OSME was founded in 1978 as the successor to the Ornithological Society of Turkey. Its primary aims are:

- To collect, collate, and publish data on all aspects of the birds of the Middle East.
- To promote an interest in ornithology and bird conservation throughout the Middle East.
- To develop productive working relationships with other governmental and non-governmental organisations with an interest in conservation and/or natural history in the region.

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Write to the Membership Secretary at the address below for a membership form detailing methods of payment and also rates for Family, Supporting and Life membership. For any other information on the Society, write to the Secretary at the same address.

Publications
OSME publishes a scientific journal, Sandgrouse, containing papers, news and features on all aspects of Middle Eastern ornithology. Published twice yearly, it is issued free to members. Further copies are available for sale from OSME.

Meetings
An Annual General Meeting is held in London at which guest speakers provide new perspectives on ornithology in the region. There are also occasional special meetings, some taking place outside the UK.

Projects
OSME organises field expeditions to collect data on birds in little-known parts of the region and in areas where OSME can assist by teaming up with local groups.

The Conservation & Research Committee grants funds to valuable field projects and desk studies which further knowledge and conservation of birds in the region. Grants have been awarded to over 45 projects since the Conservation & Research Fund was set up in 1982.

MEBirdNet Email Discussion Group
This is an e-mail mailing list (moderated by OSME) that discusses birds and birdwatching in the Middle East, Caucasus and Central Asia. Subjects include research, conservation, bird news, recent records, identification, requests for information and exchange of information. To join the mailing list, send an empty e-mail to: MEBirdNet-subscribe@yahoogroups.com.

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Cover Photograph:  
Eurasian Stone-curlew Burhinus oedicnemus on nest in Roman ruins at Benghazi, Libya. © Graham Haigh.
EDITORIAL

1996 saw the publication of the extraordinarily useful Field Guide to the Birds of the Middle East (FGME1) whose authors were Richard Porter, Steen Christensen and Per Schierrmacker-Hansen. In the absence of a formal checklist, this invaluable book has acted as the reference for Sandgrouse authors in respect of English and scientific names of birds of the OSME Region. Ten years on, using the book for that purpose has become less appropriate for a number of reasons. Firstly, developments in taxonomic research, especially involving many aspects of DNA-based studies, have revised not only many genera, but also the sequence of families. Secondly, at species and subspecies level, clearer evidence has supported more ‘splits’ than ‘lumps’, although many families have yet to undergo such scrutiny. Thirdly, the International Ornithological Congress (IOC) will shortly publish a world list of English names; the IOC has made two crucial decisions in producing this list – they make no claim that this will be ‘the’ world list, just ‘a’ world list, and they have ensured that no region has been dealt with in isolation, but that all decisions have followed a clear set of general principles. Lastly, the OSME Region itself has changed. Although in 1996 the OSME Region largely coincided with the area covered by FGME1, now that it includes the Caucasus and Central Asian Republics and Afghanistan it no longer does so. There was therefore a clear need for new lists for the Middle East and for the OSME Region.

For the past year an ad hoc group headed by Richard Porter has assembled a species list for a second edition of The Field Guide to the Birds of the Middle East (FGME2), which covers exactly the same area. It was too costly to expand it to include the new countries in the OSME Region. However, it was entirely sensible for OSME to use the FGME2 species list as the basis for an OSME Region List (ORL). The first priority was to determine the basis on which species, subspecies or forms should be admitted to the ORL; each would have to have been included in a published authoritative ornithological reference. Furthermore, the ORL should reflect generally accepted developments in taxonomy and address the question of English species names in detail. Fortunately, Richard Porter and I were able to gain access to the final draft IOC world list (of around 9400 species). Inevitably, anyone examining the IOC list will find dislikeable IOC name changes, but we noted that most changes were non-contentious. The IOC have detailed the rules they followed and why -their overarching view was that change should not occur for change’s sake. These rules coped with most species, despite occasional weak decisions. Much of the time, the IOC has taken a slightly conservative line, but more important it has aligned very closely with one particular world list species list, which is based on a seminal paper, the full citation being: Cracraft, J, FK Barker and A Cibois. 2003. Avian higher-level phylogenetics and the Howard and Moore checklist of birds. In: Dickinson, EC. 2003. (Ed). The Howard and Moore complete checklist of the birds of the world. 3rd edn. Christopher Helm. London. UK.

The species limits in Dickinson (2003) are all derived from published papers listed therein. Research does not stand still, and so the FGME2 and OSME Region Lists consider variations from Howard & Moore 3rd edition on an individual basis. For the ORL, I have consulted many references, and I have a particular debt of gratitude to many people from the expanded OSME Region who kindly sent me authoritative checklists yet to be published in their countries. I am particularly grateful that Edward Dickinson has offered a dialogue on this subject from his thinking on the preparation of the 4th edition of the Howard & Moore checklist. The ORL will never be in a ‘final’ state, but it will soon reach usable form. OSME intends to publish the Region List on the OSME website, www.osme.org. The ORL is not a formal checklist, in the sense of confirming a species’ occurrence country by country, but it is at least a step forward. From now on, I intend to edit submissions to Sandgrouse in compliance with the ORL and I ask forbearance from authors affected. I intend to start the logical process of developing a formal OSME Region Checklist, but its success will depend much on constructive criticism of the ORL, once published. Next will be the production of versions of the Middle East list and the ORL that include Arabic bird names – BirdLife International has already prepared an agreed list Arabic names for the species in FGME1.

Mike Blair
SANDGROUSE 27 (2) CORRIGENDA

Page 134: In Recent changes in the status and distribution of birds in Libya, under Hirundinidae: The Crag Martin Hirundo rupestris observations were ‘80km to the west at Tolmeta’ and not ‘80km to the west of Tolmeta’. Correction advised by Jeremy Gaskell.

Page 157: In On the distribution of Red-tailed Wheatear Oenanthe chrysopygia in Armenia, the citation for the scientific name should have been ‘(de Filippi, 1863)’ and not ‘(de Fillipi, 1863)’. Correction advised by Guy Kirwan.

Page 168: Mike Wilson-kindly pointed out that in the review of Michael Patrikeev’s The Birds of Azerbijan, he, Mike Wilson, was credited with a fine editing touch, but although he worked with Michael Patrikeev on the preparation of some of the material, the editor was Geoffrey Harper, to whom the credit, of course, is due.

Page 171: In Around the Region, the record for Oriental White-eye Zosterops palpebrosus seemed to be a first record for Iran, or at least the species’ first mention in the literature for Iran (advice from Guy Kirwan), but in the draft Checklist of the Birds of Iran received recently, a previously overlooked reference, Reynolds (1978), is cited as the first record.

Reference

MIKE HELPS

Mike Helps, a founder member of the Ornithological Society of Turkey (the forerunner of OSME), died in September 2005 after a long fight against cancer. He made his first of many visits to Turkey in 1966 as a member of the team that studied the Bosphorus soaring bird migration for an entire autumn. Such a complete survey had never attempted before and was Mike’s idea. Later he took part in the Turkish winter waterbird counts, was a regular contributor to the OST Bulletin and a member of the first Turkish bird records committee. As an architectural draughtsman, Mike produced a series of detailed maps of the country which were available to visiting OST members for recording purposes. His visits to Turkey became more infrequent from the 1980s when he began devoting more of his time to conservation issues in his native Sussex in England.

Richard Porter

2006 OSME SUMMER MEETING
29 JULY 2006

The 2006 OSME Summer Meeting will be held on Saturday 29 July in central London in the offices of the Association of British Travel Agents, 68–71 Newman Street, London W1P 3AH. Speakers will include Paul Doherty who will show video footage from his recent visits to Israel. Full details will be mailed later and will be available on the OSME website.

OSME AT BRITISH BIRDWATCHING FAIR 18–20 AUGUST 2006

As usual OSME will have a stand in the Fair at Rutland Water. A range of sales goods will include some hard-to-find bird literature from the region, T-shirts, caps and other OSME items. All profits from OSME’s sales will go towards our Conservation Fund which supports projects in the Middle East and Central Asia, so please come and help us by spending some money. On the stand throughout will be the OSME team with occasional visitors from the Middle East. We hope to see many of you there! Once again we are grateful to Zeiss Optics for kindly offsetting part of the cost of our stand.

Dawn Balmer
OSME COUNTRY CONTACTS
The following people are birders resident in the countries listed and are able to offer advice to anyone visiting their area. If you do not have access to e-mail, please contact John Bartley on 01636 703512 in order to obtain a postal address.

ARMENIA - Basil Ananian: vananian72@yahoo.com
AZERBAIJAN - Elchin Sultanov: sultanov@azdata.net
BAHRAIN - Howard King: howardk@batelco.com.bh
CYPRUS - Colin Richardson: Richar@cytanet.com.cy
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WildSounds has become OSME's official supplier of bird and wildlife books, CDs and cassettes. Their extensive catalogue also includes gentle atmosphere recordings, videos, CD-ROMs and Field Recording Equipment. WildSounds donates a proportion of their income to OSME's Conservation Research Fund for every purchase by an OSME member, so please buy your books and recordings from them and remember to tell them you are an OSME member! To obtain details of WildSounds' range of goods call +44 (0) 1263 741100 or look at their website: http://www.wildsounds.co.uk

HELP OSME TO RECLAIM TAX WITH GIFT AID
Already a significant number of our UK members have allowed us to reclaim 28% of the value of their membership subscription back in taxes from the UK government. It costs these members nothing more than a signature on a simple form declaring that UK tax has been paid and authorising OSME to claim it back. There are still plenty of UK members who have not signed a Gift Aid form. These are readily available and declarations may also be made by telephone by calling the Treasurer, John Warr, on +44 (0) 1442 822108 or by email to ajwarr@gotadsl.co.uk.

OSME SUPPORTS MIDDLE EAST PROJECTS
OSME has awarded grants to a number of projects in the Middle East over recent months. The grants come from the Conservation and Research Fund, which is used to support a wide range of conservation, survey and educational projects. Special thanks are given to Avifauna and The Wetlands Trust for generously donating £1500 and £1000 towards the CRF.

Recent CRF awards include:
£1500 towards the project Field Guide to the Birds of the Middle East, in Arabic
Awarded to the Society for the Protection of Nature in Lebanon to assist with production costs of the Field Guide to the Birds of the Middle East in Arabic. It is hoped the book will be launched in the spring of 2006, to mark the 20th anniversary of SPNL.

£500 to Guy Kirwan for museum visits in North America
Towards the cost of visiting three museum collections in North America to study old bird skins obtained from Turkey, Iran and Socotra.
£275 for Nubian Nightjar research in Israel
A grant was awarded to Yoav Perlman to study the habitat preference, foraging ecology, body temperature patterns, and conservation of the Nubian Nightjar *Caprimulgus nubicus* in Israel. The money will be used to fit temperature-sensitive radio transmitters to four Nubian Nightjars.

£100 on books for a Jordanian ecologist
Two books were awarded to Anwar Elhalah in the Azraq Wetland Reserve (Jordan), *Raptors of Europe and the Middle East* by Dick Forsman and *Bird Census Techniques, 2nd Edition* by Colin Bibby.

APPLICATIONS FOR PROJECT SUPPORT ARE INVITED

We welcome applications for grants of up to UK£500 from our Conservation and Research Fund, to support research projects in the region. Projects should be directed to one or more of the following subject areas:

i. Investigating the status of threatened or near-threatened species.
ii. Attempting to further knowledge of existing Important Bird Areas (eg undertaking breeding censuses, visiting out-of-season to conduct systematic counts).
iii. Investigating potential new Important Bird Areas or little-known areas.
iv. Conducting ecological studies of little-known species.
v. Educational projects.

Priority will be given to projects involving nationals from the region. Applicants are required to write up the results of their project for possible publication in *Sandgrouse*. For further information, contact Mrs Pat Bartley by e-mailing her at crf@osme.org or calling +44 (0) 1636 703512.

Keith Betton, Chairman, OSME

NEWS & INFORMATION
compiled by Dawn Balmer & Keith Betton

The aim of this section is to inform readers about events in the OSME region. It relies on members and others supplying relevant news and information. If you have anything concerning birds, conservation or development in the OSME area please send it to News and Information, OSME, c/o The Lodge, Sandy, Bedfordshire SG19 2DL, U. K.

This section is not intended as a definitive report or write-up of the projects concerned. Many of the projects are sponsored; such support is appreciated but is not generally given acknowledgement here.

ARABIA

ABBA records for 2005
If you have any records for 2005 from anywhere in the Arabian Peninsula of species covered by the ABBA project, please send them to Mike Jennings, Project Co-ordinator Atlas of the Breeding Birds of Arabia, Warners Farm House, Warners Drove, Somersham, Cambridgeshire, PE28 3WD, England, e-mail: arabian.birds@dial.pipex.com. All records are welcome, including details of habitats, food and manner of finding food, status changes or frequency, exotics and conservation issues. For more details visit the website at http://dspace.dial.pipex.com/arabian.birds.

(Contributed by Mike Jennings).

CYPRUS'

Songbird slaughter
According to the Royal Society for the Protection of Birds, almost nine out of ten (88 per cent) of Cypriots disapprove of the illegal capture of songbirds, which are trapped each autumn and spring to be served up as expensive delicacies in local restaurants. Trapping has been illegal on Cyprus for over three decades, but despite the direct
intervention of RSPB and BirdLife Cyprus, it is believed that hundreds of thousands of birds are still slaughtered every year driving a trade providing tavernas with the delicacy, ambelopoulia. It is believed that each bird can fetch nearly £2 in this lucrative market. Graham Wynne, the RSPB’s Chief Executive, said: “It is clear that illegal bird trapping must cease. The majority of islanders, strongly supported by the Cypriot government, clearly want this practice to end. Regrettably, the activities of a tiny minority of die-hard isolated hunters continue to bring shame on the island and one of the European Union’s newest members. Bird trapping on Cyprus is an emotive issue for many of the RSPB’s one million members and has been a long-running campaign for the Society. The thought that bird trapping on Cyprus is drawing towards a long-overdue demise will bring much satisfaction to the thousands who have sought its cessation.”

The Cyprus Government and BirdLife Cyprus are officially launching a joint anti-bird trapping publicity campaign, including distributing a leaflet prepared jointly by BirdLife Cyprus, the Game Fund and the police. The market research shows that demand for ambelopoulia is still strong. Half of those polled have tried the delicacy and around one in seven (14 per cent) regard ambelopoulia as their favourite bird dish. Two per cent of islanders claim to eat the dish ‘regularly’. When Cyprus joined the European Union on 1 May 2004, the majority of bird hunting became illegal under the European Union Birds Directive. (Source: RSPB).

IRAN

Siberian White Crane re-introduction

“Through the assistance of film maker, Mani Mirsadeghi, I was able to secure a three-day visa to Iran in December 2005. Thanks to my host, Mr. Sadeghi Sadegan of the Iran Department of the Environment, we were able to visit the last of the wild Siberian Cranes on their wintering grounds on the Caspian lowlands to help Mani film cranes, interview conservationist and waterfowl trapper, Mr. Azadi, and meet many colleagues both in the field and in Tehran”. During the past three years, with financial support from the Global Environment Facility (GEF) of the United Nations Environment Program, ICF has helped Iranian colleagues coordinate a program to help assure the survival of the last damgahs (trapping centres), habitats in which a Siberian Crane population might be re-established using captive-reared birds from human-led migrations from Russia to Iran. This technique has proved effective since 2001 with the new population of Whooping Cranes that now migrate from Wisconsin to Florida. Sadeghi is the leader of the GEF Project in Iran. Through this program he has helped establish a Waterfowl Trappers Association through which it is hoped that both the needs of the trappers and the cranes can continue to be met.

In 2003, a female, named Suna, was hatched and reared at the Crane Breeding Center at the Oka Nature Reserve, Russia. She was sent to Iran during the winter of 2003–2004 and was released with the wild cranes. She started to migrate with a wild crane in March of 2004, but travelled only several hundred miles (landing near Anzali Wetland in Gilan Province, Iran). Subsequently, she was held in captivity in Bujagh National Park until December of 2004 and was later transferred to Fereidoonkenar, being held there until her release on May 11, 2005. After the arrival of only two wild cranes, both of which appear to be males, she was released with one of the males on July 7, 2005. They paired. Now the female acts like a wild crane. She feeds on natural food items in the flooded rice fields, flies well, and is in the constant company of her new mate. She will be three years old by the time of the 2006 nesting season. If she migrates successfully with her wild mate, nesting attempts may start this year. (Contributed by George Archibald of the International Crane Foundation).

A Photographic Guide to the Birds of Iran

Seyed Babak Musavi is working on a photographic guide to the birds of Iran. A selection of photos can be seen at www.birdforum.net/pp_gallery/showgallery.php/cat/500/ppuser/15855 or www.usefilm.com/photographer/89894.html. If you have possible contributions, please contact Sayed at mbabak2002@yahoo.com.

Iranian Journal of Ornithology

The Birds Society of Iran is planning to publish a new journal called the Iranian
Journal of Ornithology. Papers may be published in Farsi or English. The first issue is planned for spring 2006. Papers should be submitted to Abolghasem Khaleghi zadeh at akhaleghi zadeh@yahoo.com. (Contributed by Abolghasem Khaleghi zadeh).

IRAQ
A member of the US National Guard who had stationed in Iraq chronicled the birds and other forms of wildlife he observed there for almost a year. http://birdingbabylon.blogspot.com/.

ISRAEL
International Birdwatching Centre
Volunteers are required at the International Birdwatching Centre, Jordan Valley. Skilled ringers are required for spring and autumn 2006. Volunteers must be prepared to work for at least 5 weeks, must have a ringing license and should send details of their experience when applying. Full board accommodation and equipment are provided. Please contact David Glasner, e-mail dglasner@kfar-ruppin.org.il, fax: +972-4-6480612 or visit the website www.kfar-ruppin.org.il for further information.

Gamla Nature Reserve
Volunteers are required till the end of July 2006, for the Nest Surveillance Project. In order to sustain and conserve Griffon Vultures, we will conduct nest surveillance and reproductive surveys at the Gamla Nature Reserve, which is located at the centre of the Golan Heights in the north of Israel. Volunteers help us to watch and document all behaviour (courtship, mating, incubating, hatching, feeding, fledging etc.) and to track fledglings and juveniles, which will be ringed and/or fitted with radio transmitters. Accommodation, transport & pocket money are provided. Please contact: e-mail: gamla@golan.org.il for further details.

The Jerusalem Bird Observatory (JBO)
Volunteers are wanted for bird monitoring in the spring, and to help with maintenance. Volunteers who would like to help with monitoring and ranger work in the Gazelle Valley would need a bit of Hebrew. No accommodation provided. Please contact: Amir Balaban by email: amirbalaban1@barakonline.net Tel: +972-52-448879; Fax: +972-6547725 or visit the website www.birds.org.il/bulbul.

Assad Serhal
Assad Serhal, Director General of the Society for the Protection of Nature in Israel (SPNL), has become a council member of BirdLife International. Assad, who is also a council member of IUCN, helped found the SPNL after studying ecology and wildlife management in the USA. He has since co-authored the Arabic Field Guide to Birds of Prey of the Middle East and later another Arabic book on the Game Birds of the Arab World. For more details about SPNL visit their website: www.splnb.org (Contributed by Richard Porter).

New website launched
For those interested in birding and photography in Israel a new website has been launched at www.israbirding.com. The site’s aim is to provide updates from the field, including articles, rarity alerts and photographs. (Contributed by Avner Cohen & Tomer Landsberger).

JORDAN
Yehya Khaled
Following the appointment of Khaled Irani to Jordan’s Minister of the Environment, Yehya Khaled has been promoted to Director General of the Royal Society for the Conservation of Nature (RSCN), BirdLife International’s Jordan Partner. Yehya has worked for RSCN since 1994, first as a researcher on carnivores and rangelands, and as also as head of their reserves section. He became director of conservation in 1997. Apart from a wide range of experience in the management of protected areas, he has also specialized in institutional capacity building. This could be of great benefit in helping other Arab nations with their wildlife conservation development. Yehya will have overall responsibility for the RSCN’s 220 staff and six nature reserve: Shuamari, Azraq wetland, Mujib, Ajloun, Dana and Dibeen. (Contributed by Richard Porter).

Aqaba Bird Observatory
The Jordan Society for Sustainable development (JSSD) has announced the development of a Bird Observatory in Aqaba. The observatory will be built on the old
Aqaba water treatment plant, including the adjacent Peace forest. For more information about the observatory contact Khaled Nassar
Tel: +962 6 5866602

KUWAIT
The Birds of the State of Kuwait
This book is now available; order a copy from George Gregory at mbriggs@gibobs.fsworld.co.uk. The book costs £15 + p&p (UK £1.50, Europe £3, rest of the world £5).

LIBYA
Libya report published
An important report on an ornithological survey carried out between 3–17 January 2005 has recently been published. The aim of the expedition was to search for Slender-billed Curlews Numenius tenuirostris, investigate the status of 14 species on conservation lists in Libya, carry out the first comprehensive mid-winter census in Libya and identify wetlands of major importance for wintering waterbirds. 65 sites were visited between 3–17 January; they include most wetlands along the coast from Ras Ajdir on the Tunisian border to Tobruk harbour, just west of the Egyptian border. Sadly, no Slender-billed Curlews were found, although suitable habitats were identified. A total of just over 30 000 waterbirds, of a wide range of species, was recorded, including 1200 Great Cormorants Phalacrocorax carbo, over 400 herons, over 1100 ducks, nearly 400 Eurasian Coots Fulica atra, over 5500 waders, almost 20 000 gulls (including over 300 Audouin’s Gulls Larus audouinii) and almost 300 terns. A few Ferruginous Ducks Aythya nyroca were found, although no Marbled Duck Anas angustirostris or White-headed Duck Oxyura leucocephala were located. The full 94 page report can be downloaded from the RAC/SPA website www.rac-spa.org/. The report citation is: AZAZAF, H, N BACCETTI, P DEFOS DU RAU, H DLENSI, MF ESSAGHAIER, A HAMZA, K ETAYEB AND M SMART: Report on an Ornithological Survey in Libya from 3 to 17 January 2005. Cyclostyled report to Regional Activities Centre/Special Protected Areas (MAP/UNEP), Environment General Agency (Libya) and African-Eurasian Waterfowl Agreement (CMS/UNEP). 14 pp with map and five Appendices.
NB Libya will be covered by the African Bird Club from now on.

