possible for birdwatchers to obtain excellent photographs of birds, especially through 'digiscoping', while the great increase in private family cars in the 2000s has made it

much easier for many birdwatchers to go on birdwatching field trips.

If a birdwatcher is lucky enough to find an extreme rarity, he or she should take especially detailed notes, including a full field description of the bird, which can be submitted to the Iran Bird Records Committee for acceptance and publication in a future Rare Birds Report. When writing up a report of a rarity, many aspects of the observation should be taken into account, such as light conditions, optical equipment available and reference sources used in the identification, and the observers should give an indication of their previous experience, if any, of the species in question and similar species with which it might be confused. Special forms for the reporting of rarities have been prepared to encourage birdwatchers to provide full details in a standardised format (see Khaleghizadeh 2009). Obviously, good identifiable photographs (or even identifiable sound recordings) will greatly enhance the chances of a record of an extreme rarity being accepted, but should always be submitted along with a proper written report. Unfortunately, because of the poor reporting of sightings of rarities by some observers, we have had to omit a number of records of rare birds which might well have been correctly identified but lack any convincing documentation.

Another advantage of making a good description of a bird that is new or strange to an observer is that even if the observer cannot identify the bird with any certainty, other more experienced birdwatchers might be able to identify the bird correctly from the description. The more details written down in the field, the easier it will be for someone to confirm the identity of the bird at a later date. Again, good photographs are very valuable in this regard. We recommend that people who have just taken up birdwatching associate with expert birdwatchers in their birdwatching activities for the first few months at least. Furthermore, all birdwatchers are encouraged to go on their birdwatching excursions with at least one other birdwatcher because two or more people together can share their previous experiences and are less likely to make mistakes in identification. In general, the more observers there are who have seen a rare bird and agree on its identity, the more likely it is that the record will be accepted.

Fifty-one species that were recorded in Iran prior to 1980 have not been seen in the last 30 years (Table 1). These can all be classed as extreme rarities. In addition, 44 of the 71 genuine rarities recorded between 1980 and 2010 can also be classed as extreme rarities, as they have been recorded in Iran on fewer than 10 occasions in the last 50 years. It should be noted that records of all these species will only be accepted by the Iran Bird Records Committee if they are accompanied by detailed descriptions and preferably also identifiable photographs (although it is appreciated that this will not always be possible). Because of the great increase in knowledge of the birds of Iran in recent decades, we now have a much better idea of which species occur only as extreme rarities in Iran, and we feel that now is the time to introduce a strict rule on the submission of records for these species. Few observers should complain at having to produce detailed reports on their observations of these species, as they are very unlikely to see more than one or two extreme rarities in a year.

Iran is a large country, and some species are relatively common in the north of the country but extremely rare in the south, and vice versa. Ideally, a full detailed description should be submitted for any record of a resident species found well outside its known range in Iran, e.g. a Black Woodpecker outside the south Caspian region or an Iraq Babbler outside Khuzestan. Similarly, there are many migratory species which occur regularly only in a restricted part of Iran and are extremely rare elsewhere. For example, the Goosander *Mergus merganser*, Common Goldeneye *Bucephala clangula* and Little Gull *Larus minutus* are regular winter visitors to the north of Iran, but are only likely to occur on the south coast as extreme rarities, while the Striated Heron, Pacific Golden Plover and Lesser Sand Plover *Charadrius mongolus* are very unlikely to occur away from the south coast. Any reports of these species far outside their known ranges would require convincing documentation if they are to be accepted. It is intended that the next official list of rare birds in Iran compiled by the Iran Bird Records Committee will include species for which records outside their known ranges require detailed descriptions.

The present review of rare birds in Iran includes a number of scarce and local breeding

birds, many of which are present throughout the year in Iran and cannot be considered as real 'rarities', as their occurrence is both regular and predictable. However, because their populations are very small, often poorly known and of considerable national, if not also international, conservation concern, it is important to monitor their populations as closely as possible by keeping details of all acceptable records.

Rare species that are expanding their ranges and becoming commoner in Iran are also of considerable interest, and these range expansions and increases in populations should be properly documented (see Osaei et al. 2007, Ayé & Salmanzadeh 2007, Behrouzi-Rad 2010, Ashoori et al. 2011, Tohidifar et al. 2011). Six species (Striated Heron, African Sacred Ibis, Barn Owl, Long-eared Owl, Indian Silverbill and House Crow) are now being reported so frequently in Iran that they will no longer be regarded as rarities, and will be omitted from future lists of rare birds in Iran (see also Khaleghizadeh 2009). In the coming years, as many more people take up birdwatching and the existing observers become more experienced, we may start to get large numbers of records of some species currently thought to be rarities, in which case we can remove these from the rarity list at the next major review.

On the other hand, many species are clearly becoming less common in Iran, and it is likely that some of these will eventually become so rare that all records will be worth documenting in future Rare Bird Reports. Twelve species that were not considered to be rarities in the 1970s have been seen so infrequently in recent decades that they have been included in this review, namely Great Snipe, Lichtenstein's Sandgrouse, Pallid Scops Owl, Lesser Spotted Woodpecker, Black-crowned Sparrow-lark, Common Grasshopper Warbler, Savi's Warbler, Blyth's Reed Warbler, Icterine Warbler, Hume's Leaf Warbler, Black-headed Penduline Tit and Mongolian Trumpeter Finch. Furthermore, a number of the genuine rarities seem to have become even rarer in recent decades, notably Persian Shearwater, Goliath Heron, Red Kite, White-eyed Buzzard, Rough-legged Buzzard, Lanner Falcon, Siberian Crane, Yellow-eyed Pigeon and Bearded Reedling. Although many Siberian Cranes have been reared in captivity and released at Fereidoun-Kenar in recent years, the captive-bred juveniles have not adapted well to the habitat conditions, and the number of birds visiting the wetland has continued to decline (Table 2). Only one individual was present in the winter of 2010/11, and it seems likely that this species will disappear from Iran in the near future. The Goliath Heron, White-eyed Buzzard and Yellow-eyed Pigeon have also undoubtedly been declining in Iran in recent years. However, many of the other species for which there have been few recent records may simply have been overlooked, either because of identification problems (e.g. in the case of some of the warblers) or because of poor observer coverage in the regions or habitats where they are most likely to be found (e.g. in the case of Black-crowned Sparrow-lark and Mongolian Trumpeter Finch). As the number of experienced birdwatchers increases and coverage is improved, it is to be hoped that many of these questions will be resolved.

To sum up, in the present review we have presented records of 71 species of genuine rarities, 20 species of rare and local breeding birds and 11 species, formerly considered as rarities, that are expanding their ranges and increasing in numbers in Iran. These records include the first confirmed records of 15 species that had not previously been recorded with certainty in Iran: Sooty Shearwater, Barnacle Goose, Crested Honey Buzzard, Black-winged Kite, Amur Falcon, Oriental Pratincole, River Tern, Namaqua Dove, Plain Martin, Olive-backed Pipit, Buff-bellied Pipit, Red-vented Bulbul, Ultramarine Flycatcher, Verditer Flycatcher and Spotted Nutcracker. In addition, we list 51 species that have not been recorded in Iran since the 1970s, bringing the total number of species considered to be rare birds in Iran to 153.