LEBANON
Bekaa Valley
Birdwatchers visiting Lebanon might be interested in the recent experiences of David Whaley and Judy Dawes. They visited the Bekaa Valley around the Aammiq wetlands reserve, supported by the A Rocha organisation. The centre at Aana, near Aammiq, has some simple accommodation (2 twin bedded rooms, bathroom & kitchen) at Aana. Useful contacts: Chris Naylor (Team Leader based in Beirut) arocha@cyberia.net.lb and Rick Prior richwprior@hotmail.com. They commented, "The driving conventions are strange but there was no reaction to our initially rather tentative driving style and we felt safe on the roads. Signposting in Roman alphabet is patchy but we managed OK with a 1:200,000 map (Guide Stephan). There are now decent hotels in the valley, near the reserve, at Khirbit Kanafar & further south at Saghbine". (Contributed by David Whaley and Judy Dawes).

Birds of the Middle East in Arabic
The Society for the Protection of Nature in Lebanon and the Sustainable Hunting Project-Lebanon are pleased to announce that the necessary funding has been secured for printing The Field Guide to the Birds of the Middle East (Richard Porter, Steen Christensen and Per Schiemacker-Hansen) in Arabic. It is hoped that its publication in Arabic will increase the number of birdwatchers across the whole region. It will also improve hunting practices by enhancing the understanding of hunters of the complexity and variety of birds migrating through Lebanon and the region. The aim is to publish the field guide in February 2006, with 5000 copies to be produced and distributed throughout the region. Thanks go to the RSPB for supporting the translation done by Dr. Saed Mohammad in Bahrain, as well as the Dutch Embassy in Lebanon, Euronatur, OSME, the World Land Trust and A&C Black for their faith in this initiative and their contribution to making it a success. We extend our warmest gratitude to Dr Richard Porter, whose support has been instrumental in making this a reality. (Contributed by Mireille Atallah).
UAE
*Al Yasat area – a marine sanctuary*
President His Highness Shaikh Khalifa Bin Zayed Al Nahyan, in his capacity as Ruler of Abu Dhabi, has issued an Emiri decree declaring Al Yasat area a marine sanctuary. According to the decree’s first article, Al Yasat islands of Upper Yasat, Lower Yasat, Esam, Karsha and the surrounding waters of a geographic extent of 481.73km², are a marine reserve. The decree prohibits any form of hunting, killing or catching birds or other animals specified by the Executive Committee for the implementation of Federal Law 22 for 1999 on the use, protection and development of marine resources, Federal Law 24 for 1999 on environment protection and development and all relevant international conventions signed by the UAE. The decree also restricts all types of fishing within three nautical miles from the nearest tide boundary in the sanctuary. Exempt from this are the institutions, agencies and individuals permitted by the competent authority. (Contributed by Simon Aspinall).

*Requests for Information*
*Colour-ringed Spoonbills*
For many years Eurasian Spoonbills *Platalea leucorodia* from the West European breeding population have been colour-ringed in Netherlands, France, and Spain. Readings of colour rings have given much valuable information about the species in its wintering areas in Morocco, Mauritania and Senegal, about life expectancy and the importance of these areas for juveniles, which do not return to European colonies until they are three or four years old. In recent years, colour ringing has begun in the Central European breeding population: in Italy (since 1989), Greece (2000 and 2001) and (since 2003) in the Danube basin (Croatia, Czech Republic, Hungary, Serbia and Montenegro, Slovakia and Romania); readings of colour rings already have produced much new information about the staging and wintering areas of these birds. The main migratory routes seem to be either down the Adriatic to wintering grounds in the tidal areas of Tunisia and Libya, a few birds crossing the Sahara to the Inner Niger Delta or through southeastern Europe and the Levant to wintering areas along the Nile Valley, as far south as Sudan.

Observers are requested to report sightings of any colour-ringed Eurasian Spoonbills they may encounter: Italian colour rings are on one leg only; they are black, with three or four white letters or numbers, the first digit normally being an “I” with heavy serifs at the top and bottom of the letter; they should be reported to Nicola Baccetti at the Italian National Institute for Wild Fauna (INFS) at nicola.baccetti@infs.it. Rings from other countries are of the type used in the Netherlands, having a two letter/number code, always reading down, a ring being placed on each leg with the same inscription on each, but often on different coloured rings. It is extremely important to note the position of the metal ring, *ie* whether it is above or below the colour ring, and whether it is on the right or left leg. Information on sightings should be sent to the coordinator of the International Spoonbill Working Group, Otto Overdijk, at o.overdijk@wxs.nl. (Contributed by Mike Smart).

*Colour-ringed Crab-plovers*
The Natural History Museum of Milano, the University of Pavia and the Eritrean Ministry of Fisheries are carrying on a study on the distribution, ecology and breeding biology of the Crab-plover *Dromas ardeola* in the islands off Central Eritrea. In summer 2005, 16 individuals were trapped and colour-ringed. Please look out for these birds as they disperse along the shores of the Arabian Peninsula and the Indian Ocean. Details should be sent to Dr Giorgio Chiozzi, Curator of Birds, Museo Civico di Storia Naturale, I-20121 Milano e-mail: giorgio.chiozzi@comune.milano.it.

**APPEAL FOR INFORMATION**
*From Gerald Oreel and Arend Wassink.*
We are compiling a book on the birds of Kazakhstan. This will be the first comprehensive work in English on the rich avifauna of this large Central Asian country. It is planned for publication in 2007. We seek information on bird records, observations and distributions in Kazakhstan.

Contact: G J Oreel, Deurganck 15, 1902 AN Castricum, Netherlands. Telephone +31 251 670992, e-mail gerald.oreel@planet.nl.

*Dawn Balmer & Keith Betton*
Comments on two subspecies of passerine birds recently described from Turkey, *Eremophila alpestris kumerloevei* and *Pyrrhula pyrrhula paphlagoniae*, with remarks on geographical variation in related forms of Bullfinch from the Balkans and Caucasus

GUY M. KIRWAN

Roselaar (1995) described two new subspecies of passerine birds that are considered endemic to Turkey, namely *Eremophila alpestris kumerloevei* and *Pyrrhula pyrrhula paphlagoniae*. Neither has attracted much attention in subsequent literature, although Alström (2004) upheld the former, albeit apparently recognising fewer characters as being useful for its diagnosis. Here I critically re-evaluate the taxonomic status of both forms under a much stricter approach to the recognition of subspecies (as espoused, eg. by Haffer 2003), and conclude that neither variation certainly merits naming under the concept of subspecies as adopted here (ie discarding purely clinal variation as being unworthy of recognition). Furthermore, I discuss geographical variation in related forms of Bullfinch found in the Balkans and Caucasus regions, in particular concluding that *Pyrrhula p. caspica* is also unworthy of taxonomic recognition and that at least some of the names that have been employed to describe *P. pyrrhula* variation in continental Europe are probably also unneeded. A recent review of the diagnostability of many taxa considered endemic to Turkey, based on a similar approach to the use of subspecies, suggests that many currently accepted subspecies are only doubtfully separable, being probably better considered as synonyms.

Guy M. Kirwan, 74 Waddington Street, Norwich NR2 4JS, U. K.

Writing only a little over two decades ago, Kumerloeve (1984) expressed the opinion that insufficient attention had been paid to the taxonomy of Turkish birds. That challenge was amply met by Roselaar (1995), who devoted an entire book to the study of the biogeography of Turkish passerines. Amongst the most interesting of Roselaar's results was the description of three new subspecies, of which one, the non-passerine Pied Kingfisher *Ceryle rudis syriaca*, Roselaar 1995: 22, was based on the holotype taken in 'Syria' as well as material from Turkey and elsewhere in the Middle East (the name has subsequently been corrected to *syriacus*: David & Gosselin 2002). That the latter form represents anything other than an example of Bergmann's Rule was refuted by Kasparek (1996), whose position I strongly support (Kirwan et al in prep.). The purpose of the present contribution is to comment further on the validity of the other two new subspecies proposed by Roselaar (1995), namely *Eremophila alpestris kumerloevei* Roselaar 1995: 23, and *Pyrrhula pyrrhula paphlagoniae* Roselaar 1995: 24, neither of which has apparently received much attention in the subsequent literature, with the exception of Alström's (2004) validation of the former. Both are considered endemic to Turkey.

METHODS

I examined relevant material of *Eremophila alpestris kumerloevei* and *Pyrrhula pyrrhula paphlagoniae* in the following institutions: The Natural History Museum (NHM, Tring), The Manchester Museum (MM, Manchester) and the National Museum of Natural History (NMNHS, Sofia). Furthermore, digital images of important specimen material relating to various forms of *P. pyrrhula* were solicited from the following institutions: Zoologisches Forschungsinstitut und Museum Alexander Koenig (ZFMK, Bonn), American Museum of Natural History (AMNH, New York), Field Museum of Natural
History (FMNH, Chicago), Naturhistorisches Museum (NMW, Wien), and Museum für Naturkunde, Zentralinstitut der Humboldt-Universität (ZMB, Berlin). The following data were obtained from most specimens examined directly: wing-chord (flattened), tail-length and culmen-length (to skull), using a standard metal wing-rule with a perpendicular stop at zero (accurate to 0.5 mm), and digital callipers (accurate to 0.01 mm). A broad range of material, pertaining to all relevant forms held in NHM and NMHS was photographed, using a Nikon Coolpix 885 digital camera, in natural light. I made detailed notes on geographical and seasonal plumage variation, and compared these directly with relevant type descriptions and, where possible, with type material. Field studies within the ranges of the two principal taxa concerned complemented my museum work, and were made in 1996, 1997 and 2005.

RESULTS

Eremophila alpestris kumerloevei
Named for Hans Kumerloeve, males of this taxon are, according to Roselaar (1995) distinguishable in worn plumage as follows. The hindneck is vinous-pink contrasting with the greyish-pink mantle and scapulars, whereas the upperparts are uniform vinous-buff in bicornis, and balcanica and penicillata, which both show a contrasting pinkish hindneck, and have the mantle and scapulars variably ashier grey or darker. Compared to penicillata and balcanica the dark shaft-streaks on the upperparts are much fainter (and sometimes virtually absent), whereas bicornis shows no streaking. In comparison to bicornis, E. a. kumerloevei has pinkish-grey uppertail-coverts and lesser wing-coverts, rather than buff or slightly rufous, but is equal to balcanica and penicillata in this respect. Both balcanica and penicillata reportedly have a deeper, more lemon-yellow face and throat than kumerloevei, whereas on bicornis these parts are paler, almost white. Female kumerloevei differs in having pale pinkish sandy-buff upperparts with very fine shaft-streaks, whereas both balcanica and penicillata have more distinct or heavier shaft-streaks and a duller or darker ground colour respectively, and bicornis is sandier buff above with even fainter shaft-streaks than kumerloevei. Additionally, the mean size (as expressed in wing-length) was considered intermediate between penicillata and bicornis. In upholding kumerloevei, Alström (2004) merely stated that ‘kumerloevi [sic] resembles previous [penicillata] but with unstreaked greyish-pink upperparts’.

The holotype of kumerloevei, a male (NHM.1890.1.29.56), was taken at Bereketlû, near Çamardi in the eastern Taurus, on 30 April 1876, by C. G. Danford. It was compared directly with the type of E. a. penicillata (Gould, 1837), also a male (NHM.1855.12.19.13), collected at Erzeroum (=Erzurum), ‘Persia’ (=Turkey), by K. E. Abbott, as well as nine other specimens from the purported range of kumerloevei (most of them, seven, from Ereğli), 16 additional penicillata (all Turkey and the Caucasus) and 39 E. a. bicornis (C. L. Brehm, 1842) (Near East). Data on E. a. balcanica (Reichenow, 1895) were obtained from a small Bulgarian series held in the NMNHS, and I examined four additional specimens from the designated range of kumerloevei held in MM and all collected by Danford. It is worthy of remark that the winter specimens from Ereğli, which Roselaar examined for his diagnosis of kumerloevei, do not necessarily serve as useful comparative material as it is unknown to what extent this species moves in winter in Turkey, and it is certainly not impossible that birds from the breeding range of penicillata could enter that of kumerloevei at this season. Equally, both races might range south as far as that of bicornis, especially during severe winters, and balcanica might easily reach the usual range of kumerloevei at this season.

As evidenced by the accompanying plates (1–2), whilst Roselaar’s description of the male upperparts coloration is basically correct, it seems of extremely limited use in a diagnosis, given that the colour of the hindneck in all taxa is variable, even when
Plates 1–2. Comparison of the holotypes of Eremophila alpestris penicillata and E. a. kumerloevei (both males), with another male specimen of E. a. penicillata (middle). (Guy M. Kirwan, © Natural History Museum, Tring)

Plates 3–4. Dorsal and ventral views of two Eremophila alpestris kumerloevei (both males), taken at Eregli, Turkey, in winter. (Guy M. Kirwan, © Natural History Museum, Tring)

Plates 5–6. Three male and one female Eremophila alpestris bicornis, all of them taken in summer in Lebanon/Syria, showing some of the range of variation found in this taxon. (Guy M. Kirwan, © Natural History Museum, Tring)
Comments on two subspecies described from Turkey & remarks on Bullfinch from the Balkans and Caucasus

Plates 7-8. Dorsal and ventral views of the holotype of Pyrrhula pyrrhula paphlagoniae. (Renate van den Elzen, © Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn)

Plates 9-10. Dorsal and ventral comparative views of Pyrrhula pyrrhula caspica (middle two birds) and Turkish specimens of P. pyrrhula (race unknown) collected in winter. (Guy M. Kirwan, © Natural History Museum, Tring)

Plates 11-12. Views of two male Pyrrhula pyrrhula caspica collected on Pish Kuh (Gilan province), northern Iran. (Frank Steinheimer, © Museum für Naturkunde, Zentralinstitut der Humboldt-Universität, Berlin)
comparing birds of the same age and season. Furthermore, the upperparts streaking, which is indeed very weak in *kumerloevei* and appears particularly useful for separating *penicillata* and *kumerloevei* does not always hold as a valid character. There is a male *kumerloevei* in NHM (1908.5.26.31) with patchily darker and more prominent streaking, as well as a male *penicillata* from the Caucasus (NHM.1965.M.8067) with very little streaking and thus inclining strongly towards most *kumerloevei* examined by me. Field observations in May, at Demirkazik in the Taurus of southern Turkey, also suggest that the extent and intensity of upperparts streaking in *kumerloevei* varies quite dramatically. In addition, some male *bicorinis* show upperparts streaking (albeit rather fine and pale), even in May/June, despite Roselaar’s assertion to the contrary, and thus appear very similar to *kumerloevei* in this feature. In respect of these features, the only ones advanced by Roselaar (1995) for separating females of two taxa, *penicillata* and *kumerloevei* seem to me virtually inseparable, although I have examined few with closely comparable states of wear. As stated by Roselaar (1995), in rump coloration *penicillata, balcanica* and *kumerloevei* appear inseparable, but I also have great difficulty in separating *bicorinis* using this feature, even with a reasonable series at hand. I find that there is far too much individual and seasonal variation in the facial and throat coloration of all four taxa for this feature to be usefully employed in their separation. Thus, one is left with the limited mensural data presented by Roselaar (1995) with which my own measurements closely agree, but given some overlap between all four taxa in both sexes and the lack of any published multivariate analysis discriminating them, it must be regarded as uncertain as to whether *kumerloevei*, at least, is truly diagnosable using wing-length alone.

In sum, like others (Shirihai & Svensson in prep), I contend that *kumerloevei* is probably sufficiently close to *penicillata* to be considered a synonym of the latter. The most recent review of subspecies in the widespread Horned (Shore) Lark recognises 42 races (Alström 2004), but I suspect that the ‘thorough review’ of racial limits across the entire range suggested by the latter author would pave the way for a considerably more rational view of the species’ taxonomy. Like many other Alaudidae, most races have been described on the basis of differences in plumage ground colour, which at least partially is determined by soil colour, in combination with size. Unsurprisingly, many examples of intergradation and intermediates are known, and a significant proportion of all variation that has been described is almost certainly clinal or extremely local. In the present case, it would be unsurprising to discover that *kumerloevei* grades into both *penicillata* to the east and *bicorinis* to the south, and perhaps even *balcanica* to the north-west. Thus, I dispute Roselaar’s (1995) suggestion that these taxa are all ‘markedly different’, for all of the differences between them described by him are, to other eyes, extremely subtle.

*Pyrrhula pyrrhula paphlagoniae*  
The holotype, a male taken in September, is from Karadere, near Bolu, in north-west Turkey (Plates 7–8), and Roselaar (1995) restricted this form to the montane forests of the western Black Sea Coastlands, and perhaps mountains elsewhere in western Turkey. It clearly belongs to the same group as *P. p. rossikowi* Derjugin & Bianchi, 1900, which inhabits forested areas of the eastern Pontics, the Caucasus and Transcaucasia. *P. p. paphlagoniae* is described as being close to both *P. p. germanica* C. L. Brehm, 1831 (of Europe), and *P. p. rossikowi* (from further east), but Roselaar (1995) considered it to be shorter winged than the latter and more or less identical in size to *germanica*. Bill shape differs from both other subspecies, with the base being more swollen than *rossikowi*, and male *paphlagoniae* has the mantle and scapulars paler than *germanica*, and the underparts also slightly paler red, whilst female *paphlagoniae* was distinguished from same-sex *germanica* in having a rather greyer cast to the

Guy M. Kirwan
upperparts. Compared to *P. p. caspica* Witherby, 1908, described from northern Iran, males are darker grey above and deeper red below.

As discussed below, most Turkish material available in natural history museum collections was taken in winter, and therefore is not very suitable for comparative purposes. Indeed, Roselaar (1995) seems to have only examined nine (six male) specimens from the relevant region in describing the new subspecies. Nonetheless, I have examined photographs of the holotype of *paphlagoniae* (held in ZFMK), as well as seven other specimens from the western Black Sea Coastlands held in NMW: three adult males (NMW 8664–6), an adult female (NMW 8667) and a juvenile female (NMW 31898), all taken at either Bolu Dağ or Karadere, near Bolu, in August–September 1934, by Koller, and an adult male and a juvenile female taken at Abant Golu in early–July 1968 (Rokitansky & Schüfter 1971). I do not find *paphlagoniae* diagnosable for the following reasons. In terms of upperparts coloration, of both sexes, I find it impossible to observe meaningful, in some cases even any, differences between *caspica, germanica, rossikowi* and *paphlagoniae*. Underparts coloration in males of these forms is also very similar, and I find it as easy to detect differences, of the scale that Roselaar purports to differentiate *paphlagoniae* from *germanica*, between different specimens of *paphlagoniae* taken at the same locality! As further discussed below for other subspecies, differences in bill structure are very hard to evaluate and need not represent anything more than local adaptation to different feeding conditions, which if true would make such a feature uninformative taxonomically (see also Helbig et al. 2002). Wing-length, perhaps superficially the best feature advanced by Roselaar (1995) as useful in diagnosing *paphlagoniae*, overlaps rather broadly with *germanica* (see Table 1), at least on the basis of the small series that have been subject to such scrutiny, and even to a lesser extent with *rossikowi*. Given that Roselaar (in BWP and 1995) considered *germanica* an intermediate form, it seems very difficult to also recognise *paphlagoniae* which is virtually identical in most features and certainly closely linked ecologically and biogeographically.

Most of the material that I have examined from Turkey was taken in winter (N=17, held in Manchester and Tring), with the majority Danford specimens from the Taurus. Roselaar (1995) ascribed a winter bird taken in northern Thrace to nominate *pyrrhula*, but I have difficulty in assigning any of the southern Turkish material, especially, to subspecies on the basis of coloration alone, as they could equally be *pyrrhula* (including *germanica*), *rossikowi* or Roselaar’s *paphlagoniae*, which might also be expected to move south to some extent in winter. Although Roselaar (1995) appears to place strong faith in wing-length, presumably in conjunction with overall coloration and, in some instances, bill structure as a means of separating such specimens, I find such an approach very difficult. Nominate *pyrrhula* and *rossikowi* overlap broadly in wing-length, and *paphlagoniae* to a lesser extent. *P. p. germanica* might be safely differentiable, at least in some instances, based on wing-length, from either *pyrrhula* or *rossikowi*, but there is probably much overlap with *paphlagoniae*, especially when comparing Bulgarian material appertaining to *germanica*. Furthermore, it must be kept closely in mind that in many instances sample sizes, especially for *germanica, paphlagoniae* and *rossikowi*, used by Roselaar (1995) and other authors, were small, in some instances pitifully so (see Table 1). I will address the issue of bill structure as a useful character below.

**COMMENTS ON OTHER TAXA OF BULLFINCH**

*P. p. caspica*, described from the south shore of the Caspian Sea, at ‘Alumdeh’ in western Mazandaran province (northern Iran), seems to be very poorly known indeed. Only six specimens consistently referred to this taxon appear to exist, just one of them a female, and one of them an immature male, all of these in non-Iranian
institutions. The only published list of material held in Iran, of the largest collections in Tehran, does not mention the species (Khaleghizadeh 2004). Of the six, there are two males in Tring (1907.12.21.569 and 1907.12.21.570), both taken in mid to late February, of which the latter is the holotype and the other a syntype (Plates 9–10). These two alone were considered sufficient by Witherby (1908) to erect the new taxon, which he considered to have the underparts brighter and redder than any other described form of *P. pyrrhula*, approaching *rossikowi*, and the upperparts to be purer, bluer grey than nominate *pyrrhula*. Of the other specimens, the immature male, from Dimalu, near Gurgan, Mazandaran province, held in the Field Museum of Natural History, Chicago (FMNH 244810), can be considered unfit for comparative purposes (Vaurie 1949; pers. obs.). The others comprise two males in Berlin (ZMB 27.549 and 27.548), taken by Gerd Heinrich at 2000 m on the Pish Kuh (Gilan) on 26 May 1927 (Plates 11–12), and a female (mentioned by Roselaar *in Cramp & Perrins* 1994), which I have not seen. Additionally, there are 11 (three of them female) taken by Walter Koelz in November and early December in extreme north-west Iran, mostly in the vicinity of Lake Uromiyeh, which Vaurie (1949) also ascribed to *caspica*, but others have considered to be probably intergrades with *rossikowi* (see below). Just over half of these (six) are currently held in FMNH (244804–244809).

Clement *et al* (1993) described female *caspica* as being predominantly brown above with paler or greyer underparts than *rossikowi*, whereas Roselaar (*in Cramp & Perrins* 1994) stated that female *caspica* is bluer grey above. However, Vaurie (1949), the only author to have apparently directly compared females of *caspica*, albeit those he assigned by inference to this form from Azerbaijan, considered them paler mouse grey below and less tinged yellowish brown on the lower back and rump. Furthermore, Clement *et al* (1993) considered that probably both of these subspecies are present in northern Iran! Given this somewhat confused account, it seems hardly surprising that Clement *et al* (1993), Cramp & Perrins (1994) and Roselaar (1995) considered there to exist intergrades between *rossikowi* and *caspica* from the Lenkoran (Azerbaijan) region of eastern Transcaucasia.
### Table 1. Mensural data for relevant forms of Bullfinch *Pyrrhula pyrrhula* discussed in this paper, taken from a variety of published sources. My own data accord closely for *P. p. rossikowi* and *P. p. germanica* with those of Roselaar (1995) and are thus not repeated here. All measurements in mm. Where sample size differs from that in the column second from left this is stated.

<table>
<thead>
<tr>
<th>Taxon</th>
<th>Number of specimens</th>
<th>Country</th>
<th>Wing-length</th>
<th>Tail-length</th>
<th>Culmen-length (to skull)</th>
<th>Culmen-length (to feathers)</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Males</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><em>P. p. caspica</em></td>
<td>2</td>
<td>Iran</td>
<td>Both 88</td>
<td></td>
<td></td>
<td></td>
<td>Streemann (1928)</td>
</tr>
<tr>
<td><em>P. p. caspica</em></td>
<td>2</td>
<td>Iran</td>
<td>84, 86</td>
<td>62, 64</td>
<td>11.16, 11.38</td>
<td></td>
<td>Own measurements</td>
</tr>
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<td>6</td>
<td>NW Turkey</td>
<td>84.0–91.5</td>
<td></td>
<td></td>
<td></td>
<td>Jordans &amp; Steinbacher (1948)</td>
</tr>
<tr>
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<td>1</td>
<td>NW Turkey</td>
<td>86</td>
<td></td>
<td></td>
<td></td>
<td>Rokitansky &amp; Schifter (1971)</td>
</tr>
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<td>3</td>
<td>NE Turkey</td>
<td>90.5–92.0</td>
<td></td>
<td></td>
<td></td>
<td>Roselaar (1995)</td>
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<td>94</td>
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<td>11</td>
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<td>Nesterov (1911)</td>
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<td>6</td>
<td>Transcaucasia</td>
<td>90–95</td>
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<td>11.7 (n=1)</td>
<td></td>
<td>Vaurie (1949)</td>
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<tr>
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<td>8</td>
<td>Iranian Azerbaijan</td>
<td>88–91</td>
<td></td>
<td>10.5–12.0</td>
<td></td>
<td>Vaurie (1949)</td>
</tr>
<tr>
<td><strong>Females</strong></td>
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<tr>
<td><em>P. p. caspica</em></td>
<td>1</td>
<td>Iran</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
<td>Roselaar (in Cramp &amp; Perrins 1994)</td>
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<tr>
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<td>NW Turkey</td>
<td>85–88</td>
<td></td>
<td></td>
<td></td>
<td>Jordans &amp; Steinbacher (1948)</td>
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<tr>
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<td>1 (juv.)</td>
<td>NW Turkey</td>
<td>85</td>
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<td></td>
<td></td>
<td>Rokitansky &amp; Schifter (1971)</td>
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<tr>
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<td>2</td>
<td>NE Turkey</td>
<td>89, 90</td>
<td></td>
<td></td>
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<td>Roselaar (1995)</td>
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<td>5</td>
<td>Transcaucasia</td>
<td>87–91</td>
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<td>10.7–12.0 (n=3)</td>
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<td>Vaurie (1949)</td>
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<tr>
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<td>87.5–89.0</td>
<td></td>
<td>10.5–11.5</td>
<td></td>
<td>Vaurie (1949)</td>
</tr>
</tbody>
</table>
I consider *caspica* to be not diagnosable, as the Tring and Berlin specimens that I have examined fall well within the range of coloration of both the upper- and underparts of six *rossikowi* from Transcaucasia held in the same institution, although the underparts perhaps tend to be somewhat redder than in the nominate form. Vaurie (1949) had long ago noted that the differences in males of all three forms, *pyrrhula*, *rossikowi* and *caspica*, to be ‘frankly impossible to assess’. Although Vaurie (1949) considered female *caspica* to be diagnosable, others (Clement et al 1993, Roselaar in Cramp & Perrins 1994, Roselaar 1995) have doubted that eastern Azerbaijan birds and, by inference, those Koelz found wintering in north-west Iran can be certainly assigned to *caspica*. What does seem incontrovertible is the existence of a poorly marked cline west to east in the Caucasus. Thus, it seems highly inadvisable to continue to recognise a form known in museums almost entirely from wintering birds of unknown breeding range (virtually the only summer-collected material from Iran is unusable for comparative purposes), especially given that most described variation within the species’ Western Palearctic range is minor.

The status and distribution of the Bullfinch in Iran has been slightly confused in the literature. The map in Hűe & Etchécopar (1970) shows breeding in north-west Iran and throughout the forests of the Caspian lowlands. These authors state that *rossikowi* breeds in Persian Azerbaijan, and give the range of *caspica* (which they consider very similar to *rossikowi*) as northern Iran, from Azerbaijan east through the south Caspian to Gurgan. Elsewhere it was considered to breed in ‘northern Iran to south Caspian region’ (Clement et al 1993), who mapped it as occurring east as far as western Golestan province, whilst Porter et al (1996) mapped it as breeding only in the extreme north-west close to the shores of the Caspian and on the border with Azerbaijan, and Dickinson (2003) listed the range as simply ‘N Iran’, whilst D. A. Scott (in Cramp & Perrins 1994) considered Bullfinch to be a rare winter visitor to the western Caspian region of Iran, presumably from the breeding range in the northern part of the Iranian province Azerbaijan. Scott (in litt 2005) furnished me with the very few sight records of the species of which he is aware from Iran, which do indeed suggest that it is probably resident in the extreme north-west of the country (see Table 2), but he further stated that ‘we never found Bullfinches in the Caspian forest during the breeding season, despite many visits to potentially suitable habitat, and if the species breeds there, it must be very scarce’. It is also worth remarking, as noted by Scott, that the deciduous forests of Arasbaran in the Kalibar Mountains of northern Azerbaijan province are widely separated from the south Caspian forests but rather tellingly represent the southernmost extremity of the Caucasian forests. Thus, one is left with the immature male from Dimalu (taken on 23 July 1940) as the sole evidence for breeding in the south Caspian forests; given that this could have been a wandering bird from elsewhere, it seems preferable, for now, to consider *P. pyrrhula* as a breeder only in extreme north-west Iran.

In plumage, *rossikowi* also differs scarcely at all from nominate / *europoea*, although most of those held in the Natural History Museum (Tring) are winter birds. Although nominate *pyrrhula* is certainly somewhat pinker on the underparts in most (and females are possibly also less deeply saturated below), perhaps with a slightly whiter ventral region (although this is not consistent in longer series), two birds from the Carpathians, taken in May (1949.??1.8873, 1949.??1.8732), are equally well saturated and as much inclined to red as many but not all *rossikowi* (Plate 13). Vaurie (1949) had, as mentioned above, already noted the impracticality of attempting to diagnose colour differences between males of *pyrrhula*, *rossikowi* and *caspica*, and Stepanyan (1990) considered both latter names to be synonyms of nominate *pyrrhula*. Buturlin (1906) considered the bill shape of *rossikowi* to differ from *pyrrhula*, principally in being more swollen at the base,
but this could easily signal a local adaptation to particular feeding conditions and, like all other bill-shape differences highlighted by various authors over the years in support of subspecific variation in this species, seems of very little or no significance in understanding evolutionary patterns in the species. My analysis of bill shape at NHM suggests that this character is extremely difficult to assess and of little practical use in the diagnosis of different taxa. Svensson (1992) also admitted rossikowi on the basis of size (it being as large as the nominate), coloration of the underparts (males) and upperparts (females), and, on average, ‘stronger’ bill, and Vaurie (1949) also considered the bill to be longer. Personally, I doubt that coloration in either sex is sufficiently different to warrant separation, and that the size is similar to nominate becomes meaningless if one does not admit intervening subspecies, which is what Svensson effectively does, and even Roselaar (in Cramp & Perrins 1994) doubted whether more than two taxa, europaea (whose validity is not considered here) and pyrrhula required naming. The apparent isolation of rossikowi is, in fact, probably largely an artefact of observer effort, and the latter is probably linked to European populations through germanica and then paphlagoniae, which probably extends throughout northern Turkey, admittedly at low density and only in a relatively small band.

Nonetheless, Roselaar (1994, in Cramp & Perrins, and 1995) continued to recognise germanica, despite his slight reservations, albeit having plumage characters and bill shape closely according with nominate pyrrhula. Its range extends from at least Denmark and Germany east and south to Poland and the Balkans, and perhaps marginally to extreme north-west Turkey (see above). I have been fortunate to examine a very good series of birds from the range of this taxon at the museum in Sofia, as well as other material in Tring, and find all those I have examined, from Germany as far as Bulgaria, at best dubiously separable according to plumage from specimens of the nominate, e.g. from Sweden (in Sofia and Tring), as only mantle colour (slightly darker grey in germanica) seems even vaguely useful in diagnosis, and even this is subject to some variation and the difference is so shallow as to be of no practical use, even in series. Svensson (1992), too, did not accept germanica.

DISCUSSION

Roselaar (1995) considered a total of 21 subspecies endemic to Turkey, of which the vast majority (18) are passerines, including of course the two taxa that are the subject of this paper. However, a detailed re-analysis of subspecific variation in Turkish birds (Kirwan et al in prep) suggests that many of these taxa and others originally described from Turkey (based on the list presented by Kumerloove 1984) are, in fact, not readily diagnosable. Many of these names represent merely very minor or, at best, moderate variation within a cline. Whilst, as noted by Roselaar (1995), Turkey is an important
country for studying geographical variation within Western Palearctic birds, due to the presence of European, Mediterranean, Middle Eastern and Caucasian forms, it is unsurprising that very few of those previously considered to be endemic are genuinely meritorious of nomenclatural recognition, as very few, if any, of the physical features in Turkey’s landscape can be said to function as truly isolating mechanisms. Appendix 1 summarises my views on the worthiness of recognising those forms considered endemic to Turkey (Roselaar 1995) or originally described from the country (Kumerloeve 1984).

In common with my findings concerning E. a. kumerloevei and P. p. paphilagoniae, I believe that a much more stringent view of what constitutes a diagnosable taxon (eg following Barrowclough 1982, Haffer 1997, 2003), in which recognition of (usually small) steps within long clines must be regarded as highly unnecessary, is likely to better serve taxonomists searching for a more meaningful view of evolutionary history. I echo the recent thoughts of Collar (2004), who called for taxonomists to pay greater attention to the vast storehouse of material at their disposal in the world’s museums, which has tended, in recent years, to be relatively ignored in favour of molecular analyses, notwithstanding the unquestionable need for the latter. The many constituent taxa within P. pyrrhula (12 recognised in Dickinson 2003), in particular, require further investigation using molecular methods, despite the results of Arnaiz-Villena et al (2001), which suggested that none of the three taxa examined therein had achieved more than subspecific status. Of these, two, griseiventris and cineracea were elevated to species by Stepanyan (1990).

ACKNOWLEDGEMENTS

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REFERENCES


Stepanyan, L. S. 1990. [Conspicuous of the ornithological fauna of the USSR.] Nauka, Moscow. [In Russian].


APPENDIX 1.

Taxa described from Turkey considered synonyms by Kirwan et al (in prep.). Those marked * were considered endemic to Turkey by Roselaar (1995). Those denoted † were not treated as valid by Roselaar (1995).

Tetraogallus caspius tauricus Dresser 1876 (=T. c. caspius); †Tetraogallus caspius challagui Oustalet 1877 (=T. c. caspius); *Francolinus francolinus billypayaui Meinertzhagen, 1933 (F. f. francolinus); Anhinga rufa chantrei (Oustalet 1882) (=A. r. rufa); Falco cherrug gunneyi Menzbier, 1888 (=F. c. cherrug?); Ceryle rudis syriaca Roselaar, 1995 (=C. r. rudis); *Dendrocopus major paphlogonae Kumerloewe & Niethammer, 1935 (=D. m. pinetorum); *Dendrocopus medius anatoliae Hartert, 1912 (=D. m. medius); †Melanocorypha calandra holloni Kumerloewe, 1969 (=M. c. calandra); †Melanocorypha calandra dathei Kumerloewe, 1970 (=M. c. gaza?); *Calandrella brachyactyla woltersi Kumerloewe, 1969 (=C. b. hermonensis?); *Calandrella rufescens niethammeri Kumerloewe, 1963 (=C. r. rufescens); *Galerida cristata weigoldi (Kollibay, 1912) (=G. c. subtaurica); *Galerida cristata ionnafe (Kollibay, 1912) (=G. c. caucasica); †Galerida cristata arkanae Kumerloewe & Niethammer, 1934 (=G. c. subtaurica); Eremophila alpestris kumerloeovi Roselaar, 1995 (=E. a. penicillata?); *Cincclus cincclus amypteryn Neumann & Palladan, 1937 (=C. c. caucasicus); *Prunella modularis euxina Watson, 1961 (=P. m. modularis?): more research required; *Eriithacus rubecula bulbansicus Watson, 1961 (=E. r. rubetra); †Saxicola rubetra senegali Kumerloewe, 1969 (=S. r. rubetra); †Saxicola torquata gabriaeliae Neumann & Palladan, 1937 (=S. rubicola); †Monticola saxatilis coloratus Stepanyan, 1964 (=M. s. saxatilis); †Turdus viscivorus billypayanus Keve, 1943 (=T. v. viscivorus); †Syntyrurus communis fraudeli Kumerloewe, 1969 (=S. c. ictropsis); *Parus pinus kermesigui Kumerloewe, 1958 (=P. b. biarminicus?): more research required; *Aegithalos caudatus tebrotonus (Gunther, 1865) (=A. c. alpinus); Parus lugubris anatoliae Hartert, 1905 (=P. l. lugubris); †Sitta europaea leventina Hartert, 1905 (=S. e. caeae); *Sitta neumayer zarudnyi Buturlin, 1908 (=S. n. neumayer); †Cerciha brachyactyla harterti Hellmayr, 1901 (=C. b. brachyactyla); *Cerciha brachyactyla steneemannii Kumerloewe & Niethammer, 1934 (=C. b. brachyactyla); *Remiz pendulines persimilis Hartert, 1918 (=R. p. pendulines); Garrulus glandarius anatoliae Seeborn, 1883 (=G. g. krynickii); *T. g. nigripuruns Buturlin, 1906 (=G. g. krynickii); *G. g. lendli Madarasz, 1907 (=G. g. lendli); *G. g. hungaeueri Keve, 1967 (=G. g. glandarius?): more research required; †Passer domesticus colchicus Portenko, 1962 (=P. d. domesticus); †Passer domesticus mayaudi Kumerloewe, 1969 (=P. d. biblicus); †Montifringilla nivalis leucura Bonaparte, 1855 (=M. n. alpicoa?); more research required; †Montifringilla nivalis fahrettinii Watson, 1961 (=M. n. alpicoa); Carduelis carduelis niedercki Reichenow, 1907 (=C. c. carduelis); *Loxia curvirostris vasvarei Keve, 1943 (=L. c. guilemardi); *Pyrrhula pyrrhula paphlogonae Roselaar, 1995 (=P. p. pyrrhula).
Observations on the breeding birds of the Gaza Strip, Palestine

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The Gaza Strip is a narrow finger of land some 40km long and 9km wide, bounded by the southernmost Mediterranean Sea. The Gaza Strip consists of sand dunes in the west and loess plains in the east. Three wadis dissect it: Beit–Hanoun in the north, Gaza in the middle and Silka in the south at Deir al-Balah City. This study covers 35 breeding bird species in the Gaza Strip, 3 former breeders, 21 resident breeders, 4 that are both resident and passage migrants, 5 migrants that breed in spring and summer and 2 species that arrive in autumn and remain for the spring and early summer breeding season. Records of preferred habitats, breeding season, nesting habitats, nest construction, egg-laying period, clutch size, incubation and nesting periods, hatching and caring the young, broods per season and preferred food are given for some species.

INTRODUCTION

The historical extent of the occurrence and distribution of the Gaza Strip avifauna is poorly known because there have been few extensive field surveys or investigations (al-Safadi 2003a). One particular early study on the birds of the Arabia, including Palestine, was that of Meinertzhagen (1954). More recent information has been provided by al-Safadi (1997, 1999, 2001, 2003a, 2003b). Shirihai (1996) produced a comprehensive work on the birds of Israel, but apart from some mapping indications, information on Gaza Strip breeding birds was lacking.

METHODS

Since 1996, I have made frequent field visits to different areas of the Gaza Strip to record the breeding birds. I made detailed observations of the distribution, preferred habitat, behaviour, breeding season, preferred nest site, nest construction, egg-laying period, clutch size, duration of incubation and fledging, timing of hatching, parental care, broods per year and the preferred food of 35 species. I also have recorded the thickness and strength of egg shells and membranes. Clutch size, egg dimensions and weight for some species are given in Table 1. The assessments of species’ status are my own, as are the subspecies’ identity.

Table 1. Average dimensions (mm) and weight (g) of eggs of some bird species in Gaza Strip, Palestine.

<table>
<thead>
<tr>
<th>Species</th>
<th>Eggs</th>
<th>Eggs Weight</th>
<th>Eggs Weight</th>
<th>Eggs Weight</th>
<th>Eggs Weight</th>
<th>Eggs Weight</th>
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<tr>
<td>Tachybaptus ruficollis</td>
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<td>24.7</td>
<td>27.0</td>
<td>25.9</td>
<td>33.6</td>
<td>39.0</td>
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<tr>
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<td>30.5</td>
<td>34.2</td>
<td>32.1</td>
<td>39.6</td>
<td>44.6</td>
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<td>40.5</td>
<td>42.5</td>
<td>41.5</td>
<td>50.7</td>
<td>51.7</td>
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<tr>
<td>Alectoris chukar</td>
<td>51</td>
<td>29.0</td>
<td>31.5</td>
<td>28.9</td>
<td>36.4</td>
<td>44.0</td>
</tr>
<tr>
<td>Gallinula chloropus</td>
<td>52</td>
<td>27.2</td>
<td>31.2</td>
<td>29.9</td>
<td>39.4</td>
<td>45.5</td>
</tr>
<tr>
<td>Himantopus himantopus</td>
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<td>29.2</td>
<td>32.5</td>
<td>31.5</td>
<td>41.5</td>
<td>48.7</td>
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<tr>
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<td>38.5</td>
<td>37.5</td>
<td>49.5</td>
<td>53.5</td>
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<td>30.7</td>
<td>28.9</td>
<td>36.8</td>
<td>42.5</td>
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<tr>
<td>Columba livia</td>
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<td>27.4</td>
<td>28.5</td>
<td>27.9</td>
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<td>38.1</td>
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<tr>
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<td>7</td>
<td>21.4</td>
<td>23.7</td>
<td>22.7</td>
<td>28.5</td>
<td>31.7</td>
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<tr>
<td>Streptopelia turtur</td>
<td>4</td>
<td>24.0</td>
<td>24.5</td>
<td>24.4</td>
<td>33.5</td>
<td>34.0</td>
</tr>
<tr>
<td>Streptopelia senegalensis</td>
<td>12</td>
<td>20.4</td>
<td>21.3</td>
<td>20.9</td>
<td>26.0</td>
<td>28.5</td>
</tr>
</tbody>
</table>
Tyto alba     7     30.5  31.8  31.4  39.0  40.5  39.7  22.0  23.0  22.7  
Asio otus     5     32.0  32.8  32.5  40.0  41.8  41.1  22.2  23.5  23.0  
Athene noctua  5     26.5  27.2  27.0  32.0  32.9  32.4  12.5  12.9  12.8  
Halcyon smyrnensis  17    26.5  29.0  27.9  29.3  32.5  31.0  12.0  14.0  12.8  
Upupa epops    11    17.5  19.0  18.1  24.5  26.0  24.9  3.7   4.9   4.2   
Dendrocopos syriacus  14    19.0  19.6  19.3  25.6  26.5  26.0  5.5   5.7   5.6   
Galera cristata  14    15.0  16.5  15.7  22.6  24.5  23.5  2.6   3.5   3.2   
Hirundo rustica  9     13.0  14.0  13.5  19.0  20.5  19.8  1.7   1.8   1.7   
Pycnonotus xanthopygos  11    16.5  18.0  17.0  24.0  25.0  24.4  3.3   4.0   3.6   
Turdus merula    40    20.0  22.5  21.3  28.0  33.2  29.4  6.0   8.5   7.1   
Prinia gracilis  17    11.0  11.5  11.3  14.0  16.0  14.7  1.0   1.3   1.1   
Parus major     17    13.0  13.6  13.3  16.5  18.4  17.3  1.5   1.7   1.6   
Garrulus glandarius  5     21.2  23.5  22.5  29.8  31.5  30.5  7.5   9.0   8.5   
Corvus cornix    14    27.0  29.9  28.2  38.5  47.7  43.2  15.5  17.3  16.6  
Passer domesticus  15    14.0  17.0  14.9  20.5  24.0  21.5  2.3   2.8   2.5   
Passer hispaniolensis  6     16.2  17.2  16.8  20.8  24.0  22.4  3.0   3.5   3.1   

STUDY SITES
Three main study sites comprised the study area.