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Appendix I. Details of the late 1960s and 1970s records of eight scarce species not included in Scott (2008) (D.A. Scott, unpubl. data).

Number	Date	Location	Province	Observer
Great Snipe *Gallinago media*				
1 collected	1967/04/09	Robat Karim near Tehran	Tehran	Erard & Etchecopar 1970
3 collected	1967/04/15	Robat Karim near Tehran	Tehran	Erard & Etchecopar 1970
1	1967/04/18	Along river at Shahr-Estakhr	Fars	Erard & Etchecopar 1970
3 collected	1967/04/30	Robat Karim near Tehran	Tehran	Erard & Etchecopar 1970
1	1970/01/29	Gandoman Marsh	Esfahan	H Kowalski
1	1970/04/16	Ghazian airfield, near Bandar Anzali	Gilan	RG Newell, RE Scott et al.
4	1970/04/17	Ghazian airfield, near Bandar Anzali	Gilan	RG Newell, RE Scott et al.
1	1970/04/25	Ghazian airfield, near Bandar Anzali	Gilan	RG Newell, RE Scott et al.
3	1970/04/28	Ghazian airfield, near Bandar Anzali	Gilan	RG Newell, RE Scott et al.
1	1970/11/11	Ghori-Gol	Azarbaijan	SC Madge
1	1971/10/26	Ilerud Valley, Central Alborz	Tehran	DA Scott
1	1972/05/08	Gumoon Marsh, Lake Tashk	Fars	DA Scott
1	1972/05/09	Dasht-e Arjan	Fars	DA Scott
1	1972/09/06	Galugah Ab-bandan	Gilan	DA Scott
3	1973/04/05	Lashgarak, Jajerud Valley	Tehran	DA Scott
2	1973/04/06	Lashgarak, Jajerud Valley	Tehran	DA Scott
6	1973/04/09	Lashgarak, Jajerud Valley	Tehran	DA Scott
2	1973/04/13	Lashgarak, Jajerud Valley	Tehran	PN Paul
1	1973/04/15	Lashgarak, Jajerud Valley	Tehran	PN Paul
1	1973/04/19	Lashgarak, Jajerud Valley	Tehran	PN Paul
3	1973/04/20	Lashgarak, Jajerud Valley	Tehran	DA Scott
3	1973/04/21	Lashgarak, Jajerud Valley	Tehran	PN Paul, DA Scott
6	1973/04/24	Lashgarak, Jajerud Valley	Tehran	DA Scott
4	1973/04/26	Lashgarak, Jajerud Valley	Tehran	PN Paul
10	1973/05/03	Lashgarak, Jajerud Valley	Tehran	PN Paul
10	1973/05/04	Lashgarak, Jajerud Valley	Tehran	DA Scott
3	1973/05/06	Lashgarak, Jajerud Valley	Tehran	PN Paul, DA Scott
5	1973/05/10	Lashgarak, Jajerud Valley	Tehran	PN Paul
2	1973/05/12	Lashgarak, Jajerud Valley	Tehran	DA Scott
2	1973/05/14	Lashgarak, Jajerud Valley	Tehran	DA Scott
2	1973/05/17	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1973/05/20	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1973/08/14	Lashgarak, Jajerud Valley	Tehran	PN Paul
2	1973/08/16	Lashgarak, Jajerud Valley	Tehran	PN Paul
2	1973/09/09	Lashgarak, Jajerud Valley	Tehran	DA Scott
5	1973/09/13	Lashgarak, Jajerud Valley	Tehran	PN Paul
7	1973/09/20	Lashgarak, Jajerud Valley	Tehran	PN Paul, DA Scott
3	1973/10/04	Lashgarak, Jajerud Valley	Tehran	PN Paul, DA Scott
1	1973/10/12	Lashgarak, Jajerud Valley	Tehran	PN Paul
2	1973/10/25	Lashgarak, Jajerud Valley	Tehran	PN Paul
1	1973/11/20	Gumoon Marsh, Lake Tashk	Fars	DA Scott
2	1974/03/29	Lashgarak, Jajerud Valley	Tehran	PN Paul, DA Scott
1	1974/03/31	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1974/04/04	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1974/04/05	Lashgarak, Jajerud Valley	Tehran	DA Scott
4	1974/04/08	Lashgarak, Jajerud Valley	Tehran	DA Scott
5	1974/04/11	Lashgarak, Jajerud Valley	Tehran	DA Scott
3	1974/04/12	Lashgarak, Jajerud Valley	Tehran	PN Paul, DA Scott
3	1974/04/14	Lashgarak, Jajerud Valley	Tehran	DA Scott
4	1974/04/17	Lashgarak, Jajerud Valley	Tehran	DA Scott
4	1974/04/18	Lashgarak, Jajerud Valley	Tehran	DA Scott
2	1974/04/20	Lashgarak, Jajerud Valley	Tehran	DA Scott
6	1974/04/22	Lashgarak, Jajerud Valley	Tehran	PN Paul, DA Scott
3	1974/04/26	Lashgarak, Jajerud Valley	Tehran	PN Paul
1	1974/05/02	Lashgarak, Jajerud Valley	Tehran	PN Paul
3	1974/05/06	Lashgarak, Jajerud Valley	Tehran	DA Scott
2	1974/05/09	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1974/08/22	Lashgarak, Jajerud Valley	Tehran	DA Scott
2	1974/09/05	Lashgarak, Jajerud Valley	Tehran	DA Scott
2	1974/09/19	Lashgarak, Jajerud Valley	Tehran	PN Paul
2	1975/04/10	Lashgarak, Jajerud Valley	Tehran	KG Rogers, DA Scott
1	1975/04/16	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1975/04/17	Lashgarak, Jajerud Valley	Tehran	KG Rogers, DA Scott
1	1975/05/01	Lashgarak, Jajerud Valley	Tehran	KG Rogers
1	1975/05/06	Lashgarak, Jajerud Valley	Tehran	KG Rogers
1	1975/05/14	Lashgarak, Jajerud Valley	Tehran	KG Rogers
1	1975/08/28	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1975/09/05	Upper Lar Valley, Central Alborz	Tehran	DA Scott
4	1975/09/11	Lashgarak, Jajerud Valley	Tehran	KG Rogers
1	1975/10/09	Lashgarak, Jajerud Valley	Tehran	KG Rogers
1	1977/04/14	Lashgarak, Jajerud Valley	Tehran	FB Argyle
Lichtenstein's Sandgrouse				
20 drinking at night	1967/05/12	River between Takht-e Malek and Kheir-Abad	Baluchestan	Erard & Etchecopar 1970
4	1967/05/13	Between Nik-Shahr and Changdan	Baluchestan	Erard & Etchecopar 1970

Number	Date	Location	Province	Observer
2	1967/05/13	Between Cahngdan and Ghasr-e Ghand	Baluchestan	Erard & Etchecopar 1970
5	1971/02/24	Coastal plain near Charak	Hormozgan	DA Scott
2	1971/02/28	50 km east of Bandar Abbas	Hormozgan	DA Scott
10 in parties of 4 & 6	1971/03/02	Coastal plain near Zarabar	Baluchestan	DA Scott
1	1971/03/06	By Nik-Shahr road, 130 km north of Chabahar	Baluchestan	DA Scott
1 male	1972/04/03	By Khash road, 70 km north of Nik-Shahr	Baluchestan	DA Scott
1 male	1972/04/04	By Chabahar road, 36 km south of Nik-Shahr	Baluchestan	DA Scott
2 (pair drinking)	1975/05/15	Valley west of Kuhak	Baluchestan	DA Scott
2 (pair drinking)	1975/10/21	Near Garmabit, Bahu-Kalat Protected Area	Baluchestan	DA Scott
3 (1 male & 2 females)	1976/04/22	South of Lar	Fars	P Etheridge, A Parker
Lesser Spotted Woodpecker *Dendrocopos minor*				
1 male	1970/06/25	Forest near Kalaleh, Golestan National Park	Golestan	SC Madge
2 (pair)	1971/05/02	Near Tange-gol, Golestan National Park	Golestan	DA Scott
1	1972/02/02	Near Tange-gol, Golestan National Park	Golestan	DA Scott
2	1972/09/04	Forest south of Alamdeh, Galandrud	Mazandaran	DA Scott
1 female	1973/04/15	Forest south of Alamdeh, Galandrud	Mazandaran	DA Scott
1	1974/01/18	Near Abas-Abad Dam in hills south of Behshahr	Mazandaran	GA Atkinson-Willes
1 male	1974/07/12	Forest south-east of Sardasht	Azarbaijan	DA Scott
2 (pair)	1975/07/02	Forested hills south-west of Nowsud	Kermanshah	DA Scott
2	1975/07/29	Lower forest in Golestan National Park	Golestan	DA Scott
1	1976/01/31	Forest 20 km south of Amol	Mazandaran	DA Scott
Blyth's Reed Warbler *Acrocephalus dumetorum*				
1 collected	1967/05/25	Torbat Heydarieh	Khorasan	Erard & Etchecopar 1970
2 collected	1967/05/26	15 km south of Mashhad	Khorasan	Erard & Etchecopar 1970
1 collected	1967/05/28	Between Ghosh-Ghalleh and Bodjnurd	Khorasan	Erard & Etchecopar 1970
1 trapped	1970/05/30	Near Khajav-Abad, east of Lake Orumiyeh	Azarbaijan	AJ Gaston
1	1972/04/10	Govater, Bahu-Kalat Protected Area	Baluchestan	DA Scott
1 ringed	1972/09/01	Scrub at west end of Miankaleh Peninsula	Mazandaran	DA Scott, DJ Garbutt et al.
1	1973/05/28	Garden in Mazra Jaiweh, 77 km NE of Anarak	Khorasan	DA Scott
1	1973/05/29	Chah-Malek, 44 km west of Khur	Khorasan	DA Scott
1	1974/03/08	Garden in Zahedan	Baluchestan	SC Madge
1	1974/04/26	Madjurad spring, Touran Protected Area	Khorasan	DA Scott
1	1974/05/09	Lashgarak, Jajerud Valley	Tehran	DA Scott
2	1974/05/31	Kharku Island	Bushehr	DA Scott
1	1975/04/25	Garden in Doruneh	Khorasan	DA Scott
1	1975/04/26	Garden in village north-west of Tabas	Khorasan	DA Scott
1	1975/04/28	Spring at Darband	Khorasan	DA Scott
1	1975/05/04	In bushy valley on Kuh-e Khabr	Kerman	DA Scott
1 ringed	1975/09/05	Bushes in upper Lar Valley above Polur	Tehran	DA Scott
5	1976/05/22	Cultivation at Mojan village, 36°30'N, 54°48'E	Khorasan	MD Hutchinson
1 ringed	autumn 1976-1978 (date unknown)	Upper Lar Valley above Polur	Tehran	Rogers (2001)
Savi's Warbler *Locustella luscinioides*				
1	1970/04/26	Galugah Ab-bandan	Gilan	RG Newell, RE Scott et al.
1	1970/04/27	Galugah Ab-bandan	Gilan	RG Newell, RE Scott et al.
1	1970/12/06	Shahkelayeh Ab-bandan, Langarud	Gilan	DA Scott
2	1972/05/11	Gardens in Bushehr	Bushehr	DA Scott
2	1973/04/05	Lashgarak, Jajerud Valley	Tehran	DA Scott
2	1973/04/21	Lashgarak, Jajerud Valley	Tehran	PN Paul, DA Scott
1	1973/05/10	West end of Miankaleh Peninsula	Mazandaran	DA Scott
1	1973/05/12	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1973/07/23	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1974/03/08	Garden in Zahedan	Baluchestan	SC Madge
2	1974/03/31	Lashgarak, Jajerud Valley	Tehran	DA Scott
5	1974/04/04	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1974/04/05	Lashgarak, Jajerud Valley	Tehran	DA Scott
2	1974/04/11	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1974/04/12	Lashgarak, Jajerud Valley	Tehran	PN Paul, DA Scott
17	1974/04/14	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1974/04/20	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1974/05/29	Khark Island	Bushehr	DA Scott
2	1974/05/31	Kharku Island	Bushehr	DA Scott
1	1974/08/15	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1975/08/02	East end of Miankaleh Peninsula	Mazandaran	DA Scott
1	1975/08/28	Lashgarak, Jajerud Valley	Tehran	DA Scott
2	1975/09/11	Farm near east end of Miankaleh Peninsula	Mazandaran	DA Scott
1	1975/09/11	Lashgarak, Jajerud Valley	Tehran	KG Rogers
1	1975/10/31	Lashgarak, Jajerud Valley	Tehran	KG Rogers
1 ringed	1976/03/01	Garden in Ahwaz	Khuzestan	S Howe
Seen	1976/03/01 precise date unknown	Bahram-e Gour Protected Area south-east	Fars	Farnsworth (1992)
1 ringed	1977/03/25	Garden in Ahwaz	Khuzestan	S Howe
Common Grasshopper Warbler *Locustella naevia*				
1	1970/04/16	Galugah Ab-bandan	Gilan	RG Newell, RE Scott et al.