Wadi Gaza
This site comprises the western portion of Wadi Gaza (WG), some 9km in length and 4-5km² in area. Water emerges from the last third of the wadi onwards, forming small streams and brooks. The volume and flow of water increases gradually, debouching into a large lake in an estuary, about 1000-1200m long, 150-250m wide and 1-2m deep. The lake comprises perennial freshwater polluted by some sewage run-off. Wadi Gaza represents a typical natural dense riverine forest of mixed evergreen and few deciduous trees, bushes and shrubs, predominately by tamarisk Tamarix aphylla, T. nilotica, zizyphus Zizyphus lotus, carob Ceratonia siliqua, acacia Acacia cyanophylla, sycamore Platanus sp, sycamone (mulberry) Morus sp, date palm Phoenix sp, boxthorn Lycium shawii, asparagus Asparagus officinalis, tobacco trees Nicotiana glauca, prickly pear cactus Opuntia stricta, reed Phragmites sp, cat-tail Typha sp and others (some forming windbreaks), with a few introduced camphor Cinnamomum camphora and casuarina Casuarina sp trees. This shrub and tree community covers the Wadi from the political border in the east to the sea in the west. This rich habitat mix attracts many birds, whether resident or migratory, terrestrial or aquatic, to, feed, shelter, breed, roost, 'refuel', or use as a migratory waypoint.

Al-Shargiah
The al-Shargiah area lies adjacent to Gaza City to the northeast, east and southeast. It extends c10km along the eastern border, varies from 0.5-1km in width, includes the Gaza rubbish dump (c0.2km²) and comprises many different cultivated fields of olive, citrus, guava, grape, almond, fig, pomegranate, vegetables or cereals. In addition it has many scattered trees such as carob, sycamore, date palm, zizyphus, acacia, cypress Cupressus sp, prickly pear and others. The few small wasteland and neglected areas contain mostly drought-resistant shrubs, bushes and weeds. All fields are...
irrigated from pump wells through an extensive network of pipes. There is a wide variety of habitats for birds, the rubbish dump being a magnet for raptors and herons.

Beit-lahia sewage lagoons
The Beit-lahia sewage lagoons are situated c7km north of Gaza City and 5km east of the sea. This flat and sandy area is roughly 750m long and 500m wide and is surrounded by wire netting. In the middle there are 7 deep concrete basins intended to collect waste water from the villages of Beit-lahia, Beit Hanoun and Jabalia, but because these are inadequate, most of the waste water flows into adjacent sandy areas, producing large pools. A dense wood of casuarina studded with camphor trees and patches of shrubs, bushes, weeds, typha, and reeds surrounds and threatens to invade the basins. Many vegetable fields lie north of the sewage lagoons and contain many fruit trees, as well as acacia, tamarisk, zizyphus. There are also windbreaks within an overall area of c2km². It is an important if artificial habitat for waterbirds, providing secure feeding, resting, roosting and breeding places for many terrestrial birds, too.

SPECIES ACCOUNTS

Little Grebe Tachybaptus ruficollis. A common resident and breeding summer visitor in the Gaza Strip, encountered in the estuary of WG and Beit Lahia sewage lagoons and not recorded on the Gaza Strip sea coast. Pair formation and nest-building start in early summer, breeders displaying chestnut from the cheeks to the sides of neck and a conspicuous yellow patch at the gape. Their floating nests, built from vegetation and anchored to water plants, are rather exposed. Egg-laying begins in early May and extends to mid-June. The clutch comprises 2-7 chalky-white eggs, (usually 3-6). When not incubating, the parents cover their eggs with water plants. The incubation period lasts some 3 weeks. The young are able to move and swim. Both parents care for the young.

Cattle Egret Bubulcus ibis. The most abundant resident waterbird in the Gaza Strip. Found throughout the year mainly in Wadi Gaza, sewage lagoons at Beit Lahia, Sheikh Egleen and Rafah, rubbish dumps, wetlands and agricultural areas. Thousands haunt the Gaza rubbish dump in September and October and hundreds are at Beit Lahia sewage lagoons. As elsewhere in its range, this gregarious and almost omnivorous species associates with grazing animals and follows the plough. The breeding season in the Gaza Strip usually began in March, the birds achieving for a time bright red lores, bill and legs (see Sandgrouse 27 (1) p57 Plate 6), as described in Bhushan et al (1993). In the Gaza Strip, the nests, loosely assembled platforms, were built in the larger trees, such as casuarina, tamarisk (now mostly lost) and in thorn bushes, were constructed mostly from casuarina branches and twigs. In May 1996, one large casuarina tree at Beit Lahia sewage lagoons held a colony of more than 25 nests. Usually the nests contained 3-5 pale-green eggs: the size and weight of the eggs decreased when there were more than three eggs per nest. Both parents incubated the eggs over about 22 days and fed their nestlings for about five weeks.

Little Egret Egretta garzetta. A formerly common resident breeding waterbird in the Gaza Strip. It is found throughout the year mainly in Wadi Gaza, the sewage lagoons of Beit Lahia and Sheikh Egleen, in wetlands and at rubbish dumps, feeding mostly on invertebrates and amphibian. Usually seen in small numbers (4-15 birds) it occurs in flocks of about 50 birds at sewage lagoons, although hundreds appear at the Gaza rubbish dump in September and October. The breeding season started in early February, as the birds develop their plumes, the tips of those on the back curling upwards; for a time, the lores become dark pink and the feet red, according with Ardley (1987) and Bhushan et al (1993). Colonies formed in large tamarisk, thorn and sycamore trees (now mostly lost) at Wadi Gaza, nests being loosely constructed
platforms of large sticks and small twigs. Clutches comprised 3–5 eggs, both parents incubating them for about 3 weeks and feeding the nestlings for another five.

Mallard *Anas platyrhynchos*. Passage migrant and winter and spring visitor, numbers peaking in November when more than 150 may appear at Beit Lahia sewage lagoons, the species being fairly common in Wadi Gaza and at Beit Lahia from mid-October to mid-December. Mallard is the only breeding wildfowl species in the Gaza Strip, 2–3 pairs remaining at Beit Lahia until the start of the breeding season in March and April. Usually, Mallard nests are depressions in the ground, close to water, the inside diameter being c20cm, and well concealed among dense grasses or under the spread of casuarinas. The clutch comprises 6–13 eggs (usually 7–10). The egg colours blend in well with their surroundings, being whitish, greyish buff, dirty white or dirty light greenish. The female incubates the eggs for about four weeks, the males leaving the area just before hatching. In late May or early June the female guards her brood in the Beit Lahia sewage lagoons.


Black Kite *Milvus migrans migrans*. The commonest and most abundant raptor of the Gaza Strip, hundreds being present in February to March at the Gaza rubbish dump., Other dumps attract dozens, and individuals can be encountered everywhere in the Gaza Strip. Until 1997 a few pairs built nests mostly in large, tall tamarisks and cypresses (now mostly lost) along the eastern borders and beside Gaza rubbish dump. The nest is a large untidy structure of sticks, about 60–70cm in diameter, the clutch comprising 1–5 eggs (usually 2–3) laid in February and March, their colour being dull chalky-white with bold reddish-brown blotches mainly at the broad end. This species is of ecological value, because by taking small rodents it plays an important role in pest control.

Chukar *Alectoris chukar sinaica*. A common resident breeding species and the sole gamebird in the Gaza Strip, usually found in pairs or small parties of 7–21 birds in agricultural land, wasteland, wadi beds and hills. The female has one brood per year between March and May. Eggs are laid in a scrape on the ground under cover of the dense grasses found beneath thick bushes or below olive, acacia, casuarina and citrus trees. The nest is lined with loose dried grasses and some feathers. Egg-laying begins in March and April, the normal clutch complement ranging between 9–17 eggs. Larger clutches (21–22 eggs), are occasionally found, but it is suspected that at least two females laid in the same nest. Eggs are dull sandy to pale brown, patterned with dense small dark brown spots, mainly at the broad end. The female incubates the eggs for 21 days, hatching occurring simultaneously. As soon as hatching is complete, the hen and her chicks leave the nest with its eggshells (al-Safadi 1999). The eggshell and its membranes are noticeably thick and hard. The chick pierces the shell with its white egg ‘tooth’, creating a semi-circle about a fifth of the distance from the broad end to give the egg the appearance of a pot with a lid. The chick then levers the cover open and emerges without breaking the lid free. I have been unable to rear one-day-old chicks, which rather emphasizes the role that the parent birds play in leading their offspring to food (Ardley 1987). This species has an economic value and is hunted for
its delicious meat, but because it feeds on the ground on grains, seeds and vegetation, it can cause great damage to cucumber and snake-cucumber (Cucumis spp) fields.

**Common Quail** *Coturnix coturnix coburnix*. A common passage migrant and autumn visitor, it is usually seen in large numbers peaking in mid-September to mid-October when hundreds, if not thousands, are trapped each year by nets placed along the Gaza Strip coast. Small numbers also visit the Gaza Strip in spring, and from time to time a few pairs remain to breed. As elsewhere in its migration range, it usually is solitary, being rarely seen and encountered only by chance amongst dense grasses, weeds and low vegetables. It breeds in March or April on the ground, among grasses, weeds and crops. The clutch comprises 6–13 eggs, incubated for about 18 days; fledging occurs within 16–18 days.

**Common Moorhen** *Gallinula chloropus chloropus*. The second most common and abundant waterbird in the Gaza Strip, being a common resident and widespread at Beit Lahia (often more than 1500) and Sheikh Egleen sewage lagoons and Wadi Gaza. The breeding season begins in March, egg-laying in late May to mid-June, the incubation period lasts 3 weeks and fledging occurs after 6 weeks. In addition to the expected well-concealed nest locations in dense cover close to the water, some are occasionally found on dead trees lying in the water or in holes in dead dried tree trunks. As well as available natural materials such as sticks, twigs, grass, leaves and feathers, threads and nylon bag fragments feature in nest-building. The full clutch range is 6–13 eggs (normally 7–10). It was noted that the size and weight of the eggs decreases when the clutch is larger than eight. Foraging mostly occurs in the nearby woodlands and cultivated fields. Roosting occurs always in trees. Field rats *Rattus rattus ssp* may destroy some nests around the edges of pools.

**Eurasian Coot** *Fulica atra atra*. The third most abundant waterbird in the Gaza Strip, being widespread in Wadi Gaza and the sewage lagoons at Beit Lahia and Sheikh Egleen as a fairly common breeding resident. Over 1000 may occur in Beit Lahia. The breeding season seems to start in early April, lasting until July. Clutch size is 2–6 white eggs. Egg-laying seems to start in early May, incubation lasting about 3 weeks; the young fledge in about two months. Groups of varying sizes graze in the nearby fields of wheat, barley, lentil, bean, maize and alfalfa, causing much damage. In general, Coot and Moorhen live sympatrically around any standing water at Beit Lahia and Wadi Gaza.

**Black-winged Stilt** *Himantopus himantopus*. The second commonest resident wader in the Gaza Strip, present all year round in Wadi Gaza (flocks 30 strong), and the Beit Lahia (50 strong) and Sheikh Egleen lagoons. It has not been recorded along the sea coast. The breeding season in the Gaza Strip seems to be from March to July, egg-laying starting in late April and May. Their nest-scrapes are vulnerable to predation, mainly from Hooded Crow *Corvus cornix*. The clutch comprises 2–4 eggs. The incubating period lasts about 24 days, the eggs hatching at intervals as determined when each was laid. The parents remove the eggshells from the nest. Hatching takes about an hour, the chick pecking the eggshell longitudinally from the broader end. One hour after hatching the chicks are able to move, run quickly, swim and peep in response to their parents. The young are able to fly well within 30 days, but still accompany their parents.

**Eurasian Stone-curlew** *Burhinus oedicnemus saharae*. A common resident breeding bird, encountered throughout the year and widespread in the Gaza Strip. It often occurs in open wadi beds, sandy areas with scant vegetation and in agricultural regions with or without scattered trees, usually being seen in pairs or small parties of 5–16 birds, not far from water bodies. The breeding season in the Gaza Strip begins in
March. The nest, just a scrape on the ground, is found in open areas or under trees. Egg-laying starts in early April to early June. The usual clutch is of 2 eggs, unlike Shirihai (1996). The eggs match the habitat well and are very difficult to spot. The incubating period lasts 25 or 26 days, hatching taking an hour. The chicks are able to leave the nest with their parents an hour later.

**Spur-winged Lapwing (Plover)** *Vanellus spinosus*. The commonest resident wader in the Gaza Strip, found mainly in and around the sewage lagoons, wadis, wastelands and occasionally in agricultural fields scattered with grasses and sparse, short vegetation. Usually, they occur in pairs or in small parties, but sometimes as scattered singletons, but should an intruder approach their territory, a large flock can assemble rapidly, perhaps 70 birds or more. The population has increased remarkably from about 100 in January 1996 to more than 500 by January 2003. The breeding season begins in April and extends to early September. The nest is a scrape, the usual clutch comprising 4 eggs, sometimes 3, and rarely two. The eggs, laid at two-day intervals and resembling pebbles, face inwards in the nest, a full clutch forming a cross. Many small stones, 5–10mm long, common at the nesting area at Beit Lahia sewage lagoons, are often arranged in and around the nest, making it blend in with the nest's environment. The incubation period lasts 22 days, hatching periodicity matching laying. The parents remove the eggshells away from the nest immediately after the young hatch. Hatching takes about an hour, the chicks pecking the eggshell upper surface and emerging from the broad end. About an hour after hatching, the chicks can move, run quickly, swim and peep in response to the parent. After 30 days the young can fly well but do not accompany their parents, but remain close to the dense vegetation around the basins and pools.

**Rock Dove/Feral Pigeon** *Columba livia palaestinae x forma domestica*. A common resident breeding dove of the Gaza Strip, found throughout the year in small groups of 2–12 birds in wadis and agricultural areas close to buildings. It feeds mainly on the ground on a variety of wild and cultivated cereals such as wheat, barley, lentil, bean, maize and sorghum, but it also forages amongst domestic refuse. Most birds probably have a strong component of Feral Pigeon in their ancestry and occur almost everywhere, breeding throughout the year mostly in the farmhouses, building ledges, roofs, derelict artesian wells and other structures. The full clutch is usually 2 oval white eggs and rarely up to four. Both parents share the incubation over some 18 days and the feeding. Fledging occurs after 35–37 days.

**Eurasian Collared Dove** *Streptopelia decaocto decaocto*. A rather common breeding resident dove in the Gaza Strip, widespread across a variety of habitats containing trees, bushes and scattered water supplies. It forages for grain and other seeds, sometimes extracting small titbits from the accumulated solid residual matter at the sides of the Beit Lahia Station sewage lagoons. Its breeding season coincides with the onset of rich food supply that lasts from March to August. Usually it nests on horizontal forked branches in dense trees and bushes of tamarisk, casuarina, citrus, and olive, 1.5–2.5m above ground level. Both parents incubate the eggs over about 15 days and feed the young until they fledge 17–18 days later. The species suffers heavy (20–30% of all nests) predation by field rate and Eurasian Jay *Garrulus glandarius*.

**European Turtle Dove** *Streptopelia turtur arenicola*. Breeder and abundant passage migrant throughout the Gaza Strip, although winter and early spring numbers are low, thereafter increasing remarkably up to the summer breeding season. It occupies open woodland, wadis, and agricultural areas with bushes and trees, preferably with sources of water to drink. Its grain and seed diet includes casuarina seeds. The breeding season lasts from mid-April to late July. The nest is concealed among dense, thick shrubs and
trees of citrus, olive, casuarina, tamarisk, thorn and bougainvillea, always on horizontal forked branches, 1.5–3m from the ground. The two eggs, entirely white, hatch within 14–16 days, at intervals. The young leave the nest about 16–18 days later. The species is predated by crows, jays and field rats, the nest loss rate being about 50%.

Laughing Dove (Palm Dove) *Streptopelia senegalensis senegalensis*. The most abundant dove, a common breeding resident (from March until late summer), widespread in most habitats such as wadis, forests, cultivated fields with trees and bushes, gardens, villages and towns. As well as seeds, it consumes green shoots occasionally. Its nest, 1.5–2.5m above the surface, is often in thickly foliaged citrus, olive, casuarina, thorn and tamarisk trees, but it also uses available sites such as ledges on human constructions, using sticks, twigs, fibres and even threads and plastic wire. The clutch usually comprises two white eggs, laid over two days, incubation lasting 14–16 days. Any infertile egg (rare) remains in the nest with the hatchling. The young can fly well about 18 days later, both adults having shared the incubation and feeding. Usually they have 2–3 broods annually.

Barn Owl *Tyto alba*. The commonest and most abundant owl in the Gaza Strip, widespread in agricultural areas, villages and towns. There are two forms of Barn Owl in the Gaza Strip, the light, white-breasted phase *T.a. alba* being very common in towns and villages, occupying tower roofs, unused and ruined buildings, the dark phase *T.a. guttata* being scarce in forests or dense tree stands surrounded by fields, nests being in tree-holes. These are the two forms widely distributed in Europe (Ardley 1987), although Shirihai (1996) refers only to *T.a. erlangeri* in Israel. The breeding season extends from early March to late July. The clutch comprises 3–9 eggs (normally 5–7), at intervals (see also Shirihai 1996). The female incubates for about 30 days, the occasional 1–2 infertile eggs remaining with the hatched chicks. The pale-phase form's eggs are laid amongst owl pellets that include disgorged fecal sacs. As elsewhere, researchers are at risk from the sharp and powerful claws of the young! The species plays an important role in pest control by limiting the numbers of small rodents such as rats and mice.

Little Owl *Athene noctua lilith*. A scarce resident breeder in the Gaza Strip, present year-round in most agricultural areas and in wadis with trees, and often seen in daylight in thickets of tamarisk, casuarina, carob or olive trees or at their burrow entrances. It hunts mice, insects, spiders, worms and may small lizards. The breeding season extends from March to June, the nest site seemingly an opportunistic selection of a tree-hole a burrow in an earth bank, or a cavity in rugged hills. From early April onwards, eggs are laid on whatever site the nest-contents, including rubble or facades. The clutch comprises 3–6 oval eggs (usually 5) that are white freckled by tiny black spots. Incubation lasts 26–28 days, fledging occurring 30–33 days later. The species is tolerant of other species sharing the nest location, neighbours observed in a Wadi Gaza earth bank being Agama lizard *Agama stillio*, House Sparrow *Passer domesticus*, White-breasted Kingfisher *Halcyon smyrnensis*, and late in the season, European Bee-eater *Merops apiaster*.

Long-eared Owl *Asio otus*. A rare resident breeder, occurring in woodlands, olive, citrus, guava and date palm groves, quite near farmhouses, pens and stockades, usually seen as singletons or pairs in the breeding season. Being nocturnal and secretive during daylight, it is difficult to find, but dawn and dusk activity, often over open ground, provide the best opportunities. The breeding season is from early March to late June, the nest usually a repaired former Hooded Crow *Corvus cornix* nest in an olive or cypress tree, being lined with discarded cloth, cotton and plastic bag remnants, as well as feathers. Egg-laying usually starts in early March, the clutch comprising 1–5 white oval eggs and incubation lasting about 4 weeks. Hatching intervals match laying intervals, covering 3–4 days. The chicks are fed by both parents until they fledge about 4 weeks later.
White-breasted Kingfisher *Halcyon smyrnensis smyrnensis*. A fairly common resident breeder, found year-round in open wetlands, Wadi Gaza, sewage lagoons and sometimes in agricultural areas remote from waterbodies. Occasionally it appears in town-house gardens, usually being seen on a perching post near water or fishing in singles or in pairs in the breeding season. It also hunts for small lizards, beetles and worms. Nest-building begins in early March when pairs begin to dig burrows in banks, the burrow being straight, a 60–80cm-long tunnel widening into an unlined nest chamber 15–20cm in diameter. The burrow entrance is 1–5m up the bank from the ground or water surface. Pairs may dig several complete or partial nesting burrows in the nesting territory, which possibly decoys predators. Egg-laying starts in early April, the clutch size being 4–5 (rarely 6) and the eggs being smooth, shiny, white and almost round. Incubation starts on the last laying day, is shared by both parents over 18–20 days. The eggs hatch in laying sequence over 3–4 days, fledging about 26 days later. Egg losses are rare. However, on 19 April 1996, an Elbad, a subspecies of the Egyptian cobra *Naja haje*, entered a nest burrow to moult its skin by rubbing it against the burrow sides and to allow the fresh skin to harden. Of the 5 eggs, 3 eggs were broken, one was ejected on to the ground and one remained in the nest. The retrieved snakeskin was some 180cm long.