Number	Date	Location	Province	Observer
1	1970/04/17	Galugah Ab-bandan	Gilan	RG Newell, RE Scott et al.
1	1970/04/19	Galugah Ab-bandan	Gilan	RG Newell, RE Scott et al.
1	1970/04/21	Galugah Ab-bandan	Gilan	RG Newell, RE Scott et al.
2	1970/04/22	Galugah Ab-bandan	Gilan	RG Newell, RE Scott et al.
1	1970/04/24	Galugah Ab-bandan	Gilan	RG Newell, RE Scott et al.
1	1970/04/27	Galugah Ab-bandan	Gilan	RG Newell, RE Scott et al.
1	1973/04/21	Lashgarak, Jajerud Valley	Tehran	PN Paul, DA Scott
1	1973/04/24	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1973/04/26	Lashgarak, Jajerud Valley	Tehran	PN Paul
1	1973/05/04	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1973/08/17	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1973/08/19	Lashgarak, Jajerud Valley	Tehran	DA Scott
2	1974/04/17	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1974/04/18	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1974/04/20	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1974/04/22	Lashgarak, Jajerud Valley	Tehran	PN Paul, DA Scott
1	1974/04/27	Izami spring, Touran Protected Area	Khorasan	DA Scott
1	1974/05/06	Lashgarak, Jajerud Valley	Tehran	DA Scott
2 (pair, male in song)	1974/07/01	At tree line in Kalshur Valley, Arasbaran P.A.	Azarbaijan	DA Scott
1	1975/07/24	Lashgarak, Jajerud Valley	Tehran	DA Scott
1	1978/05/26	Between Kalibar and Israndurst, Arasbaran P.A.	Azarbaijan	PA Walton
1	1978/06/03	Sheedvar Island	Hormozgan	CDR Heard
Hume's Leaf Warbler (Hume's Yellow-browed Warbler) *Phylloscopus humei*				
1	1971/03/04	Kolani, Bahu-Kalat Protected Area	Baluchestan	DA Scott
1	1972/03/31	Garden in Zahedan	Baluchestan	DA Scott
1	1972/04/16	Koshan, Kuh-e Taftan	Baluchestan	DA Scott
2	1972/04/17	Koshan, Kuh-e Taftan	Baluchestan	DA Scott
1	1972/04/18	Garden in Zahedan	Baluchestan	DA Scott
1	1972/04/18	Koshan, Kuh-e Taftan	Baluchestan	DA Scott
2	1972/04/19	Garden in Zahedan	Baluchestan	DA Scott
10	1973/01/10	Gardens in Chabahar	Baluchestan	DA Scott
5	1973/01/13	Gardens in Zahedan	Baluchestan	DA Scott
9	1973/01/15	Gardens in Zahedan	Baluchestan	DA Scott
1	1973/01/18	Garden in Kerman	Kerman	DA Scott
4	1973/02/08	Gardens in Zahedan	Baluchestan	L Cornwallis
6	1974/01/31	Gardens at Minab	Hormozgan	DA Scott
1	1974/02/02	Near Bandar Abbas	Hormozgan	DA Scott
1	1974/02/06	Near Bandar Abbas airport	Hormozgan	DA Scott
8	1974/02/08	Gardens in Zahedan	Baluchestan	DA Scott
A few	1974/03/08	Gardens in Zahedan	Baluchestan	SC Madge
5	1975/01/21	Gardens in Chabahar	Baluchestan	DA Scott
3	1975/01/22	Gardens in Chabahar	Baluchestan	DA Scott
1	1975/01/23	Baftan, Bahu-Kalat Protected Area	Baluchestan	DA Scott
1	1975/01/24	Garden in Chabahar	Baluchestan	DA Scott
1	1975/01/25	Garden in Chabahar	Baluchestan	DA Scott
2	1975/01/26	Garden in Chabahar	Baluchestan	DA Scott
3	1975/01/27	Gardens in Chabahar	Baluchestan	DA Scott
4	1975/01/28	Gardens in Tiss, near Chabahar	Baluchestan	DA Scott
3	1975/01/29	Gardens in Chabahar	Baluchestan	DA Scott
8	1975/01/30	Gardens in Zahedan	Baluchestan	DA Scott
6	1975/01/31	Gardens in Zahedan	Baluchestan	DA Scott
1	1975/10/06	Village in hills 34 km south of Deh Bid	Fars	DA Scott
1	1975/10/14	Valley in hills near Qal'eh Zol	Baluchestan	DA Scott
10	1975/10/24	Gardens in Zahedan	Baluchestan	DA Scott
2	1975/10/24	Hormak oasis north of Zahedan	Baluchestan	DA Scott
2	1975/10/28	Gardens at Khunik	Khorasan	DA Scott
1	1975/10/28	Garden at Shusf	Khorasan	DA Scott
4	1975/10/29	Gardens in Birjand	Khorasan	DA Scott
5	1976/01/15	Gardens in Zahedan	Baluchestan	DA Scott
1	1976/01/17	Garden in Zabol	Seistan	DA Scott
Black-headed Penduline Tit *Remiz macronyx*				
at least 1	1970/12/29	Lake Aji-Gol	Golestan	DA Scott
at least 1	1972/07/13	Lake Aji-Gol	Golestan	DA Scott
at least 1	1974/08/31	Lapoo-Zaghmarz Ab-bandans	Mazandaran	DA Scott

Appendix II. Details of records from the 1860s to the 1960s of 13 scarce species not included in Roselaar & Aliabadian (2009).

No. &Sex	Date	Location	Province	Observer/ collector	Remarks	References
Great Snipe *Gallinago media*						
	27 March 1901 ±4 days	Chabahar/Tiss area	Sistan & Baluchestan	Zarudny		Zarudny 1911
M	7 April 1902	Arjan lake	Fars	Witherby		Witherby 1903
	April of 1915-1919	Shush	Khuzestan	Buxton		Ticehurst et al. 1923
Few	1 May 1919 ± 10 days	Bandar Anzali	Gilan	Buxton		Buxton 1921
M	10 April 1941	Do-Rud	Lorestan	Koelz, W.		K. Roselaar, Unpubl. data
M	21 April 1941	Do-Rud	Lorestan	Koelz, W.		K. Roselaar, Unpubl. data
F	27 April 1941	Do-Rud	Lorestan	Koelz, W.		K. Roselaar, Unpubl. data
3	12 August 1963	Bandar-e Gaz	Golestan	Burton, P.J.K.		Feeny 1968
Lesser Spotted Woodpecker *Dendrocopos minor*						
2M & 1F	in January 1892	Gorgan, nr -	Golestan	Zarudny	"winter 1891/92, ssp *hyrcanus*	Zarudnyy & Bil'kevich 1913
M	23 February 1907	Chalus cf, nr -	Mazandaran	Woosnam	ssp *hyrcanus*	Witherby 1910
F	29 March 1907	Behshahr/Neka foothills	Mazandaran	Woosnam	ssp *hyrcanus*	Witherby 1910
F	23 May 1912	Bandar-e Gaz	Golestan	Zarudny	ssp *hyrcanus*	Zarudnyy & Bil'kevich 1913
M	9 August 1912	Tersakan (30km E Gonbad, on Garm-Rud)	Golestan	Bilkevich	ssp *hyrcanus*	Zarudnyy & Bil'kevich 1913
M	26 August 1912	Aq Emam	Golestan	Bilkevich/ Zarudny		K. Roselaar, Unpubl. data
	8 December 1916±38 days	Gonbad-e Qabus, S of -	Golestan	Shestoperov	date approx (Nov to mid-Jan), ssp *hyrcanus*	Shestoperov 1927
	10 March 1917	Ziarat	Golestan	Shestoperov	ssp *hyrcanus*	Shestoperov 1927
M & F	17 June 1927	Suledeh, 10 km E/ESE of -	Mazandaran	Heinrich	ssp *hyrcanus*	Stresemann 1928
	15 July 1927	Deseli<>Didu	Mazandaran	Heinrich	ssp *hyrcanus*	Heinrich 1928
2 F	30 September 1940	Cheirat/Kherat/Herat	Golestan	Koelz, W.	ssp *hyrcanus*	K. Roselaar, Unpubl. data
1	18 October 1952	Firuz-Kuh	Tehran	Misonne	ssp *hyrcanus*	Missonne 1953
	30 March 1956	Arderudkanar	Gilan	Schüz	ssp *hyrcanus*	Schüz 1959
M	18 October 1956	Gorgan pass foot cf	Golestan	Petter	ssp *hyrcanus*	Berlioz 1958
M	30 May 1902	Sisakht	Kohgiluyeh	Witherby	ssp *morgani*	Witherby 1903
M	5 January 1904	Shahil-e Bala	Bakhtiari	Zarudny	ssp *morgani*	Zarudnyy & Loudon 1904
M	30 April 1940	Pashm-Shurun	Khuzestan	Koelz, W.	ssp *morgani*	K. Roselaar, Unpubl. data
F	6 May 1940	Tazeh	Khuzestan	Koelz, W.	ssp *morgani*	K. Roselaar, Unpubl. data
F	8 May 1940	Pashm-Shurun	Khuzestan	Koelz, W.	ssp *morgani*	K. Roselaar, Unpubl. data
F	28 May 1940	Kalvar	Lorestan	Koelz, W.	ssp *morgani*	K. Roselaar, Unpubl. data
1M & 2F	30 May 1940	Kalvar	Lorestan	Koelz, W.	ssp *morgani*	K. Roselaar, Unpubl. data
2M & 1F	3 February 1941	Ti, 33°19'N, 49°05'E	Lorestan	Koelz, W.	ssp *morgani*	K. Roselaar, Unpubl. data
F	4 February 1941	Ti, 33°19'N, 49°05'E	Lorestan	Koelz, W.	ssp *morgani*	K. Roselaar, Unpubl. data
M	6 February 1941	Ti, 33°19'N, 49°05'E	Lorestan	Koelz, W.	ssp *morgani*	K. Roselaar, Unpubl. data
F	7 February 1941	Ti, 33°19'N, 49°05'E	Lorestan	Koelz, W.	ssp *morgani*	K. Roselaar, Unpubl. data
M & F	8 February 1941	Ti, 33°19'N, 49°05'E	Lorestan	Koelz, W.	date approx, ssp *morgani*	K. Roselaar, Unpubl. data
F	9 February 1941	Ti, 33°19'N, 49°05'E	Lorestan	Koelz, W.	ssp *morgani*	K. Roselaar, Unpubl. data
2 M	14 February 1941	Emarat	Lorestan	Koelz, W.	ssp *morgani*	K. Roselaar, Unpubl. data
3 M+ ?	17 February 1941	Emarat	Lorestan	Koelz, W.	date approx, ssp *morgani*	K. Roselaar, Unpubl. data
F	18 February 1941	Emarat	Lorestan	Koelz, W.	ssp *morgani*	K. Roselaar, Unpubl. data
1M & 3F	20 February 1941	Emarat	Lorestan	Koelz, W.	ssp *morgani*	K. Roselaar, Unpubl. data
F	22 February 1941	Cham Chid	Lorestan	Koelz, W.	ssp *morgani*	K. Roselaar, Unpubl. data
Blyth's Reed Warbler *Acrocephalus dumetorum*						
	in June 1885	Gorgan	Golestan	Nikolskiy		Radde & Walter 1889
	5 June 1885	Gomishan - Aq Qal'eh	Golestan	Zarudny'92	numerous	Stresemann 1928
	20 April 1898±2 days	Hari-Rud	Khorasan	Zarudny	not many	Zarudny 1901

No. &Sex	Date	Location	Province	Observer/ collector	Remarks	References
M & F	1 June 1898	Hamun-e Farah marshes & shore	Sistan & Baluchestan	Zarudny	nest & eggs collected	Zarudny 1901
M	11 September 1898	Dar Gibian	Sistan & Baluchestan	Zarudny	moderate numbers	Zarudny 1901
	14 September 1898	Zahedan area	Sistan & Baluchestan	Zarudny	moderate numbers	Zarudny 1901
M & F	29 August 1940	Ferdows	Khorasan	Koelz, W.		K. Roselaar, Unpubl. data
F	6 September 1940	Kharv-e Bala	Khorasan	Koelz, W.		K. Roselaar, Unpubl. data
M	10 June 1957	Ahmad-Abad, SW of -	Qazvin	Read		Diesselhorst 1962
Marsh Warbler *Acrocephalus palustris*						
F	24 June 1872±2 days	Eqlid cf	Fars	Blanford		Sharpe 1874-1895
	7 June 1880	Pir-bazar	Gilan	Radde	everywhere in song	Radde 1881
	18 May 1902	Ali-Abad [nr Shiraz] cf	Fars	Witherby	date approx	Witherby 1903
	18 May 1902	Pol-e Mard	Fars	Witherby		Witherby 1903
	19 May 1902	Shira R.	Fars	Witherby		Witherby 1903
	23 May 1902	Kar Khun cf	Fars	Witherby	date approx	Witherby 1903
M	26 May 1902	Kuh-e Dena, E slope	Esfahan	Witherby		Witherby 1903, K. Roselaar, Unpubl. data
	29 May 1902	Kuh-e Dena, SW slope	Kohgiluyeh	Witherby		Witherby 1903
M	12 May 1905	Barbarud, cf nr Aligudarz	Lorestan	Woosnam		Witherby 1907
F	14 May 1905	Borujerd	Lorestan	Woosnam		Witherby 1907
M	15 May 1907	Alborz mts S of Rasht	Gilan	Woosnam		Witherby 1910
3M	24 May 1935	Qarun village, nr -	Lorestan	Paludan		Paludan 1938
F	22 July 1935	Firuzkuh	Tehran	Paludan	collected	Paludan 1940
F	29 July 1935	Firuzkuh	Tehran	Paludan	collected	Paludan 1940
F	8 April 1940	Arjan lake	Fars	Koelz, W.		K. Roselaar, Unpubl. data
M	29 April 1940	Cheshmeh Shirin	Khuzestan	Koelz, W.		K. Roselaar, Unpubl. data
	3 May 1940	Belu	Khuzestan	Koelz, W.	date approx	K. Roselaar, Unpubl. data
F	7 May 1940	Belu	Khuzestan	Koelz, W.		K. Roselaar, Unpubl. data
M	8 May 1940	Belu	Khuzestan	Koelz, W.		K. Roselaar, Unpubl. data
F	11 May 1940	Siah-Chal	Khuzestan	Koelz, W.		K. Roselaar, Unpubl. data
F	12 May 1940	Cheshmeh Shirin	Khuzestan	Koelz, W.		K. Roselaar, Unpubl. data
2M & 3F	13 May 1940	Cheshmeh Shirin	Khuzestan	Koelz, W.		K. Roselaar, Unpubl. data
cF	15 May 1940	Lab Sefid	Khuzestan	Koelz, W.		K. Roselaar, Unpubl. data
4F	20 May 1940	Do-Rud	Lorestan	Koelz, W.		K. Roselaar, Unpubl. data
2M	21 May 1940	Do-Rud	Lorestan	Koelz, W.		K. Roselaar, Unpubl. data
F	29 May 1940	Kalvar	Lorestan	Koelz, W.		K. Roselaar, Unpubl. data
F	10 May 1941	Do-Rud	Lorestan	Koelz, W.		K. Roselaar, Unpubl. data
M & F	15 May 1941	Safid-Kuh mt	Khuzestan	Koelz, W.		K. Roselaar, Unpubl. data
	1 June 1941	Gahar lake	Lorestan	Koelz, W.	date approx	K. Roselaar, Unpubl. data
	4 June 1941	Galeh Yar	Lorestan	Koelz, W.	date approx	K. Roselaar, Unpubl. data
M	17 June 1941	Bisheh Dalan	Lorestan	Koelz, W.		K. Roselaar, Unpubl. data
M	19 July 1941	Borujerd	Lorestan	Koelz, W.		K. Roselaar, Unpubl. data
F	23 July 1941	Borujerd	Lorestan	Koelz, W.		K. Roselaar, Unpubl. data
M	25 July 1941	Borujerd	Lorestan	Koelz, W.		K. Roselaar, Unpubl. data
M	12 August 1941	Do-Rud	Lorestan	Koelz, W.		K. Roselaar, Unpubl. data
M	21 August 1941	Do-Rud	Lorestan	Koelz, W.		K. Roselaar, Unpubl. data
M	24 September 1941	Borujerd	Lorestan	Koelz, W.		K. Roselaar, Unpubl. data
F	26 September 1941	Borujerd	Lorestan	Koelz, W.		K. Roselaar, Unpubl. data
M	28 September 1941	Borujerd	Lorestan	Koelz, W.		K. Roselaar, Unpubl. data
	17 May 1956	Sandian cf	Gilan	Schüz	singing	Schüz 1959
	18 May 1956	Gulgakh	Gilan	Schüz	singing	Schüz 1959
M	19 May 1956	Rezvandeh	Gilan	Schüz		Schüz 1959
1	18 August 1963	Bandar-e Gaz	Golestan	Burton, PJK	trapped	Feeny et al. 1968