European Bee-eater *Merops apiaster*. A rather common autumn passage migrant, apparently arriving in early September to early October and a common breeding spring and summer visitor, numbers peaking in April to May. Many breeding pairs remain until late July. Arrivals appear in large flocks of 150 birds or more and occupy open wadi sides, agricultural areas and abandoned or unused land, perching on scattered trees, branches, wires, and poles. The breeding season starts in April and extends to July, seemingly correlated with the seasonal increase in food, mainly flying insects such as bees and wasps. Nest-hole selection begins in early April, construction occurring in mid-April to late May. The earth-bank burrow entrance, some 6cm in diameter, extends straight for at least one metre. Egg-laying begins in early June, the clutch comprising 4–5 eggs, sometimes 6 and rarely 7. Incubation starts after the last egg, lasting 17–19 days, the young being able to fly about 26 days later. The species is disliked by bee-keepers for the damage it does to their colonies.

Eurasian Hoopoe *Upupa epops epops*. A rather common resident breeder, occurring in small groups of 4–12 throughout, amongst scattered trees in woodlands, orchards, wadis, olive and palm groves and also around the Beit Lahia Station sewage ponds. The species consumes large amounts of invertebrates and insects harmful to crops, and so it is not persecuted. Its breeding season lasts from late March to August, the nest-sites being in may locations, such as drainage pipes, abandoned buildings, mud walls, farmhouse roofs, abandoned vehicles as well as natural cavities, Egg-laying commonly starts in mid-April, extending to early July. The clutch comprises 4–7 eggs (usually 5–6), laid at intervals within 3–4 days. Hatching occurs after about 18 days, the young being fed by both parents, leaving the nest 22–24 days later.

Syrian Woodpecker *Dendrocopos syriacus syriacus*. Fairly uncommon resident breeder, found in small numbers throughout the year in small numbers in agricultural areas possessing a variety of fruit trees, woodlands, gardens; it sometimes occurs in villages and towns. It feeds mainly on insects, worms and on fruits such as almond and walnut. Often seen drumming very rapidly on dead trunks and branches to locate beetles or other invertebrates beneath the bark; it then pecks the bark strongly and pulls the meal out. Observations indicate the breeding season begins in March when pairs form and nest-building commences, and extends to mid-June. The bird excavates a hole in a dead or dying trunk or thick branch of citrus, casuarina, tamarisk and sycamore trees, the hole being 25–35cm long and about 10–15cm across and lacking lining. Egg-laying
occurs between 20 April and 10 May, the 4–5 eggs usually being laid at intervals within 3–4 days. Incubation lasts about 11 days, hatching sequence following laying sequence. The parents will remove a dead chick from the nest. Some 24 to 26 days after hatching the young have attained full juvenile plumage (closely resembling adult plumage), and leave the nest accompanying their parents. These breeding observations accord with descriptions of Anat Barnea (in litt) and al-Safadi (2004).

Crested Lark Galerida cristata cinnamomina. A common resident breeder, occurring throughout the Gaza Strip, mainly in open habitats with low vegetation and sparse trees and bushes, such as wadi beds, plains, waste and neglected land, sandy and semi-desert areas, and often in groups of 50 or more in fallow fields, but especially in newly-sown or cultivated areas of wheat, barley, maize, sorghum, squash, cucumber, melon and watermelon (al-Safadi 2003b). The breeding season begins in March when the bird form pairs and build well-concealed nests. Egg-laying begins in early April and extends to late June; many pairs are double-brooded. A normal clutch contains 4–5 eggs, incubation beginning when laying is completed and lasting 11–12 days. The chicks are well-camouflaged in the nest and in the surrounds (al-Safadi 2003b). Both parents feed the nestlings for about 14–15 days. By the 10th day, the chicks are almost completely feathered, closely resembling the adults, and are able to run, jump and respond vocally to the parents’ calls from hiding.

Barn Swallow Hirundo rustica. An abundant passage migrant in the Gaza Strip, peaking in September, and a common breeding summer visitor. As elsewhere, its open nest of mud and straw is placed on beams and ledges in farm buildings, sheepfolds, sheds and other structures. Some nests near a concrete factory were built from cement, sand and gravel. The clutch size is 4–6 eggs (usually 4–5), laid at intervals. Egg-laying starts before mid-May and extends to mid-June. Both parents incubate over about 17 days and share the hatchlings’ care. The young fledge within three weeks, being skilled flyers from the start.

White-spectacled (Yellow-vented) Bulbul Pycnonotus xanthopygos. Amongst the commonest resident breeders in the Gaza Strip, occurring everywhere in a wide range of well vegetated areas with plantation or natural tree and bush cover. It is often encountered in fruit fields containing guava, fig, apricot, peach, plum and sycamine, bordered with sycamore and opuntia, where its partiality for fruit causes much damage. Its breeding season is lengthy, from March to early September; most pairs are double-brooded, often replacing lost clutches. The nest, well-concealed amongst dense, thick trees and shrubs is cup-shaped and built from bent grass stems and weeds, the innermost material being very fine; it is located, firmly fixed, at a fork in the branches. Nest locations include citrus, guava, tamarisk and castor–plants, but rarely on banana bunches. Egg-laying, extending from early April to early August, is at intervals of 2–3 days. The clutch size is 3–4 eggs (occasionally 2). The rather elliptical rosy-white eggs are densely freckled with dark brown or black. Hatching takes about 13 days and fledging about 14. Usually two chicks survive to fledge, sometimes three and rarely four. The bulbul’s main predators are rats, which take eggs with impunity and the Eurasian Jay, which takes eggs or young, but only in the event of inadequate harassment, at which the parents usually are expert and persistent.

Rufous-tailed Scrub Robin (Rufous Bush Robin) Cercotrichas galactotes galactotes. A common passage migrant in spring and an abundant breeding summer visitor, occurring in many habitats, It often haunts the edges of casuarina woods, citrus, olive and palm groves, but usually prefers thickets, bushes, trees and hedges in wadis. It feeds on insects and worms, usually keeping larger prey items, such as grasshoppers or butterflies, in its bill for 1–3 minutes before swallowing. The breeding season
extends from April to August, many pairs being double-brooded. Normally, the nest contains 4–5 eggs, incubation being some 13 days. Fledging, when the chicks leave the nest, occurs 13 days after hatching.

**European Blackbird** *Turdus merula syriacus*. One of the commonest resident breeders, being widespread throughout and most numerous in well-vegetated natural and cultivated areas possessing trees from all kinds. It occurs in ones and twos year-round, but is most abundant in citrus groves. Song is given from the tops of trees, but mainly in the afternoon. Its breeding season extends from February to late August, many pairs being double brooded. The well-concealed nest is always in dense thickets or trees, especially citrus, and sometimes in the base of date palm leaves. The clutch usually comprises 3–4 greenish eggs (rarely 2 or 5), densely spotted with brown or black, which gradually change to olive or dirty green during the 13–15 day incubation. Nests with eggs have been recorded from early April to mid-August. The young leave the nest about two weeks after hatching. The main predators are rats, jays, snakes (43%) and children (two-thirds of the remainder). In 2003, of 80 eggs in five citrus groves, only 12 or 13 young survived.

**Graceful Prinia (Warbler)** *Prinia gracilis deltae*. A rather common resident breeder in the Gaza Strip, occurring year-round, widespread in natural and cultivated areas and being rather abundant in well-vegetated localities possessing grasses, weeds, hedges, vegetables and crop fields, bushes and low trees. The breeding season extends from March to June, many pairs being double brooded. The nest, almost retort-shaped with a side entrance beneath a small ‘penthouse’, is securely constructed almost entirely of cotton on a framework of fine grasses and flexible twigs, about 50–100cm above the ground and concealed among low dense, thick vegetation, wild or planted, such as wild oat, mallow, thistle, tamarisk, hedges, wheat and barley crops and tangerine bushes. The usual clutch size is 4–5 eggs, occasionally 3 and rarely 6. Both parents incubate for about 12 days and feed the nestlings for another 12. The typical family party includes 2–3 juveniles, less often 4 or 5. The cereal crop harvests destroy many nests and young.

**Great Tit** *Parus major terraesancta*. A well-known breeding visitor to the Gaza Strip, occurring in much smaller numbers from June to January probably because most the birds leave after the breeding season, which lasts from late March to late June. It is very adaptable in its choice of nest-hole sites, natural or artificial, from holes in trees to cavities in abandoned pipework or barrels. The clutch usually is 4–5 eggs (rarely 3 or 6) laid at intervals, one egg a day. Egg-laying occurs from early April to early May. Both parents incubate over 12–13 days and feed the young for about 20 days.

**Palestine Sunbird** *Cinnyris (Nectarinia) osea osea*. Most remain year-round, occurring in well vegetated areas, wild and managed, especially those with flowering and fruiting trees and bushes. Very common in Wadi Gaza, it is attracted to the flowering tobacco tree *Nicotiana glauca*, widespread there, producing nectar-rich flowers in every month. It feeds mainly on nectar, as well as small insects. Nestbuilding is in March in tamarisk, acacia, thorn trees and hedges, usually about 1.5–3m above the ground. The clutch comprises 2–4 eggs, which the female incubates for 12–13 days; fledging occurs some 2 weeks later.

**Eurasian Jay** *Garrulus glandarius atricapillus*. A scarce resident breeder, it nevertheless is found in small numbers throughout the year in woodland, fruit fields and agricultural areas, showing a preference for mixed fields cultivated with citrus trees, beans, kidney beans, peas and maize. Seemingly, this small, omnivorous population causes much damage to the vegetable crops and destroys a significant number of bird nests, taking eggs or young. The breeding season lasts from late February to July. The tree-top nest in citrus groves is only 3–4m from the ground. Egg-laying occurs from mid-March to mid-
April (sometimes to early June), the clutch being 4–5 eggs, sometimes 3 and rarely 2 or 6. The parents share both incubation (16–17 days) and care of the young (20–22 days).

**Hooded Crow** *Corvus cornix sardonius*. A widespread scavenger throughout the Gaza Strip as a common resident breeder, being found throughout the year in open agricultural areas, woodland edges and wadis. Concentrations occur around urban settlements, especially at rubbish tips and at the Beit Lahia sewage lagoons. It has been known to attack farm animals and it often robs nests and hunts rabbits. It also feasts on carrion deposited by the sea on beaches and on traffic kills. Watermelons are a particular attraction, the damage leading to persecution by farmers. The breeding season lasts from early February, nesting mostly from early March to mid-April. Pairs build separate nests in the tops of taller trees; they are, lined with soft material such as grasses, cotton, wool, threads, strings, cloth and pieces of nylon bags. The clutch size is 1–7 eggs, usually 4–5.

**House Sparrow** *Passer domesticus biblicus*. Overall, the commonest and most abundant Gaza Strip resident, occurring year-round in all habitats, cultivated lands, wadis, farms, villages and towns and seldom far from human habitation. It causes some damage to cereal crops such as wheat, barley, maize and sunflower, scarecrows usually being ineffectve. The breeding season starts in late February and nest building in March in almost any convenient hole or cavity, even holes in the earth banks in Wadi Gaza. Tree nesting has not been observed. Egg-laying starts in late March and extends to July and early August. The clutch comprises 5 eggs, sometimes 4 or 6, but rarely 2 or 7. Incubation lasts about 2 weeks, the parents feeding their young for another two. Many pairs are double-brooded and family parties often include 3–5 young. Away from towns, the species usually nests in large colonies, breeding sympatrically with few numbers of Spanish Sparrow *P. hispaniolensis*, and in Wadi Gaza alongside White-breasted Kingfisher, Little Owl and European Bee-eater.

**Spanish Sparrow** *Passer hispaniolensis transascopicus*. Much less common than House Sparrow and mostly a breeding summer visitor. Outside towns, where it rarely occurs, it associates strongly with House Sparrow, even sharing the same breeding cycle.

**DISCUSSION**

The study area included three regions of the Gaza Strip, Wadi Gaza (4–5 km²), Al-Shargiah (7–8km²) and Beit Lahia sewage lagoons (2 km²). This study covers a larger area than the 400ha of Khoury (2001), who recorded 35 breeding birds. This study confirms the breeding of 35 species in the Gaza Strip, of which 32 breed regularly and 3 species (Little Egret, Black Kite and Cattle Egret) that were recorded as breeding until 1996, 1997 and 2000 respectively. Of the 32 regular breeders, 21 are mainly resident, 4 have a resident population and augmented by seasonal visitors (Little Grebe, Eurasian Hoopoe, European Blackbird and Spanish Sparrow) and 5 are solely spring or summer visitors (Eurasian Turtle Dove, European Bee-eater, Barn Swallow, Rufous Bush-robin and Great Tit) whereas a few Common Quail pairs (possibly 15), remain from autumn through to summer to breed before leaving with their offspring and 3–4 Mallard females are resident, the males leaving immediately after the young hatch.

Because the Gaza Strip constitutes such a limited area, I could correlate most of the breeding species in the March to June period with the mouths of improved food supply. Some of the annual double-brooders have a much-prolonged breeding season, egg-laying extending into August (eg Spur-winged Lapwing, White-spectacled Bulbul, European Blackbird and House Sparrow). Generally, the field observations agree with those of Shirihai (1996) for Israel and the morphological breeding changes such as the
colour or shape of such as plumes, lores, bills and legs of Little Grebe, Cattle and Little Egrets align with Bhushan et al (1993).

Until 1965, much of the Gaza Strip such as wadis, many eastern locations and the western sand dunes represented typical natural habitats, being covered with dense forests of mixed evergreen and some deciduous trees, bushes, shrubs and hedges, predominately tamarisk (T. nilotica and T. aphylla), boxthorn, asparagus, casuarina, acacia, thorn, tobacco trees (N. glauca), cactus, carob, cypress, camphor, sycamore, palm, reed, and typha; there were also windbreaks. Few parts of the eastern regions were open semi-desert habitats. These areas and the freshwater lagoons in wadi estuaries provided excellent habitats for many birds and animals to live in; they provided food, shelter, breeding sites and roosts (al-Safadi 2001). Unfortunately, due to the inevitable consequence of the subsequent history in the Gaza Strip of human immigration, population pressure has resulted in the disappearance of almost all natural habitats. All the mature tall trees have been cut down, and so since 1996 the large bird species have either ceased to breed or do so irregularly in very small numbers. The degradation of all natural and managed habitats in the Gaza Strip accelerates annually, and within a few years, all evidence of these habitats will have disappeared.

Despite the enormous social difficulties within the Gaza Strip, it is urgently recommended that all the remaining few scattered agricultural areas should be protected from further wanton destruction and not allotted to construction of human settlements. It is hugely important that extensive field surveys should be carried out to record the remaining breeding birds and their current status in throughout the Gaza Strip, or the last opportunity to protect wild fauna will have been missed.

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Bird censusing and monitoring on Cyprus

DEREK POMEROY AND FRANK WALSH

Eight years of censusing on Cyprus has led us to propose transects as the most suitable method for bird monitoring on the island (and perhaps elsewhere in the region where resident observers are few). Timed Species Counts (TSCs) have been used each year since 1997, and transect counts (TCs) since 2001; a number of sites have been used for both methods, enabling comparisons to be made. The sites were stratified by land-use in four altitudinal zones. Whilst TSCs have advantages for less common species and need fewer person-hours for a given amount of data, TCs are widely used in Europe and they also allow densities and populations to be estimated. Existing DISTANCE software is fairly simple to use for the density estimates. The results from sites counted in consecutive years allow an annual index to be developed for each species.

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Cyprus supports 72 Species of European Conservation Concern (SPECs - BirdLife International [BLI] 2004). Most of the non-waterbird species depend upon Mediterranean vegetation types, and to a lesser extent agricultural land (Tucker & Evans 1997). However, the numbers of landbirds in Cyprus, and the changes to which they are prone, have not been much studied. Here we describe our use of transects as a monitoring method and show how it can also be used to estimate populations of landbirds. The method has intentionally been kept as simple as possible to encourage volunteers, currently few in number, to join the scheme.

We have taken as an example six common species in one District, Paphos, which covers 1396 km², about 15% of the whole island. The six species include the two endemics (Cyprus Wheatear Oenanthe cypriaca and Cyprus Warbler Sylvia melanocephala) and two others with SPEC status: Black-headed and Corn Buntings (Emberiza melanocephala and E. miliaria). The final two species are Sardinian Warbler S. melanocephala, which apparently is displacing the Cyprus Warbler in the north and west of the island (Pomeroy & Walsh 2002, Peter Flint pers comm) and (Black-billed) Magpie Pica pica, which is common and widespread outside forests. Field work is continuing, and a paper on the population sizes of some 35 species (including the six here), will be prepared in due course.

Monitoring began in 1997, using Timed Species Counts (TSCs, Freeman et al 2002), which will continue until 2006. Data from these counts, which cover 40 sites and all species, are already being analysed by the Euromonitoring programme (Petr Voršek in litt.). However, with the growing importance of monitoring, a change to transect-based counts seems desirable, and this article is intended to demonstrate its usefulness in Cyprus, how it can be used to estimate populations, and for example, improve upon the current population estimates as given in Birds in Europe (BLI 2000). Because transects are simpler to use, we have preferred them to point counts, which require the participant to identify each point every time a count is carried out - that often means that a GPS (Global Positioning System) reading has to be taken. Typically, we follow existing tracks, using permanent buildings, large rocks or other such landmarks.

METHODS

Making counts
A total of 38 sites were counted during the four years from 2001 to 2004, with most counts being made in May each year. Counts in the first three years were of a limited number of species: of the six in this study, Magpie was counted only in 2004, but the
others were counted every year. Most sites were counted in only two or three of the four years. By 2004, a set of 25 sites had been selected for continuing use, based upon strata defined by land use and altitude (Appendix 1).

**Habitats and sites.** Paphos District is notable for its diversity of land use types (some of which comprise two or more distinct habitats), and considerable altitudinal ranges (from near sea level to about 1400 metres). The Censuses of Agriculture (1994) recognised a number of land use types in Cyprus, and of these, five are important in Paphos District: pine forests, other uncultivated areas (eg matorral, maquis), grasslands, permanent crops (groves, orchards, vineyards) and arable (cereals, vegetables). (Matorral includes scattered trees, often absent from maquis). With the exception of built-up areas, these five types cover almost all the non-aquatic habitats in the District. By covering only one (main) habitat in each transect, we expect to gain a clear picture of which habitats are most important for each species – particularly those of conservation concern.

For each type of land use, sites were selected in four altitudinal zones: <200, 2–500, 5–800 and >800 metres. However, only 6% of Paphos District is above 800m asl, and there are virtually no grasslands or arable land in that zone. Above 500m, grasslands often include small arable fields, many of which were grass fallow until 2003 or 2004, when their active cultivation was presumably in response to accession to the EU and the anticipated effects of its Common Agricultural Policy. There is evidence that these newly-ploughed fields had in fact been cultivated in times past (Martin Helicar pers comm). Cyprus habitats are mostly small-scale; eg forest sites are likely to include some open (scrub) areas and vineyards often have trees at the field margins. An effort was made to choose ‘typical’ examples for each site, preferably of 1km² or more, but sometimes the best possible was as small as 10ha. Site selection also had to take account of accessibility – many places are rugged, with few tracks or none at all.

Within each site, a transect route was selected, avoiding habitat edges where possible and following terrain easily walked over - usually small roads or tracks (away from which, the terrain is typically difficult to cross, reducing bird observations). Large-scale maps were made of each transect route, prominent features en route being marked from GPS readings. One copy was used for each count. In some cases, transects were ‘circular’; in others, the same transect was walked up and back. In both cases, care was taken to avoid double-recording any individual bird, a practice that greatly benefited from the use of maps (see below).

For the majority of species, counting took the form of mapping birds along the transect route, rather like the traditional Common Bird Census (Williamson 1964), but with a view to using the program DISTANCE (see below) to analyse the data. For most species, only males were recorded, by sighting or song; but for Magpie and others whose sexes are similar, or which generally are silent, such as Masked Shrike *Lanius nubicus*, all individuals were mapped, using a different symbol for each species. Two categories of birds were counted but not mapped; aerial birds, such as hirundines, and flocking species such as sparrows. We refer to them here as non-mapped species.

Counts were made by walking slowly along the transect, a distance of about a kilometre typically being covered in about an hour. When two or more individuals of a species were seen or heard simultaneously, they were noted to prevent double-counting; birds flying from one perch to another were appropriately indicated on the maps for the same reason. Mapped species seen only in flight, but considered likely to be resident because of the suitability of the habitat, had their distances recorded as ‘?’ For all other sightings

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35
of the mapped species, the perpendicular distance of each bird from the transect line at first sighting (or hearing) was noted to the nearest 10m. Distances were estimated by eye, but our estimates were frequently calibrated. Typically, four counts were made at each site in any one year. The transect ‘time of day’ was varied, and the period of counting was throughout May and the first half of June, when all species were likely to be nesting.

**Estimating populations from transect data**

The same counts can yield monitoring and density data – although for the non-mapped species only relative densities can be estimated. We have included a description here of how population densities can be estimated for mapped species, using the computer program DISTANCE (Buckland et al 2001), and applied it to the six species in this paper, using published data on altitude and land use in Paphos District.