No. &Sex	Date	Location	Province	Observer/ collector	Remarks	References
Savi's Warbler *Locustella luscinioides*						
	10 April 1886	Lotf-Abad	Khorasan	Radde	many migrants	Radde & Walter 1889
F	18 April 1898	Kariz	Khorasan	Zarudny	seen & collected	Zarudny 1901
	25 August 1963±5 days	Bandar-e Gaz	Golestan	Burton, PJK e.a.	several trapped	Feeny et al. 1968
F	11 April 1940	Kazerun	Fars	Koelz, W.	ssp *fusca*	K. Roselaar, Unpubl. data
2M	17 March 1941	Do-Rud	Lorestan	Koelz, W.	ssp *fusca*	K. Roselaar, Unpubl. data
1M & 2F	21 July 1941	Borujerd	Lorestan	Koelz, W.	ssp *fusca*	K. Roselaar, Unpubl. data
1M & 2F	22 July 1941	Borujerd	Lorestan	Koelz, W.	ssp *fusca*	K. Roselaar, Unpubl. data
F	24 July 1941	Borujerd	Lorestan	Koelz, W.	ssp *fusca*	K. Roselaar, Unpubl. data
F	25 April 1945	Karaj	Tehran	Koelz, W.	ssp *fusca*	K. Roselaar, Unpubl. data
M	16 May 1956	Mordab lake, S-shore	Gilan	Schüz	also others heard, ssp *fusca*	Schüz 1959
F	25 October 1957	Shemiran	Tehran	Read	ssp *fusca*	Diesselhorst 1962
Common Grasshopper Warbler *Locustella naevia*						
	30 April 1896	Sarideh, E of -	Khorasan	Zarudny		Zarudny 1900
3 M	20 April 1898±2 days	Hari-Rud	Khorasan	Zarudny	collected	Zarudny 1901
F	8 May 1940	Belu	Khuzestan	Koelz, W.		K. Roselaar, Unpubl. data
2M	24 July 1940	Cheirat/Kherat/Herat,	Golestan	Koelz, W.		K. Roselaar, Unpubl. data
M	29 August 1940	Ferdows	Khorasan	Koelz, W.		K. Roselaar, Unpubl. data
M	19 July 1941	Borujerd	Lorestan	Koelz, W.		K. Roselaar, Unpubl. data
M	24 July 1941	Borujerd	Lorestan	Koelz, W.		K. Roselaar, Unpubl. data
M	12 September 1941	Do-Rud	Lorestan	Koelz, W.		K. Roselaar, Unpubl. data
F	24 September 1941	Borujerd	Lorestan	Koelz, W.		K. Roselaar, Unpubl. data
	18 April 1956	Mehdi Gudeh I. (NE Mordab)	Gilan	Schüz	song heard	Schüz 1959
	20 April 1956	Rezvandeh	Gilan	Schüz	song heard	Schüz 1959
	27 April 1956	Gulgakh	Gilan	Schüz	song heard	Schüz 1959
	29 April 1966	Gulgakh	Gilan	Genenger	singing	Genanger & Genanger 1968
Hume's Leaf Warbler *Phylloscopus humei*						
	28 April 1940	Hundar	Khuzestan	Koelz, W.	date approx	K. Roselaar, Unpubl. data
European Pied Flycatcher *Ficedula hypoleuca*						
M	in April 1885	Bushehr	Bushehr	Palmer, AJV		Sharpe 1886
F	3 April 1905	Ramhormoz	Khuzestan	Woosnam		Witherby 1907
F	8 April 1905	Izeh	Khuzestan	Woosnam		Witherby 1907
	29 March 1940	Neyriz	Fars	Koelz, W.	date approx	K. Roselaar, Unpubl. data
Caspian Tit *Parus (lugubris) hyrcanus*						
M	1 June 1904	Rostam-Abad, nr -	Gilan	Zarudny		Zarudnyy & Loudon 1905
M & F	1 May 1907	Damavand mt, NE of -	Mazandaran	Woosnam	only 2-3 pairs seen	Witherby 1910
M	24 July 1912	Aq Emam	Golestan	Bilkevich		Zarudnyy & Bil'kevich 1913
M & F	22 July 1940	Dimalu	Mazandaran	Koelz, W.		K. Roselaar, Unpubl. data
2M&1 F	23 July 1940	Dimalu	Mazandaran	Koelz, W.		K. Roselaar, Unpubl. data
White-crowned Penduline Tit *Remiz coronatus*						
	14 November 1900	Kariz	Khorasan	Zarudny		Zarudny 1916
F	16 November 1900	Pish-Robat	Khorasan	Zarudny		K. Roselaar, Unpubl. data
	2 December 1900	Rud-e Shur nr Dastgerd	Khorasan	Zarudny		Zarudny 1916
3M&1 F	5 December 1900	Chah-e Bani well	Khorasan	Zarudny		K. Roselaar, Unpubl. data
	10 December 1900	Bandan	Khorasan	Zarudny		Zarudny 1916
	28 January 1901	Mirkuh	Sistan & Baluchestan	Zarudny		Zarudny 1916

No. &Sex	Date	Location	Province	Observer/ collector	Remarks	References
2M& 1F	29 January 1901	Khan Mohammed-Abad	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
M	8 February 1901	Juan-kan	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
	9 February 1901	Narreh Now	Sistan & Baluchestan	Zarudny		Zarudny 1916
M	12 February 1901	Jalq oasis	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
F	14 February 1901	Qaleh Eibi (below village, on Rud-e Kalagan)	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
	16 February 1901	Mok Sukhteh/Maksotag cf	Sistan & Baluchestan	Zarudny		Zarudny 1916
	17 February 1901	Mir-kala [nr Jalq	Sistan & Baluchestan	Zarudny		Zarudny 1916
M	4 March 1901	Sarbaz	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
M	10 March 1901	Rask	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
M	10 March 1901	Gol-Posht	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
M	11 March 1901	Gol-Posht	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
F	10 May 1901	Gunich	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
Black-headed Penduline Tit *Remiz macronyx*						
M	<1910	Bandar-e Gaz	Golestan			Witherby 1910
1 pair	30 March 1963	Anzali Mordab, NW part	Gilan	Nielsen		Nielsen & Speyer 1967
	<1914	Chat-e Atrak	Golestan	Bilkevich	ssp *neglectus*	Zarudny 1914
	24 June 1885 plus 13days?	Gorgan Bay	Golestan	Zarudny'92	ssp *neglectus*	Stresemann 1928
2 F	16 March 1907	Farah-Abad, Sari	Mazandaran	Woosnam	ssp *neglectus*	Witherby 1910
M	20 May 1907	Anzali Mordab nr Rasht	Gilan	Woosnam	ssp *neglectus*	Witherby 1910
1+	in January 1910±3yr	Miankaleh sandspit	Mazandaran	Bilk/Loudon?	ssp *neglectus*	Zarudny 1914
	5 October 1916	Chat-e Atrak	Golestan	Shestoperov	ssp *neglectus*	Shestoperov 1927
	8 December 1916±38days	Gonbad-e Qabus, E of -	Golestan	Shestoperov	date approx, ssp *neglectus*	Shestoperov 1927
M	6 September 1942	Borujerd	Lorestan	Koelz, W.	ssp *neglectus*	K. Roselaar, Unpubl. data
	1 June 1898±3days	Hamun-e Farah marshes & shore	Sistan & Baluchestan	Zarudny	ssp *nigricans*	Zarudny 1908
	1 June 1898±3days	Helmand R. mouth cf	Sistan & Baluchestan	Zarudny	ssp *nigricans*	Zarudny 1908
6M	14 June 1901	Adimi neyzar/marshes	Sistan & Baluchestan	Zarudny	ssp *nigricans*	K. Roselaar, Unpubl. data
11 M& 2F	27 May 1898±4days	marsh W of Nasr-Abad	Sistan & Baluchestan	Zarudny	ssp *nigricans*	Zarudny 1901
F	29 May 1898	Nasr-Abad (nr Zabol)	Sistan & Baluchestan	Zarudny	ssp *nigricans*	K. Roselaar, Unpubl. data
M	3 June 1898	Gaz-e Bar	Sistan & Baluchestan	Zarudny	ssp *nigricans*	Zarudny 1901
3M	30 May 1898	Hamun-e Farah marshes & shore	Sistan & Baluchestan	Zarudny	ssp *nigricans*	K. Roselaar, Unpubl. data
M	30 May 1898	Helmand R. mouth cf	Sistan & Baluchestan	Zarudny	ssp *nigricans*	K. Roselaar, Unpubl. data
F	31 May 1898	Helmand R. mouth cf	Sistan & Baluchestan	Zarudny	ssp *nigricans*	K. Roselaar, Unpubl. data
	9 January 1901±4days	Sistan, desert of SE -	Sistan & Baluchestan	Zarudny	ssp *nigricans*	Zarudny 1916
	in 1898±2yr	Hamun-e Sabari	Sistan & Baluchestan	Zarudny	ssp *nigricans*	Zarudny 1908
	in 1898±2yr	Neyzars/marshes	Sistan & Baluchestan	Zarudny	ssp *nigricans*	Zarudny 1908
Eurasian Bullfinch *Pyrrhula pyrrhula*						
3	11 November 1898	Mashhad	Khorasan	Zarudny		Zarudny 1901
A few	16 November 1898±2 days	Mashhad	Khorasan	Zarudny		Zarudny 1901
M	29 March 1898	Quchan	Khorasan	Zarudny	breeding in small numbers in mts	Zarudny 1901
	29 November 1898	Goudan, nr -	Khorasan	Zarudny		Zarudny 1901
M	21 February 1907	Surdabend, nr Ramsar	Mazandaran	Woosnam	ssp *caspica*	Withrby 1908, 1910
M	25 February 1907	Alamdeh	Mazandaran	Woosnam	ssp *caspica*	Withrby 1908, 1910
	11 May 1927	Khorram-Abad, S of -	Mazandaran	Heinrich	ssp *caspica*	Heinrich 1928
2 M	26 May 1927	Pish-Kuh Mt.	Mazandaran	Heinrich	2000m, ssp *caspica*	Stresemann 1928
M	23 July 1940	Dimalu	Mazandaran	Koelz, W.	ssp *caspica*	K. Roselaar, Unpubl. data
	21 May 1956	Chalus-pass, N of -	Mazandaran	Schüz	heard at 1850m, ssp *caspica*	Schüz 1957
2M	14 November 1940	Livan	Azarbaijan	Koelz, W.	ssp *rossikowi*	K. Roselaar, Unpubl. data
F	15 November 1940	Livan	Azarbaijan	Koelz, W.	ssp *rossikowi*	K. Roselaar, Unpubl. data