**Effective width and area.** The program DISTANCE calculates the effective width of the transect, defined as ‘the half-width of the strip extending either side of a transect centre line such that as many objects are detected outside the strip as remain undetected within it’ (Buckland et al 2001, p424). In our case the objects were birds. The program looks for the best fit of each data set against several alternative models; it can also truncate outlying points, which might affect the model. However, we have not truncated the data sets used in this article, in order to achieve maximum sample sizes; this is discussed below.

DISTANCE makes several assumptions (Buckland et al 2001, Bibby et al 2000), of which the two most important are that all birds on the actual transect line are counted; and that the distances are measured accurately. The first was probably reasonably true for our data, as most habitats on Cyprus are relatively open, and we tended to use tracks; but no doubt a few birds ‘just slipped away’ – especially Sylvia warblers. Estimates of sighting distances were calibrated from time to time with a tape measure; but they certainly remain estimates. The estimated distances for each species were pooled over all sites of a particular land-use type, to maximise the sample size. Bibby et al (2000, p81) suggest that an adequate sample is about 100 detections. We reached this level for all species where the data for the different land-use types were pooled, but did so in only a few cases when they were not (Table 1).

**Density estimates.** An advantage of transects over TSCs is that they generate better estimates of density. For each species at each site, we calculated the effective sampling area from the transect length and its effective width. Lengths were measured on the maps. Where the shape of the transect involved a loop, generating a more complex polygon, the area was calculated by using squared-paper area summation.

Figure 1 is an example of how the results for one species might appear on a site map. Two clusters are apparent, for which we have used different letters, P and Q. Each cluster presumably represents a single individual male, but neither bird was seen on all five occasions, the totals being 4 and 3 respectively. This could of course mean that some birds were overlooked within the ‘Effective Strip Width’ (The width is not known at the time of the counts). But, as suggested by Figure 1, others might be seen beyond it. DISTANCE assumes that the number of individuals within the mean effective width that were missed are ‘balanced’ by those beyond it which were, nevertheless, recorded. It follows then that for bird P, 4/5 of its territory is within the effective width and similarly 3/5 for bird Q. The actual boundaries of the territories are not known, nor do they matter.
Table 1. Summarised results of DISTANCE analyses on the six species included in this paper, with the models chosen as the best fit for each particular data set, as described in the text. Habitat here refers to land-use type. ESW=Effective Strip Width (metres) with its standard error (SE) and 95% confidence intervals (CI).

<table>
<thead>
<tr>
<th>Species</th>
<th>Habitat</th>
<th>n</th>
<th>Model Used</th>
<th>ESW</th>
<th>SE</th>
<th>95% CI</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyprus Wheatear</td>
<td>Forest</td>
<td>138</td>
<td>Uniform/Cosine</td>
<td>35.6</td>
<td>2.3</td>
<td>31.3</td>
<td>40.3</td>
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<td></td>
<td>Uncultivated</td>
<td>55</td>
<td>Uniform/Cosine</td>
<td>33.8</td>
<td>4.4</td>
<td>26.1</td>
<td>43.8</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>99</td>
<td>Uniform/Cosine</td>
<td>48.5</td>
<td>3.6</td>
<td>41.8</td>
<td>56.2</td>
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<tr>
<td></td>
<td>Total</td>
<td>292</td>
<td>Uniform/Cosine</td>
<td>34.9</td>
<td>1.7</td>
<td>31.6</td>
<td>38.4</td>
</tr>
<tr>
<td>Sardinian Warbler</td>
<td>Forest</td>
<td>54</td>
<td>Half-normal/Cosine</td>
<td>17.0</td>
<td>1.9</td>
<td>13.6</td>
<td>20.4</td>
</tr>
<tr>
<td></td>
<td>Uncultivated</td>
<td>163</td>
<td>Half-normal/Cosine</td>
<td>12.4</td>
<td>1.4</td>
<td>9.9</td>
<td>15.5</td>
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<td></td>
<td>Others</td>
<td>161</td>
<td>Half-normal/Cosine</td>
<td>16.1</td>
<td>1.0</td>
<td>14.2</td>
<td>18.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>378</td>
<td>Half-normal/Cosine</td>
<td>16.9</td>
<td>0.7</td>
<td>15.4</td>
<td>18.4</td>
</tr>
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<td>Cyprus Warbler</td>
<td>Forest</td>
<td>74</td>
<td>Half-normal/Cosine</td>
<td>26.2</td>
<td>2.4</td>
<td>22.0</td>
<td>31.4</td>
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<tr>
<td></td>
<td>Uncultivated</td>
<td>96</td>
<td>Half-normal/Cosine</td>
<td>15.6</td>
<td>1.3</td>
<td>13.2</td>
<td>18.5</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>58</td>
<td>Half-normal/Cosine</td>
<td>20.0</td>
<td>2.1</td>
<td>16.3</td>
<td>24.7</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>228</td>
<td>Half-normal/Cosine</td>
<td>20.6</td>
<td>1.1</td>
<td>18.6</td>
<td>22.9</td>
</tr>
<tr>
<td>Magpie</td>
<td>Arable</td>
<td>57</td>
<td>Uniform/Simple</td>
<td>97.5</td>
<td>4.3</td>
<td>89.2</td>
<td>106.6</td>
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<tr>
<td></td>
<td>Others</td>
<td>101</td>
<td>Uniform/Simple</td>
<td>48.6</td>
<td>6.3</td>
<td>37.6</td>
<td>62.7</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>159</td>
<td>Uniform/Simple</td>
<td>60.6</td>
<td>3.3</td>
<td>54.3</td>
<td>67.5</td>
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<tr>
<td>Black-Headed Bunting</td>
<td>Arable</td>
<td>69</td>
<td>Uniform/Cosine</td>
<td>63.3</td>
<td>7.0</td>
<td>50.8</td>
<td>78.8</td>
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<tr>
<td></td>
<td>Others</td>
<td>119</td>
<td>Uniform/Cosine</td>
<td>47.3</td>
<td>4.9</td>
<td>38.6</td>
<td>58.0</td>
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<tr>
<td></td>
<td>Total</td>
<td>188</td>
<td>Uniform/Cosine</td>
<td>45.9</td>
<td>4.4</td>
<td>38.0</td>
<td>55.5</td>
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<tr>
<td>Corn Bunting</td>
<td>Grass</td>
<td>47</td>
<td>Half-normal/Cosine</td>
<td>42.0</td>
<td>3.8</td>
<td>35.1</td>
<td>50.3</td>
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<tr>
<td></td>
<td>Others</td>
<td>83</td>
<td>Half-normal/Cosine</td>
<td>58.4</td>
<td>4.4</td>
<td>50.4</td>
<td>67.8</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>130</td>
<td>Half-normal/Cosine</td>
<td>52.8</td>
<td>2.9</td>
<td>47.3</td>
<td>58.9</td>
</tr>
</tbody>
</table>

NB The mathematical models used are all curve-fitting models selected according to current best-fit criteria as per Buckland et al (2001).

Figure 1. Two individuals of a species as plotted on a map during five counts of a particular transect. Each symbol represents the bird’s position on a different date.

Since we know the length of the transect, as well as its effective width, we can easily calculate the area within which these birds were observed, and thus the density of birds, which is usually expressed as birds per hectare, or per square kilometre. Hence the density of males in this example is 7 (the number observed) divided by the number of visits (5) and the effective area; if, by way of illustration, the latter were 5ha, the density would be 7 / (5 x 5), i.e. 0.28ha⁻¹ or 28km⁻². Densities were calculated for each species from the mean numbers of birds (including individuals flying over) per kilometre of transect (N) and the effective strip width (W, in metres, which is on either side of the transect line), thus

\[
\frac{Nx1000}{Wx2} = \text{birds km}^{-2}
\]

Bird populations of Paphos District. Unsurprisingly, different bird species prefer different habitats and most are influenced by altitude (Flint & Stewart 1992). Ideally
we would superimpose contours on a land-use map for the district, but such a map does not exist, and so we analysed the data both by land-use and by altitude. Theoretically, the two independent estimates should agree, but we were quite pleased that they were within 10% of each other for half the species (see below).

**Areas by land use type.** We derived estimates for the total area within the District for each of the five land-use types, as summarised in Appendix 2. The Census of Agriculture (1994) gives the area of various land-use types by district, as reported by farmers for the land that they own. The categories they used were (with ours in parentheses, where different): temporary crops (arable), permanent crops, fallow land (assumed to be arable), grazing land (grassland), forest land, uncultivated, and scrub (uncultivated). However, the total area accounted for in this way was only 343 km$^2$, whereas the District’s area is 1396 km$^2$. The ‘missing’ areas are of two types, government forest and halitiki, or public land. The area of government forest was obtained from Forest Department officers, although they were only able to provide a figure for the whole of Paphos Forest, parts of which are in Nicosia and Lemesos Districts. The area within Paphos District was estimated from counts of grid squares on 1:50,000 maps.

The halitiki land consists of three main types (Nick Symons, pers comm): grassland, uncultivated and urban. The last was estimated as 40km$^2$, based upon a figure of 20km$^2$ for Paphos town (from maps), assuming that all the other towns and villages accounted for another 20. That left 669 km$^2$ to be divided between grassland and uncultivated. From our own observations, and the independent estimates of Nick Symons (pers comm) and Martin Hellicar (2004 & pers comm), we arrived at a consensus of 70% grassland and 30% uncultivated land. The totals for the six land-use types, estimated in this way, are summarised in Appendix 2. Although this method is cumbersome and includes several unsupported assumptions, the figures in the final column of the table accord well with our experience in the field. The areas of forest, urban, arable and permanent crops are probably reasonably accurate; the relative amounts of grassland and uncultivated are less certain, but the two types grade into each other in many places and are not easily defined at a landscape level.

**Areas by altitudinal zones.** To calculate the areas of the four altitudinal zones, we used a Paphos District 1:100 000 scale map (Selas Ltd, Nicosia, 4th edn 2001), which shows contours for 200 and 600m. The 500m contour was interpolated, using 1:50 000 topographical maps. A grid was then superimposed on our map, and the number of squares counted.

**RESULTS AND DISCUSSION**

**Table 2** shows details of population density calculations for the Cyprus Wheatear, the most widely-occurring of our six species. The rows show results and calculations by land-use type, whilst the columns do the same for altitudinal zones. The highest densities occurred in forests and in permanent crops such as orchards and vineyards, whilst the most densely-populated altitudinal zone was 200–500m, 23.5 to 26.0 males km$^2$ being calculated for these categories, or about 50 birds km$^2$ if the species is monogamous. Such data lead to estimates for the District in the order of 20 000 pairs, but the results from the two methods differ by about 25%. Similar tables were prepared for each species and summary results are given in **Table 3**. Again the estimates derived from the two methods vary; however, the variation is small for the Cyprus Warbler, Magpie and Corn Bunting, but larger, up to 25%, for the other species. The final column gives a ‘best estimate’ for Paphos District, by taking the approximate average of the two separate values.
Table 2. Derived population estimates for Cyprus Wheatears in Paphos District calculated by two methods – land-use and altitude. The individual sites are referred to by their codes (eg Q01, P13) - see Appendix 2.

<table>
<thead>
<tr>
<th>Land-Use Type and ESW (m)</th>
<th>&lt;200 m</th>
<th>2–500 m</th>
<th>5–800 m</th>
<th>&gt; 800 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>Years of data</td>
<td>Mean birds km⁻¹</td>
<td>Code</td>
<td>Years of data</td>
</tr>
<tr>
<td>Forest 35.6</td>
<td>Q01 2</td>
<td>1.37</td>
<td>P02 3</td>
<td>2.61</td>
</tr>
<tr>
<td>Grassland 48.5</td>
<td>T01 2</td>
<td>1.10</td>
<td>P09 3</td>
<td>1.15</td>
</tr>
<tr>
<td>Uncultivated 33.3</td>
<td>P12 2</td>
<td>0.14</td>
<td>P14 3</td>
<td>0.74</td>
</tr>
<tr>
<td>Permanent Crops 48.5</td>
<td>P04 2</td>
<td>0.00</td>
<td>P05 2</td>
<td>3.39</td>
</tr>
<tr>
<td>Arable Crops 48.5</td>
<td>P06 2</td>
<td>0.00</td>
<td>T05 2</td>
<td>0.64</td>
</tr>
<tr>
<td>Mean estimate birds km⁻¹</td>
<td>0.76±0.76 (n=7)</td>
<td>1.64±1.17 (n=7)</td>
<td>0.62±0.91 (n=10)</td>
<td>1.27±0.44 (n=4)</td>
</tr>
<tr>
<td>Factor²</td>
<td>14.3</td>
<td>14.3</td>
<td>14.3</td>
<td>14.3</td>
</tr>
<tr>
<td>Estimated density³ km⁻²</td>
<td>10.8</td>
<td>23.5</td>
<td>8.8</td>
<td>18.1</td>
</tr>
<tr>
<td>Area (km²)</td>
<td>40.4</td>
<td>55.7</td>
<td>348</td>
<td>87</td>
</tr>
<tr>
<td>Pop’n estimate by altitudinal zone</td>
<td>4374</td>
<td>13,074</td>
<td>3075</td>
<td>1577</td>
</tr>
</tbody>
</table>

Notes: a. ESW is estimated strip width, in metres, from Table 1. b. Number of sites contributing data. c. The factor by which densities are calculated from mean numbers per kilometre of transect; they are equal to (1000/ESW x 2) (the ESW applies to both sides of the route followed) d. Mean number of birds per kilometre of transect multiplied by the factor for the habitat. e. These sites included some cultivation (mainly cereal or fallow) and the respective proportions are included in the appropriate land use category.
Using our data to obtain estimates for the whole district involves much multiplication – for example, we used data from the 292 Cyprus Wheatears that were actually counted (Table 1) to reach an estimate of some 20,000 (Tables 2 and 3). But for monitoring, scaling-up is not necessary. Five of these six species were counted at the same sites in both 2003 and 2004 (Table 4). The three commonest species had similar numbers in both years but the two buntings, both SPEC 2 species, declined steeply. From 2004 onwards, data from 25 sites will provide larger samples and more robust evidence of trends.

There are various ways in which DISTANCE can be used to estimate densities. Buckland et al (2001) recommend truncation to reduce variances, which, whilst not affecting the estimates of density, reduces the variance estimates (truncation is ignoring birds beyond some specified distance, thus eliminating the tail of the distribution). For three species with large sighting distances, we tested the effects of truncation on our data. What we found was that the effective strip width (ESW, Figure 1) is reduced by truncation, whilst the standard errors are not reduced (Table 5). Smaller ESW values lead to larger density estimates (only slightly smaller numbers of birds are considered from areas which, at least for the Magpie and Corn Bunting, are considerably smaller). For two of the three species, the SEs were lower for the data without truncation; so we decided, provisionally, not to truncate. The program selected two different models for the analysis of our data (Table 1); there seems no good reason for not accepting that.

As is evident from Table 1, ESW values vary with land use. Where large quantities of data are available, as in Britain and some other European countries, ESW values can be calculated for every species in almost every habitat (Newson et al 2005); in our case, the differences seen in Table 1 are large only
in the case of the Magpie, and even those may reduce as the sample size increases in future years. Nevertheless, we have applied the values specific to a land use type to the rows in Table 2 wherever the sample sizes exceeded 40 (Table 1).

These and related studies (eg Flint 2003) have already led to a reappraisal of the population estimates for the two Cyprus endemics, lowering their SPEC status. The method described in this article could form the basis for monitoring all of the commoner landbird species on Cyprus (and elsewhere) where volunteer observers are few. Seventeen European countries use point counts for monitoring, compared to 12 that use transects or a combination of methods (Vorišek & Marchant 2003), but we preferred a transect method, because in almost all habitats there are suitable tracks, it is simpler to use and the tracks are likely, in most cases, to persist for many years into the future. We had a ‘free choice’ of sites within each of our strata (as opposed to selecting them randomly). Use of ‘free choice’ selection is widespread in Europe, but it does assume that care is taken to select sites representative of each category and altitude.

In summary, these are the main elements of our sampling programme:
1. Strata need to be carefully determined, but habitat and altitude are obvious choices. Transects also need to be very carefully selected, such that they broadly represent the strata, are easily followed on the ground, and are each predominantly of one defined habitat type. For practical reasons, it is convenient if they are readily accessible.

2. Each transect should be carefully mapped for future reference, particularly noting permanent objects, such as buildings and large rocks.

3. A core team of experienced observers is needed to estimate distances to individual birds each year at a representative sample of sites, to develop the data set from which Effective Strip Widths are calculated, thus progressively increasing the total sample size and monitoring any long-term trend in ESW values.

4. Hence, all that the volunteer observers have to do is to record the numbers of males (where practicable) or individuals (other species) on standard forms; all the calculations are made by the organisers.

Table 4. Counts at the 12 sites (totalling 11.4 km²) counted in both 2003 and 2004. Altogether, there were 60 counts in 2003 and 32 in 2004 at these sites. Magpies were not recorded in 2003.

<table>
<thead>
<tr>
<th>Species</th>
<th>SPEC status (BLI 2004)</th>
<th>2003</th>
<th>2004</th>
</tr>
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<tr>
<td></td>
<td>Birds counted</td>
<td>Birds count-1</td>
<td>Birds counted</td>
</tr>
<tr>
<td>Cyprus Wheatear</td>
<td>-</td>
<td>52</td>
<td>0.87</td>
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<td>Sardinian Warbler</td>
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<td>87</td>
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<td>-</td>
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<td>Black-headed Bunting</td>
<td>2</td>
<td>56</td>
<td>0.93</td>
</tr>
<tr>
<td>Corn Bunting</td>
<td>2</td>
<td>52</td>
<td>0.87</td>
</tr>
</tbody>
</table>

Table 5. The effects of truncation on Effective Strip Width (ESW) and its standard error (SE) for three different species with high ESW values.

<table>
<thead>
<tr>
<th>Species</th>
<th>Truncated Truncation distance (m)</th>
<th>ESW (m)</th>
<th>SE</th>
<th>Not truncated ESW (m)</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyprus Wheatear</td>
<td>80</td>
<td>32.8</td>
<td>1.1</td>
<td>34.9</td>
<td>1.7</td>
</tr>
<tr>
<td>Magpie</td>
<td>120</td>
<td>49.0</td>
<td>3.5</td>
<td>60.6</td>
<td>3.3</td>
</tr>
<tr>
<td>Corn Bunting</td>
<td>90</td>
<td>33.0</td>
<td>3.0</td>
<td>52.8</td>
<td>2.9</td>
</tr>
</tbody>
</table>
5. Observers obviously need to be proficient at identification of the species to be monitored, knowing them by calls as well as by sight. All field data should be carefully vetted before entry into the permanent record.

Much as Transect Counts yield estimates of actual abundance, Timed Species Counts may continue to be useful for aerial species such as swallows, and for less common species, since they generate more data for a given effort, and appear to be effective for monitoring trends (Pomeroy 2005). Density estimates can be made from TSC data by comparison of the two methods during years when both methods were used.

As we explained at the outset, we have kept the methods for transect-count monitoring as simple as possible. As time goes by, experience will be gained and expertise developed, then more robust methods can be considered.

ACKNOWLEDGEMENTS

We thank Annet Nakyeyune for making the DISTANCE calculations, Martin Hellicar and the late Colin Bibby for useful discussions, and Steve Freeman and Stuart Newson for helpful comments.

REFERENCES


### APPENDIX 1
Summary of 25 sites being used for monitoring in Paphos District. Figures in parentheses are transect length in metres.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Site Code</th>
<th>Altitudes</th>
<th>SC</th>
<th>SC</th>
<th>SC</th>
<th>SC</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest</td>
<td>Q01</td>
<td>Yialia pines (1680)</td>
<td>P02</td>
<td>Jephas (800)</td>
<td>P03</td>
<td>West of Phini (1250)</td>
<td>Q04</td>
</tr>
<tr>
<td></td>
<td>P02</td>
<td></td>
<td>Q02</td>
<td>Psilophos (1400)</td>
<td>Q03</td>
<td>Phinokli (1280)</td>
<td>Q05</td>
</tr>
<tr>
<td>Uncultivated</td>
<td>P12</td>
<td>Lara junipers (1250)</td>
<td>P14</td>
<td>KT burn1 (900)</td>
<td>P13</td>
<td>Akousses (1100)</td>
<td>P17</td>
</tr>
<tr>
<td>Grassland</td>
<td>T02</td>
<td>Yialia (980)</td>
<td>P06</td>
<td>Akamas broom (1500)</td>
<td>KT grassland (930)</td>
<td>Q10</td>
<td>Drinia (800/320)</td>
</tr>
<tr>
<td></td>
<td>T01</td>
<td>Lara (980)</td>
<td>P05</td>
<td>Neo Chorio groves (910)</td>
<td>Latchi (1200)</td>
<td>T03</td>
<td>Inia (1100/500)</td>
</tr>
<tr>
<td>Arable</td>
<td>P06</td>
<td>Limni (1180)</td>
<td>T05</td>
<td>Terra (2100)</td>
<td>Q08</td>
<td>Latchi (1200)</td>
<td>T07</td>
</tr>
<tr>
<td>Permanent Crops</td>
<td>P04</td>
<td>Ghoudhi orchards</td>
<td>P05</td>
<td>Neo Chorio groves (910)</td>
<td>Arodhes vines (800)</td>
<td>Q06</td>
<td>Arodhes vines (800)</td>
</tr>
<tr>
<td>Site/Length Totals (m)</td>
<td>7/8080</td>
<td>7/8540</td>
<td>Q06</td>
<td>Arodhes vines (800)</td>
<td>T04</td>
<td>Ag Nick upper vines (1210)</td>
<td>25</td>
</tr>
</tbody>
</table>

Notes: a KT = Kritou Terra. b Ag Nick = Agios Nikolaus. c These basically grassland sites had patches of cultivation: for example along the Drinia transect, there were 800 m of grassland and 320 of cultivation, and birds were allocated accordingly.

### APPENDIX 2
Calculation of the approximate areas of each of the five main land use types in Paphos District. Bird populations were not estimated for built-up areas.

<table>
<thead>
<tr>
<th>Land use categories as used in this study</th>
<th>Areas of land in private ownership (km²) Census of Agriculture (1994)</th>
<th>Government forest (part of Paphos, plus Akamas, Pejia and a few smaller forests)</th>
<th>Other land and a few smaller forests</th>
<th>Adjustments</th>
<th>Resulting estimated area for whole District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest</td>
<td>324</td>
<td>4 (344 less 20 – see adjustment) so 20 assessed as ‘uncultivated’</td>
<td>The forest estate is not all forest; 4 + 344 - 20 = 328</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grassland</td>
<td>[Referred to as 'grazing']</td>
<td>6</td>
<td>Add 70% of remaining8 669 = 469</td>
<td>6 + 469 = 475</td>
<td></td>
</tr>
<tr>
<td>Uncultivated</td>
<td>[2 categories: ‘uncultivated’ (109) and ‘scrub’ (16)]</td>
<td>125 [see under ‘forest’] = 20</td>
<td>Add 30% of remaining8 669 = 200</td>
<td>125+20 +200 = 345</td>
<td></td>
</tr>
<tr>
<td>Permanent crops</td>
<td>107</td>
<td></td>
<td></td>
<td>107</td>
<td></td>
</tr>
<tr>
<td>Arable</td>
<td>[Two categories: ‘temporary crops’ (75) and ‘fallow’ (26)]</td>
<td>101</td>
<td></td>
<td>101</td>
<td></td>
</tr>
<tr>
<td>Built-up</td>
<td></td>
<td>40 [See text]</td>
<td></td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>343</td>
<td>344</td>
<td>40</td>
<td>669</td>
<td>1396</td>
</tr>
</tbody>
</table>

Note: a = 1396 – (343 + 344 + 40) = 669 km²; see text for 70/30 split.
Colonisation of the Middle East by the invasive Common Myna Acridotheres tristis L., with special reference to Israel

CLAUS HOLZAPFEL¹, NOAM LEVIN², OHAD HATZOFE³ AND SALIT KARK⁴

The Common Myna Acridotheres tristis L. is a tropical and subtropical Asian bird that has been introduced into many regions of the world. The species quickly established thriving feral populations following introduction into the Gulf region. Since the 1990s it began to appear in nearly all Middle Eastern countries and has spread in some parts of the region. This species is listed as one of the 100 worst invading species globally and is known to have negative effects on native bird biodiversity and to cause other problems. However, up to now there has been no synthesis of current information on distribution, colonization, and range expansion of the Common Myna in the Middle East. For example, after a first single observation in 1987, the species has been increasingly noted in Israel starting from 1997 and has dramatically increased in range and population size since then. Currently the Common Myna still has its stronghold in a single location (about 70% of the national population 2003), the population originating from escapes from a local bird zoo or deliberate releases. The initial stages of invasion from this and other unknown locations are documented here. A map of distribution range and spread of the Common Myna throughout the Middle East is provided and the changes in distribution range in Israel are discussed in more detail. This paper aims at providing an important baseline for further work on understanding future changes in the species' range.

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Biological invasion by non-native species is recognized as one of the major threats to native species and ecosystems (Pimentel et al 2000, Sala et al 2000). Such invasions into native communities are among the prime global change factors contributing to biodiversity decline (Sala et al 2000). Invasive species have played a role in the majority of bird extinctions since 1800 and are considered a major threat to endangered birds today (BirdLife International 2004). Work that focuses on mapping bird introductions and on understanding the causes, results, impacts and extent of the process of spread is receiving increasing research emphasis in recent years (Blackburn & Duncan 2001, Duncan et al 2003). An advantage for the study of bird species is that birdwatchers are collecting substantial amounts of data that permit reliable description of distribution changes and their timing to be made. Recently, there has been a large increase in the numbers and range of non-native birds in the Mediterranean Basin, but relatively limited work has been done to record and track the process (but see Reino & Silva 1996). A recent study by Kark & Sol (in press) suggests that, relative to other Mediterranean climate regions around the world (eg in California, Australia and the South African Cape), non-native birds in the Mediterranean Basin have been very successful in establishing breeding populations. This is apparent for birds introduced into both the Western and Eastern Basins, and especially into Iberia and Israel. In Israel alone, over ten non-native alien bird species are currently establishing breeding populations, most of them first being recorded in the 1990s (Sapir 2000).

An integral part of the growing international problem of global change is land-use change. This, resulting from increasing human mobility, is the main catalyst for
invasion of non-native organisms, including birds (Vitousek 1994). Both trends enable non-native species to move, or be moved, and colonize new areas. Species that thrive in disturbed habitats, especially those that have become commensal with humans, are strong candidates for invaders. This ongoing process is demonstrated by the case of the Common Myna *Acridotheres tristis*, a species that is showing recent dramatic increases in its global distribution range, mostly resulting from introduction into new areas (Feare & Craig 1998). The Common Myna has been nominated among 100 of the “World’s Worst” invaders by the Invasive Species Specialist Group (Lowe et al 2000). Some members of the starling family (Sturnidae), and mynas in particular, have proved to be particularly successful in colonisation of new areas (Feare & Craig 1998, Long 1984). The Common Myna is spreading fast in the Middle East. Many first state records have been published recently, indicating a current colonization process all over the region (Bara 2002, Bilgin 1996, Millington 2000, Nation et al 1997, Sapir 2003). The natural range of the Common Myna spans from Central Asia and Afghanistan through India to south-eastern Asia (Feare & Craig 1998). The species showed a seemingly natural range expansion northwards in Central and Southwest Asia (Sagitov et al 1990, Sperl 1992) and has been deliberately introduced into various parts of the world (eg southern United States, South Africa, Australia and New Zealand, (see Long 1984). The species has been found in Western Palearctic areas beyond the Middle East and Central Asia, for instance in Western Europe in northern France (Hars 1991) and in Central Europe in Germany (Moritz 1975). These occurrences lasted several years at a time, indicating that individuals can survive in cooler climates, but this does not necessarily indicate that they can establish self-sustaining populations there.

This paper aims primarily to document the current status and spread of Common Myna in Israel until the end of 2003. It also provides information on the Middle East in general in order to describe the spread of this invasive bird species in the region.

**METHODS**

We collected as many currently available records as we could reliably confirm for Israel to document the introduction and spread of Common Myna in this region. The data are largely based on information published in the Internet (private birder websites and mailing lists) and personal observations. Such records were deemed verified if the observers were known to be reliable. Sightings of observers unknown us were followed up and included in the data base only when confirmed. We solicited
additional information from the Israeli bird watching community through "IsraBirdnet", a private domain mailing list of experienced birders dedicated to the flow of information on birds in Israel. From these data we reconstructed the spread of Common Myna in Israel. Systematic counts have been conducted since 2001 by various observers in the Park HaYarkon area, a large public park in Tel Aviv city. These counts focused on the main roosting site, a dense growth of evergreen, exotic trees. Here birds flying into roost sites were counted roughly every fortnight from 2001 to 2003. These counts were conducted starting about one hour before dusk and (in most cases) two to three observers were positioned at opposite sides of the roost, thereby ensuring that all birds were counted and double counts were minimized.

RESULTS
The earliest records of the species in the Middle East region are from the early 1970s in various locations in the Gulf States, where the species has been introduced in large numbers to serve as a potential agent of biological pest control (Porter et al 1996). This area remains the centre of the species' introduced range in the Middle East (Bundy & Warr 1980, Jennings 1995, Nightingale & Hill 1993, Richardson 1992). However, the species has now been recorded in virtually every Middle Eastern country (Fig 1). Apparently, some countries have been colonized by 'vanguard' individuals only very recently, as demonstrated by many documented first records: eg Iraq in 1997 (Salim 1998), Egypt in 1998 (Millington 2000), Lebanon in 1999 (Bara 2002), and Jordan in 2001 (Kilburn in litt). However, the possibility that this species has been overlooked in the past prior to the surge in birdwatching activity cannot be disregarded.

The range in Israel (up to 2003)
Apparently, the first Common Myna was seen by J. Riihimaki (in litt) in Eilat at the northern end of the Red Sea on 3 April 1987. This record remained the only observation for Israel until 1997, when small numbers were discovered in Park HaYarkon, a large urban park in northern Tel Aviv. Since then there has been a rapid increase both in numbers and distribution (see Figs 2 and 3). The first nesting was confirmed in Park HaYarkon and Mikve Yisrael in 2000 (Sapir 2003). By 2003 these mynas had been seen widely across Israel. The focus of distribution in terms of population density is still in the central coastal area, especially in Tel Aviv. However, small numbers of

birds have appeared as far north as the Carmel coast near Haifa and the Sea of Galilee. Eastward expansion is demonstrated by single individuals appearing at the foot of the Judean Mountains and in Jerusalem and southward expansion is shown by occurrences in the southern Coastal plain, in Beer Sheba and near the western shore of the Dead Sea (Fig 2).

The highest concentrations of Common Mynas are still found in Park HaYarkon. A large communal roost is present in the park (maximum number counted in November 2002: 380 individuals). The number of birds during roost flights peaked in the winter (outside the breeding season, which occurs between May and August) but has been substantial even in spring and early summer (eg 200 in June 2002). Seventeen nests were found in the park in 2002. However, since this number is not based on a systematic nest search and because a larger number of pairs were observed, the breeding population is expected to be larger. At this stage only rough estimates of the total population size in Israel can be made. A conservative estimate for the whole country is 500 birds (end of 2003), c70% being in the Tel Aviv area (see Figs 3 and 4).

The main habitats of the species in Israel are urban and suburban parks with irrigated grass lawns and native trees (often date palms) or traffic structures. In some cases also building structures (shopping malls, fuel stations) are colonized. Nest sites have been found in palm trees, woodpecker holes, traffic lights, electricity utility poles, and in crevices in buildings.

DISCUSSION

The current spread of the Common Myna in Israel and in most parts of the Middle East was likely triggered by deliberate introductions or by accidentally escaping cage birds and is not likely due to natural range expansion from adjacent areas. However, the larger geographical pattern of spread does resemble a natural range expansion process. In fact, differentiation is often difficult between natural expansion and invasive spread of non-natives, as was the case with Cattle Egret Bubulcus ibis in the New World (Peterson 1954, Maddock & Geering 1994) and the Eurasian Collared Dove Streptopelia decaocto, a species which underwent a rapid range expansion throughout Europe in the 1900s and showed an almost comparable recent invasive spread through parts of North America after being introduced there (Hengeveld 1993). What is remarkable about the current spread of the Common Myna in Israel is the extremely short time-lag of just a few years from first occurrence to the rapid spread.
The populations in Israel most likely originate from locally introduced stock and do not represent spread from other areas in the Middle East where the species was introduced prior to the rise of the Israeli Common Myna population. It is conceivable that the first Israeli birds in the Tel Aviv region were escapes from a bird zoo (Tzapari), which was established in the mid-1980s and holds many non-native species in the centre of Park HaYarkon. A number of non-native birds are free-flying in the park, including some sturnids, (Vinous-breasted Starling *Sturnus* (Acridotheres) burmannicus, Black-collared Myna (Starling) *S. (Gracupica) nigricollis, Superb Starling *Lamprotornis superbus*, Rüppell’s (Glossy-) Starling *L. purpuroptera*), some of them now breeding freely in various numbers. All these species are likely escapes or deliberate releases from the bird zoo. Occurrences of the Common Myna and its spread in other Middle Eastern countries were generally blamed on escapes or deliberate introductions (Richardson 1992, Gregory 2002). Although we lack detailed information concerning the number of releases or escapes from the bird zoo given the fast rate of the park’s population growth, we have assumed that it was a fairly larger number. Earlier observations of small numbers likely were of birds released by or escaped from private bird fanciers, because the Common Myna is a fairly popular cagebird in Israel and other Middle Eastern countries (eg see Gregory 2002).

The habitats used by Common Myna in Israel and other parts of the Middle East demonstrate its preference for areas undergoing major land-use change, typically such as large, irrigated grass lawns interspersed with trees and artificial structures like street and traffic lights, which choice mirrors in many ways the species’ habitat preference in...
its native tropical range (Feare & Craig 1998). In this context, we note that in the Middle East, the Common Myna is apparently most abundant in countries with higher GNP’s, where large-scale landscaping is affordable (eg the Gulf States, Saudi Arabia, but also Israel). We hypothesize that in these semi-arid and arid countries the species is associated with high water consumption in luxurious areas, where the water use can recreate artificially sub-tropical and tropical habitats resembling those in its native range (Feare & Craig 2000). Urban and suburban landscaping – as a significant form of land-use change – appears to provide opportunities for colonisation by some bird species with appropriate biological attributes, as demonstrated by previous expansions of other predominantly subtropical birds into Mediterranean areas in Israel: both White-spectacled (Yellow-vented) Bulbul Pycnonotus xanthopygus and Palestine Sunbird Cinnyris (Nectarinia) osea are today abundant in irrigated gardens in central and northern Israel (Shiri hai 1996). Urbanization bringing increased irrigation of parks and other grass lawns is expected to play also a major role in the spread of the tropical Great-tailed Grackle Quiscalus mexicanus into temperate zones of the US (Wehtje 2003).

So far, negative effects of the Common Myna are not known in Israel and data on negative interactions with other bird species are still only anecdotal (eg an observation of Common Mynas eating House Sparrow Passer domesticus chicks in Park HaYarkon in June 2004: Yotam Orchan pers comm). Aggressive behaviour towards Syrian Woodpecker Dendrocopos syriacus has also been noted in the vicinity of nesting holes. Similar competition for nesting holes between introduced mynas and native birds occurred in Australia (Pell & Tidemann 1997). However, to date it is unclear whether native birds might be affected by increasing numbers of Common Myna in Israel. Current work is focused on determining such patterns. Sapir (2003) states that the species is currently still restricted to urban parks and anticipates antagonistic effects on native birds once mynas colonise irrigated rural areas. Given the documented negative effects in other parts of the world, notably among island avifaunas (Byrd 1979, Grant 1982, Jones 1996, BirdLife International 2000), such potential effects need to be closely studied. The interaction between Common Myna and another recently introduced species, Vinous-breasted Starling is currently under investigation (Salit Kark & Yotam Orchan unpub). It would be prudent to be alert to future interactions of Common Myna with other native species, such as Tristram’s Starling Onychognathus tristramii, a species that recently has shown some tendency to colonize urban environments in some parts of the Middle East, probably encountering the myna soon (Chris Feare pers comm)

It is interesting to note that the Common Myna has been implicated in the dispersal of non-native invasive shrub species in the Seychelles (Fleischmann 1997). Such facilitation of invasion of non-native plants by invasive birds appears to be to a widespread phenomenon (Richardson et al 2000). Other negative effects of introduced dense populations of Common Myna in many parts of the world have been as agricultural pests and as nuisance species (noise disturbance and droppings at urban roost sites) Kannan & James (2001).

![Fig 4: Increase in population size and occurrences of Common Myna Acridotheres tristis in Israel 1987 to 2003. The population estimates are based on available records and minimise double-counting. Occupied sites represent geographically distinct occurrences or populations.](image-url)
The presented data describe the early stages of a remarkable population increase of the Common Myna in Israel and demonstrate the need for careful documentation and thorough monitoring of any new occurrence of non-native bird species. Such data are needed to facilitate predictions of future spread and to develop counterstrategies if deemed necessary. We do lack detailed information on the number of birds that were released or did escape. Success of invasion of non-native species is both a function of the number of individuals entering a new area and of the frequency of such introduction events (propagule pressure sensu Williamson 1996). Therefore, ornithologists and birdwatchers alike need to become aware of the numbers and species of non-native birds kept in captivity, to record sightings of introductions and to help discover why introductions have occurred, whether as escapes or deliberate releases, all as part of maintaining a heightened interest in non-native species. Data on such species have become increasingly important and the birding community should be encouraged to collect data in the same way as for the 'more attractive' native species.

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The winter distribution and habitat use of the near-threatened Cinereous Bunting Emberiza cineracea

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INTRODUCTION

The conservation of migratory bird species poses special problems because their annual movements, often spanning continents, require their breeding grounds, stop-over sites and wintering grounds to remain capable of meeting their needs (Salathé 1991, Crick & Jones 1992, Bibby 2003). For example, we know quite well the Palearctic breeding grounds and the principal migration routes of over 300 migratory bird species through Europe and the Mediterranean, but we have but a fragmentary knowledge of the distribution of these migrants in Africa (Walther & Rahbek 2002). Recently, Walther et al (2004) specified the African winter distribution and habitat use of the near-threatened Cinereous Bunting Emberiza cineracea. Its categorisation as near-threatened arises because livestock grazing and tourism developments are destroying its breeding habitats on several Greek islands and around the Turkish cities of Develi and Kilis (ssp cineracea). Little is known of the conservation status of the ssp semenowi which occurs from southeastern Turkey through northern Iraq up to an apparently isolated population in the Zagros Mountains in SW Iran (Byers et al 1995, Snow & Perrins 1998, BirdLife International [BLI] 2004). The species migrates through the Middle East and the Gulf Region to its wintering range, which lies not only in northeastern Africa but also in the southwestern Arabian peninsula (Chappius et al 1973, de Knijff 1991, Byers et al 1995).

Because the focus of Walther et al (2004) was exclusively the African winter distribution of the Cinereous Bunting, I provide here the supplementary Arabian winter records of the Cinereous Bunting to better describe the entire winter distribution of this species.

While the species is regularly recorded on migration in Cyprus, Syria, Lebanon, Jordan, Israel, Palestinian Authority

Map 1. Recorded localities for Cinereous Bunting Emberiza cineracea in the southwestern Arabian peninsula and in Africa taken from those listed in both Walther et al (2004, Table 3) and in Table 1 of this study. Key: ⋄ or ○ = occurred in November to February inclusive, and ▲ or △ = records in other months, solid symbols representing records since 1980 and open symbols prior to 1980. 2005 © Bruno Walther.
Territories, Egypt, Kuwait, Qatar, Bahrain and the United Arab Emirates (BLI 2004), true winter records from November to February are surprisingly few, the most recent African winter record being from the 1950s (Walther et al 2004). Therefore, the more recent winter records from Yemen reported in this note will hopefully aid further field investigations of the whereabouts of this species during the Palearctic winter.

METHODS

To acquire information about the winter distribution of the Cinereous Bunting, I contacted all Ornithological Society of the Middle East (OSME) country contacts, and various field ornithologists that had worked in the region. Furthermore, with the help of Effie Warr and Robert Pryš-Jones, I was able to consult all the older literature citations and to examine all available specimens at the British Museum (Natural History), Tring, UK, while P Sweet sent information on the available specimens in the American Museum of Natural History, New York, USA. Each record of the species was entered into a database containing information on number, subspecies, age, and sex of individuals observed, as well as data on habitat, date, and locality. I established the geographical coordinates of each locality identified. Where the source did not provide coordinates, I consulted the Times Atlas (1956 & 2001 editions), various printed gazetteers, or the internet-based gazetteer of the National Geospatial-Intelligence Agency (2005). Whenever these references provided more accurate coordinates than did the original sources, I used the revised coordinates.

RESULTS

The migration and winter distribution of the Cinereous Bunting were previously described by Chappius et al (1973), de Kniijf (1991) and Walther et al (2004). Table 1 presents all recorded localities for the Cinereous Bunting in Africa not previously listed in Walther et al (2004) plus all records in the southwestern Arabian peninsula. There are only April and September records for Sudan (Walther et al 2004). Those from southwestern Saudi Arabia are from March, April, September and December; the locality of the last-named (Record 1) lies close to the present Saudi-Yemen border. Except for Record 1, all winter records from November to February inclusive come from Eritrea and Yemen whereas all recent (post-1980) winter records are exclusively from Yemen (Map 1). The only recent Eritrean records are from March and April (Records 18 & 19).

The reported habitats used by the birds recorded in Table 1 are similar to those given in Walther et al (2004); elevations range from 1220–2200m asl, and habitats generally are semi-open to open rocky areas, grasslands, meadows or low-intensity cultivated areas, interspersed mostly with low vegetation of mosses, ferns, grasses, herbs, shrubs, and some larger trees and woodlands where presumably seeds are the principal food (cf Records 7 & 18). The Cinereous Bunting frequently appears to associate with other species in winter flocks (eg with Serinus spp, Petronia spp and other bunting species).

The eastern subspecies semenowi definitely migrates from its breeding range to both parts of the wintering range, but so far, the western breeding subspecies cineracea has been observed only in northeastern Africa (Walther et al 2004) (Table 1). From the sparse data available, it seems that cineracea migrates only to the western part of the wintering range but not to the southwestern Arabian peninsula.

1Tilahun et al (1996) report the supposedly first sighting of a single Cinereous Bunting in or around the Dessa'a Forest (13°20' - 14°10'N, 39°32' - 39°55'E), an Important Bird Area of Ethiopia north-east of Mekele (Me'ele), 13°32'N, 39°33'E), citing Dijksen (1996) which probably provides further details on this record. The locality extends the range of the Cinereous Bunting very slightly south of the southernmost Eritrean record shown in Map 1, but overall extends the range only slightly south of the Eritrean-Ethiopian border.
Table 1. Recorded localities of Cinereous Bunting *Emberiza cineracea* in Africa not previously listed in Walther et al (2004) plus all records in the southwestern Arabian peninsula. Sources and details of each record are specified by record number below the table. Subspecies, age and sex (F=female, M=male), and numbers (No) observed are given if known. Dates are as accurate as possible, given the source. Geographical coordinates are given as degrees, minutes and seconds, and were double-checked (see Methods). Details of each Record follow Table 1.