No. &Sex	Date	Location	Province	Observer/ collector	Remarks	References
	16 November 1940	Livan	Azarbaijan	Koelz, W.	date approx, ssp *rossikowi*	K. Roselaar, Unpubl. data
3M	27 November 1940	Maragheh	Azarbaijan	Koelz, W.	ssp *rossikowi*	K. Roselaar, Unpubl. data
M&F	28 November 1940	Maragheh	Azarbaijan	Koelz, W.	ssp *rossikowi*	K. Roselaar, Unpubl. data
	8 December 1940	Orumiyeh city	Azarbaijan-W	Koelz, W.	date approx, ssp *rossikowi*	K. Roselaar, Unpubl. data
Afghan Scrub Sparrow *Passer (moabiticus) yatii*						
1	11 October 1898	Chah-e Guisheh well	Khorasan	Zarudny	in tamarisks	Zarudny & Härms 1912
M	28 June 1900	Bampur	Sistan & Baluchestan	Loudon		K. Roselaar, Unpubl. data
A few (5 M)	22 November 1900	Mozhn-Abad	Khorasan	Zarudny	in gardens	Zarudny 1916, Zarudny & Härms 1912
1	8 December 1900	Chah-e Guisheh well	Khorasan	Zarudny		Zarudny & Härms 1912
M & F	16 December 1900	Hoseyn-Abad (nr Zabol)	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
9M & 3F	17 December 1900	Hoseyn-Abad (nr Zabol)	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
M	17 December 1900	New Helmand R.	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
1 M & 3 F	18 December 1900	Hoseyn-Abad (nr Zabol)	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
1 M & 2 F	18 December 1900	New Helmand R.	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
M	19 December 1900	Hoseyn-Abad (nr Zabol)	Sistan & Baluchestan	Zarudny	large numbers	Zarudny 1916, K. Roselaar, Unpubl. data
F	20 December 1900	Afzal-Abad	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
M & F	23 December 1900	Afzal-Abad marshes	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
1M & 2F	25 December 1900	Hoseyn-Abad (nr Zabol)	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
M & F	26 December 1900	Hoseyn-Abad (nr Zabol)	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
M	27 December 1900	Deh-e Kul, at c.:	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
M	28 December 1900	Jalil-Abad (Sistan), at c.	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
	29 December 1900	Jalal-Abad<>New Helmand R.	Sistan & Baluchestan	Zarudny		Zarudny 1916
3M & 1F	31 December 1900	Jalal-Abad (Sistan)	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
M	3 January 1901	Hoseyn-Abad (nr Zabol)	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
	8 January 1901	Chah-e Mohammed-Reza-Khan well	Sistan & Baluchestan	Zarudny	wintering flocks up to 50 exx	Zarudny & Härms 1912
	9 January 1901	Hauzdar	Sistan & Baluchestan	Zarudny	wintering flocks up to 50 exx	Zarudny & Härms 1912
	9 January 1901±4 days	Sistan, desert of SE -	Sistan & Baluchestan	Zarudny		Zarudny 1916
F	10 January 1901	Chah-e Hak well cf, at c.:	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
	11 January 1901	Chah-e Hak well	Sistan & Baluchestan	Zarudny	wintering flocks up to 50 exx	Zarudny & Härms 1912
	12 January 1901	Ramrod ruins	Sistan & Baluchestan	Zarudny	wintering flocks up to 50 exx	Zarudny & Härms 1912
	13 January 1901	Chah-e Gombaz Novar well cf	Sistan & Baluchestan	Zarudny	wintering flocks up to 50 exx	Zarudny & Härms 1912
1 pair	9 February 1901	Mok Sukhteh/Maksotag cf	Sistan & Baluchestan	Zarudny		Zarudny & Härms 1912
1 pair	9 February 1901	Narreh Now	Sistan & Baluchestan	Zarudny		Zarudny 1916
	12 February 1901	Jalq	Sistan & Baluchestan	Zarudny	small flock	Zarudny & Härms 1912
	14 February 1901	Qaleh-Lidschi- Qaleh-Eibi (Rud-e Kalagan area)	Sistan & Baluchestan	Zarudny	several flocks	Zarudny 1916, Zarudny & Härms 1912, K. Roselaar, Unpubl. data
	16 February 1901	Maksotag- Mir-Qale	Sistan & Baluchestan	Zarudny	several flocks	Zarudny & Härms 1912
	17 February 1901	Mir-Qale [nr Jalq]	Sistan & Baluchestan	Zarudny		Zarudny 1916
	8 March 1901	Puri	Sistan & Baluchestan	Zarudny	small numbers	Zarudny & Härms 1912
	9 March 1901	Rask	Sistan & Baluchestan	Zarudny	small numbers	Zarudny & Härms 1912
	11 March 1901	Kaptegin-Dukan	Sistan & Baluchestan	Zarudny	small numbers	Zarudny & Härms 1912
	12 March 1901	Gaz-e Manzal	Sistan & Baluchestan	Zarudny	small numbers	Zarudny & Härms 1912
	13 March 1901	Riku	Sistan & Baluchestan	Zarudny	small numbers	Zarudny & Härms 1912
	15 March 1901	Bahu-Kalat	Sistan & Baluchestan	Zarudny	small numbers	Zarudny & Härms 1912
	17 March 1901	Bal	Sistan & Baluchestan	Zarudny	frequent flocks of 5-20 exx	Zarudny & Härms 1912
	18 March 1901	Mir-Bazar/Polan	Sistan & Baluchestan	Zarudny	frequent flocks of 5-20 exx	Zarudny & Härms 1912
	18 March 1901	Shahrestan	Sistan & Baluchestan	Zarudny	frequent flocks of 5-20 exx	Zarudny & Härms 1912
15	21 March 1901	Kambel-e Bala	Sistan & Baluchestan	Zarudny		Zarudny & Härms 1912

No. &Sex	Date	Location	Province	Observer/ collector	Remarks	References
15	22 March 1901	Lekubal	Sistan & Baluchestan	Zarudny		Zarudny & Härms 1912
1 F	22 April 1901	Razi valley	Sistan & Baluchestan	Zarudny	in tamarisks	Zarudny & Härms 1912, K. Roselaar, Unpubl. data
8	28 April 1901	Bampur	Sistan & Baluchestan	Zarudny		Zarudny & Härms 1912
M	17 June 1901	Helmand delta	Sistan & Baluchestan	Härms [=Zarudny]	date approx	K. Roselaar, Unpubl. Data
F	18 June 1901	New Helmand R.	Sistan & Baluchestan	Zarudny		
M	23 June 1901	Deh-e Gazmeh	Sistan & Baluchestan	Zarudny	nests & eggs collected	Zarudny & Härms 1912, K. Roselaar, Unpubl. data
2 F	23 June 1901	Deh-e Malek Mohammed-e Oshtorak	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
1M & 4F	24 June 1901	Deh-e Malek Mohammed-e Oshtorak	Sistan & Baluchestan	Zarudny	nests & eggs collected	Zarudny & Härms 1912, K. Roselaar, Unpubl. data
2 M	24 June 1901	New Helmand R.	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
2 M	25 June 1901	Deh-e Kadkhoda Jany	Sistan & Baluchestan	Zarudny	eggs collected	Zarudny & Härms 1912, K. Roselaar, Unpubl. data
F ?	26 June 1901	Deh-e Dust Mohammed	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
3 F	27 June 1901	Karku	Sistan & Baluchestan	Zarudny	eggs collected	Zarudny & Härms 1912, K. Roselaar, Unpubl. data
	28 June 1901	Helmand R. delta	Sistan & Baluchestan	Zarudny		Zarudny & Härms 1912
M	28 June 1901	Marghan on Helmand R., nr -	Sistan & Baluchestan	Zarudny	nests & eggs collected	Zarudny & Härms 1912
4 M & 2 F	28 June 1901	Deh-e Khamr	Sistan & Baluchestan	Zarudny		K. Roselaar, Unpubl. data
	29 June 1901	New Helmand R.	Sistan & Baluchestan	Zarudny		Zarudny & Härms 1912
8 M	29 June 1901	Marghan on Helmand R.	Sistan & Baluchestan	Zarudny		Zarudny 1916, K. Roselaar, Unpubl. data
	9 August 1901	Tiz-Ab/Tiz-bad	Khorasan	Zarudny		Zarudny & Härms 1912
	10 August 1901	Tiz-Ab-Karat	Khorasan	Zarudny		Zarudny & Härms 1912