<table>
<thead>
<tr>
<th>Record/Subsp.</th>
<th>Age</th>
<th>Sex</th>
<th>No.</th>
<th>Date</th>
<th>Locality</th>
<th>Coordinates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Saudi Arabia</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 semenowi</td>
<td>adult</td>
<td>F</td>
<td>1</td>
<td>23 Dec 1936</td>
<td>Faifa [= Fayfa], Tihama ‘behind Jizan’ [= Jaizan], Asir region</td>
<td>17°15’30&quot;N, 43°06’00&quot;E</td>
</tr>
<tr>
<td>2 -</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>16 Mar 1984</td>
<td>near Taif</td>
<td>21°16’13&quot;N, 40°24’57&quot;E</td>
</tr>
<tr>
<td>3 -</td>
<td>adult</td>
<td>F</td>
<td>1</td>
<td>10 Apr 1992</td>
<td>Wadi Turabah, Asir Mountains, between Taif and Baha</td>
<td>20°27’58&quot;N, 41°14’29&quot;E</td>
</tr>
<tr>
<td>4 -</td>
<td>adult</td>
<td>-</td>
<td>1</td>
<td>10 Apr 1992</td>
<td>Wadi Turabah, Asir Mountains, between Taif and Baha</td>
<td>20°27’58&quot;N, 41°14’29&quot;E</td>
</tr>
<tr>
<td>5 -</td>
<td>-</td>
<td>-</td>
<td>≥ 1</td>
<td>16 Sep 1995</td>
<td>Wadi Three Gazal-Ash Shafa [= Wadi ash Shafa], c20km SW of Taif city</td>
<td>21°06’20&quot;N, 40°20’01&quot;E</td>
</tr>
<tr>
<td><strong>Yemen</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 semenowi</td>
<td>adult</td>
<td>M</td>
<td>1</td>
<td>26 Dec 1912</td>
<td>Menakha [= Manakah], Yaman Mountains</td>
<td>15°04’19&quot;N, 43°44’27&quot;E</td>
</tr>
<tr>
<td>7 semenowi</td>
<td>adult</td>
<td>M</td>
<td>1</td>
<td>11 Jan 1913</td>
<td>Menakha [= Manakah], Yaman Mountains</td>
<td>15°04’19&quot;N, 43°44’27&quot;E</td>
</tr>
<tr>
<td>8 semenowi</td>
<td>adult</td>
<td>M</td>
<td>1</td>
<td>31 Jan 1913</td>
<td>Menakha [= Manakah], Yaman Mountains</td>
<td>15°04’19&quot;N, 43°44’27&quot;E</td>
</tr>
<tr>
<td>9 semenowi</td>
<td>adult</td>
<td>M</td>
<td>1</td>
<td>6 Mar 1913</td>
<td>Wasil [= Jabal al Wasil], Yaman Mountains</td>
<td>14°41’00&quot;N, 45°45’00&quot;E</td>
</tr>
<tr>
<td>10 semenowi</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>Dec 1948</td>
<td>high up on the Jebel Sabar (= Sabor) near Taiz</td>
<td>13°32’26&quot;N, 44°00’46&quot;E</td>
</tr>
<tr>
<td>11 -</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>8 Oct 1979</td>
<td>Qa [= Qa'] al Haql, S of Yarim [= Yerim]</td>
<td>14°17’50&quot;N, 44°22’49&quot;E</td>
</tr>
<tr>
<td>12 -</td>
<td>-</td>
<td>-</td>
<td>7</td>
<td>10–11 Nov 1985</td>
<td>Al Mahwit (between Sanaa and Al Hodeidah)</td>
<td>15°27’00&quot;N, 43°33’00&quot;E</td>
</tr>
<tr>
<td>13 -</td>
<td>-</td>
<td>-</td>
<td>≥ 1</td>
<td>10 Dec 1992</td>
<td>near Al Bishari (= Bayt al Bishari)</td>
<td>15°28’49&quot;N, 43°35’31&quot;E</td>
</tr>
<tr>
<td>14 -</td>
<td>-</td>
<td>-</td>
<td>25</td>
<td>18 Nov 1993</td>
<td>Al Mahwit (between Sanaa and Al Hodeidah)</td>
<td>15°27’00&quot;N, 43°33’00&quot;E</td>
</tr>
<tr>
<td>15 -</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>Oct</td>
<td>Jabal Sumarah-Wadi Rafood-Wadi Bana</td>
<td>14°08’00&quot;N, 44°18’00&quot;E</td>
</tr>
<tr>
<td>16 -</td>
<td>-</td>
<td>-</td>
<td>Scarce</td>
<td>Winter</td>
<td>Jabal Shibam</td>
<td>15°02’00&quot;N, 43°45’00&quot;E</td>
</tr>
<tr>
<td><strong>Egypt</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 -</td>
<td>adult</td>
<td>F</td>
<td>1</td>
<td>30 Mar 1996</td>
<td>10 km east of El Arish (= El ‘Arish)</td>
<td>31°08’30&quot;N, 33°53’24”E</td>
</tr>
<tr>
<td><strong>Eritrea</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 -</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>21 Mar 1998</td>
<td>Acria Dam near Asmara (central plateau)</td>
<td>15°21’36&quot;N, 38°57’00&quot;E</td>
</tr>
<tr>
<td>19 -</td>
<td>adult</td>
<td>M</td>
<td>1</td>
<td>22 Apr 2002</td>
<td>Dengolo Tattay in the Lower Dongollo, 20–30km from Massawa on the road to Asmara</td>
<td>15°28’21&quot;N, 39°08’03&quot;E</td>
</tr>
<tr>
<td><strong>Tunisia</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 -</td>
<td>adult</td>
<td>M</td>
<td>1</td>
<td>21 Apr 1971</td>
<td>Gabes [= Gabès]</td>
<td>33°53’00&quot;N, 10°07’00&quot;E</td>
</tr>
</tbody>
</table>
The winter distribution and habitat use of the near-threatened Cinereous Bunting Emberiza cineracea

The numbers below correspond to the numbers in the Record column in Table 1:

1. Specimen collected by H. St. J. B. Philby deposited in the British Museum (Natural History), Tring, UK (BMNH 1937.4.17.574) and cited in Bates (1937 p794) and later mentioned in Meinertzhagen (1954 p112) and Chappius et al (1973). Habitat: 6000ft [= 1829m] asl, no further details.

2. Observed by Chris Hobden and accompanied by other buntings, either House Buntings Emberiza striolata or Cinnamon-breasted Bunting E. tahapisi (FE Warr in litt 2003). Habitat: no information.

3. Observed by S Newton (in litt 2004) and cited as ‘spring passage migrant’ in Evans (1994). Habitat: among low shrubs and boulders on a rocky wadi slope (c1600m asl, S Newton (in litt 2004); more details found in Evans (1994)).

4. Observed by S Newton (in litt 2004) and accompanied by two Ortolan Buntings E. hortulana and possibly two more Cinereous Buntings E. cineracea; cited as ‘spring passage migrant’ in Evans (1994). Habitat: assumed to be similar to that of Record 3.


6. Specimen collected by GW Bury and deposited in the British Museum (Natural History), Tring, UK (BMNH 1913.7.18.82) and cited in Sclater (1917 pp146–147) and later mentioned by Bates (1937 p794), Meinertzhagen (1954 p112), Chappius et al (1973) and Brooks et al (1987). Habitat: 7000ft [= 2134m] asl, no further details.


Habitat: wadi with cultivated terraces and uncultivated rocky areas interspersed with wooded areas and areas rich with grasses, herbs, ferns and mosses (1900m asl); more details found in Evans (1994).


14. Observed by D Farrow (in litt 2004). Habitat: wadi with cultivated terraces and uncultivated rocky areas interspersed with wooded areas and areas rich with grasses, herbs, ferns and mosses; more details found in Evans (1994).

15. The species is cited as ‘passage migrant/winter visitor’ in Evans (1994) without further details. Habitat: low-intensity agricultural areas on plains and lower slopes and dense low shrubbery interspersed with herbs and grasses on higher rocky slopes (1800–3000m asl); more details found in Evans (1994).

16. The species is cited as ‘scarce winter visitor’ in Evans (1994) without further details. Habitat: relatively well-wooded highland area with scattered Acacia woodlands, mountain meadows, and terraced hill-sides; more details found in Evans (1994).


18. The individuals observed by Zinner (2001) were feeding on flower seeds in a manner similar to European Goldfinches Carduelis carduelis and were flocking together with several Ortolan Buntings E. hortulana and African Cirls Crithaga [Serinus] citrinelloides (D Zinner in litt 2004). Habitat: open grassland and Eucalyptus grove near dam (2200m asl, D Zinner in litt); more details in Zinner (2001)

19. Observed by C. Wiklund (in litt 2004). Habitat: the individual was accompanied by a few Petronia sp individuals and was drinking from a small rain-water pool in a deserted courtyard of an old Italian public bath, now a ruin, surrounded by very steep semi-arid mountain slopes covered with boulders, stones and gravel, and some sparse vegetation, eg bushes and small forest patches.


Additions and corrections to Table 1, Basra Reed Warbler Acrocephalus griseldis in Walther et al (2004).

The Tanzanian records from ‘east of Mubeza (= Mubesia)’ and ‘near Tanga’ are identical and originate from the same male specimen deposited in the British Museum (Natural History), Tring, UK (BMNH 1934.11.21.62) collected by RE Moreau on 24 March 1934.

Additions and corrections to Table 3, Cinereous Bunting, in Walther et al (2004).

The three individuals mentioned as Records 5–6 were collected on 2 April 1914 (cf. Sclater & Mackworth-Praed 1918 p464) between 3000 & 4500ft [= 914 & 1372m] asl and were, according to the specimen labels, accompanied by several other conspecifics when shot. The specimen mentioned as Record 8 was collected, according to the specimen label, ‘on maritime plain about 15 miles from sea’.

Bruno A. Walther
DISCUSSION

For the moment, the Cinereous Bunting is classified only as near-threatened (BLI 2004), but field ornithologists working both in the breeding and wintering grounds should continue to monitor the species for possible population decreases. As mentioned above, some breeding habitats continue to be destroyed, but we know much less about the state and possible change of wintering habitats (but see, for example, Evans 1994). Indeed, it appears to be exceedingly hard to even find the species in its wintering quarters in northeastern Africa. For example, C Wiklund (in litt 2004) suggested that the Cinereous Bunting may be becoming extinct in Eritrea because his only observation of the species (Record 19) occurred during two years of field observations (over the months of February to August and involving at least 1200 hours [his estimate] of birdwatching) in many regions of Eritrea (including the Asmara, the Dubarwa – Mendefera, the Massawa and the Senafe areas, the surroundings of Adi Abeita, Adi Kuchet, Adi Zarna, Ali Gedir, Amne Tekle, Barentu, Campo Achera, Decamere, Dembe ne ar Adi Quala, Ghandien, Ghatelal, Ghinda, Grettit, Gurgussum, Hirigigo, Keren, Nefasit, Tessenei, Tira Amni, the Elabered estate and the water reservoir of Mai Serva, the northern road to Filfil, the riverbed and riverine forests of the river Gash close to the Sudanese border, and the islands Dahlac Kebir, Dur Gaam, Dur Ghella, Enteara, Enterdebir, Entraya, Nocra, and Seil Nokra of the Dahlac Archipelago). Similarly, H. Shirihai (pers comm 2004) made no observation of the species at all during five years of extensive field observations in Ethiopia over the months of August to November. Perhaps neither observer was present at the right time of year to detect the main wintering population, but the general paucity of winter records in the literature and from experienced and well-travelled field ornithologists makes one wonder whether there are undiscovered wintering sites. One ongoing atlas project (Ash & Atkins, Birds of Ethiopia and Eritrea) may close some of these sampling gaps.

Walther et al (2004) used modelling techniques to predict possible undiscovered wintering sites for the Cinereous Bunting, and suggested that a combination of suitable temperatures, elevations, habitat and forest cover existed in the plains and hills along the Red Sea coasts in southern Egypt, Sudan, Eritrea, Ethiopia and Somalia as well as in a few inland areas in Sudan, Ethiopia and Kenya which may provide putative wintering grounds for the Cinereous Bunting. Given the paucity of information concerning the breeding, migration and wintering areas of this species, it is essential to gather further information on the status of this species. This desk study and the studies cited above (which summarise most known information on the winter distribution and habitat use) can provide a starting point for further fieldwork on the Cinereous Bunting.

ACKNOWLEDGEMENTS

I thank the many people and institutions who have helped with the project called ‘A database of Western Palearctic birds migrating within Africa to guide conservation decisions’ and who are acknowledged on the website http://www.macroleology.ku.dk/africamigrants.htm. For providing records and references for this particular study, I thank the librarians of the Royal Society for the Protection of Birds at The Lodge, Sandy, UK, the librarians of BirdLife International, Cambridge, UK, Linda Birch at the Alexander Library, Edward Grey Institute, Oxford University, UK, and Dawn Balmer, Peter Capainolo, Mike Evans, Dave Farrow, George Gregory, Michael Jennings, Stephen Newton, Richard Porter, Robert Prýs-Jones, Hadoram Shirihai, David Stanton, Paul Sweet, Effie Warr, Christer G Wiklund and Dietmar Zinner. In the early parts of this study, I was financed through a 2-year Marie Curie Individual Fellowship funded by the European Commission’s ‘Improving Human Research Potential’ programme, administered by the European Commission Research Directorate General in Brussels. Much of the work was carried out at the Zoological Museum, University of Copenhagen, Denmark and at the Department of Zoology, University of Cambridge – I am grateful for the assistance I received there.
The winter distribution and habitat use of the near-threatened Cinereous Bunting Emberiza cinereacea

PRIMARY REFERENCES


SCLATER, WL. 1917. The birds of Yemen, south-western Arabia, with an account of his journey thither by the collector, Mr. G. Wyman Bury. Ibis 105(5): 129–186.


SECONDARY REFERENCE


Plate 1. Northern Lapwing Vanellus vanellus and Sociable Lapwing V. gregarius Erzerum, Turkey, 2005 © Soner Bekir.

Plate 2. Sociable Lapwing Vanellus gregarius taking off, Erzerum, Turkey, 2005 © Soner Bekir.

Plate 3. Sociable Lapwing Vanellus gregarius climbing, Erzerum, Turkey, 2005 © Soner Bekir.
The status of Sociable Lapwing *Vanellus gregarius* in Syria

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INTRODUCTION

Sociable Lapwing (Plover) *Vanellus gregarius* (*Chettusia gregaria*) is a bird of semi-arid steppes, breeding in southeastern Russia and Kazakhstan and wintering in southwest Asia and northeast Africa (Glutz von Blotzheim *et al* 1975, Cramp & Simmons 1983, Kasparek 1992). Its movements on outward migration are slow and protracted (Snow & Perrins 1998). It disperses widely through much of southern Asia, including Syria. BirdLife International [BLI] (2005) gives the key wintering sites as being in Israel, Eritrea, Sudan and northwest India; typical wintering habitats are dry plains, sandy wastes and areas of short grass, often adjacent to water.

There has been a major range contraction since the 1850s, the species having disappeared from former breeding areas in the Crimea and southeast Ukraine (Glutz von Blotzheim *et al* 1975, Kasparek 1992). Sociable Lapwing entered the IUCN Red List in 1988. In 1998, it was classified as Vulnerable, having an estimated world population of fewer than 10 000 individuals (Stattersfield & Capper 2000). More recently the decline has accelerated – in April 2002 breeding numbers were estimated as being between 200 and 600 pairs (600 to 1800 individuals, Tomkovich & Lebedeva 2002). Its IUCN Red List status changed in 2004 to Critically Endangered ‘because its small population has undergone an extremely rapid reduction for poorly understood reasons, and this decline is projected to continue in the future’ (BLI 2005).

This catastrophic decline has been attributed to a range of causes, primarily thought to occur in breeding areas. Sociable Lapwing is a conspicuous ground-nesting species vulnerable to predators and human disturbance. Large-scale cultivation attempts, failed and successful, across the Russian steppes since the 1930s almost certainly have had a major long-term effect. However, ‘known factors cannot explain the magnitude of recent declines, but key threats probably affect birds at wintering and passage sites’ (Stattersfield & Capper 2000). Conservation measures proposed have included surveys of key wintering and passage sites (BLI 2005). This report reviews recent records from Syria and neighbouring countries to assist the conservation of a species under serious threat of extinction.

RECENT ASSESSMENTS OF THE STATUS OF SOCIABLE LAPWING IN COUNTRIES NEIGHBOURING SYRIA

Kasparek (1992) made a detailed assessment of Sociable Lapwing’s status in the Middle East, concluding that it was an uncommon migrant with large wintering flocks only in the Negev of Israel and Eritrea; most records from Turkey were in late April and September – October. During a BLI project on Great Bustard *Otis tarda*, Soner Bekir (in litt & pers comm) estimated 125 on the Bulanik Plain near the city of Mus in East Anatolia in Oct 03 and counted flocks of 12 and 8 near Erzerum airport on 19 October 2005 (Plates 1–4), supporting its Turkish status as a passage migrant. Kasparek (1992) reviewed previous records from Mesopotamia, concluding that it had never been an important wintering area for the species. There are few recent ornitho-
logical data from Iraq but a ‘large flock’ was reported from the Tigris south of Mosul, during a helicopter flight on 5 November 2004 (Trouern-Trend 2005). There are two Lebanese records, both in October, from 1958 and 2004 (Ramadan-Jaradi et al 2005). Andrews (1995) treats it as a winter vagrant in Jordan, the most recent published record being of 7 in the northeast in February 1969. He noted that Canon Tristram had found Sociable Lapwing plentiful in February 1872. Andrews suggested that small flocks might winter around Jordan’s desert fringe. Shirihai (1996) described it as a ‘rare to fairly rare passage migrant’ to Israel, passing through from mid-February to mid-May and from mid-September to late November, and a ‘locally scarce winter visitor’, arriving in November – December and departing in the second half of February and in March. It still winters in the Negev but numbers have declined to perhaps 20 – 40 in recent years (Yoav Perlman, pers com).

Green (1984) made field observations from February 1983 to January 1984 in the al Jawf area of northwestern Saudi Arabia, immediately south of the Jordanian border, an area ecologically similar to much of eastern Syria. He described Sociable Lapwing as an uncommon migrant in February – May and August – September but did not cite individual records. Recently (20 Nov 05) Anders Blomdahl’s Swedish Ornithological Society expedition to Oman reported 13 and 6 at two locations near Salalah, Oman (Ian Harrison in litt to editor) (Plate 5). BLI (2005) summarises the status of Sociable Lapwing in the Middle East as ‘non-breeding’ (equivalent to wintering status) in Iraq and Israel, a passage migrant in Iraq, Syria, Saudi Arabia and Turkey and a vagrant to Lebanon and Jordan.

**RECENT RECORDS FROM SYRIA**

The Syrian avifauna is very poorly known (Evans 1994). In his overview, Kasparek (1992) made little reference to Sociable Lapwing in Syria. He tabulated 8 records, all between September and November, noting that at that time there were no Syrian records between December and February. Neither Pyman (in Syria January – September 1943) nor Jeffery (in the Palmyran desert April 1948 – April 1950) recorded the species in Syria; McFarlane noted it once between 1974 and 1977, a flock of 40 birds at Dibsi Faraj on Lake Assad on 12 September 1974 (Macfarlane 1978). The overview by Baumgart et al (1995) concluded that Sociable Lapwing was a passage migrant in March and from September to November in small numbers (maximum 30), with most records from the northeast.

In the last decade there has been increasing interest in Syria’s birds. Visits by individual birders have yielded only one Sociable Lapwing record (Table 1). However, there were three observations totalling 23 birds in 2001 – 2003, all in February – March, in or near the al Talila Reserve southeast of Palmyra (Serra et al 2005). Three records totalling 8 birds came from the Syrian Wetland Expedition in January – March 2004 (Murdoch et al 2004): one on a flooded field with 2000 Lapwings at Lake of Homs, western Syria; three in a meadow north-east of the Euphrates valley, again with Lapwings; and 4 in the al Talila Reserve.

**ASSESSMENT OF STATUS IN SYRIA**

Syria is a country through which, for geographical reasons, a significant part of the Sociable Lapwing population is likely to pass, either on migration to Israel and northeast Africa or possibly to winter. The tabulated records from early February to mid-March (Table 1) are consistent with Baumgart’s assessment that the species is a migrant rather than a wintering species to Syria. However, on detailed examination, it becomes clear that this interpretation could be due to observer bias; observations at al Talila reserve were much less frequent in December – January than in February –
March and small numbers of birds could have overwintered without detection. Most sites were only visited once during the Syrian Wetland Expedition. Thus it is still unclear whether Sociable Lapwing is a scarce wintering bird or only a passage migrant to Syria. A further possibility is that Syria is an important wintering area in February – March with the early part of the winter spent elsewhere.

The most direct danger to Sociable Lapwings in Syria is from hunting, which is illegal but widespread (Evans 1994; Murdoch et al 2004, Serra et al 2005). One of the few recent records relates to a shot bird (Serra et al 2005); another comes from Lake of Homs, where hunting is often intensive (Murdoch et al 2004). A more insidious threat comes from degradation of the species’ favoured habitat, mainly from overgrazing, which has intensified in the last generation. There is a complex cocktail of causes for overgrazing, including the disruption of traditional patterns of pasture exploitation, rapid technological progress, a very high rate of population growth and a general lack of conservation awareness at all levels (Serra & Chatty, in prep).

The Italian Government sponsored the creation of the al Talila reserve, a FAO/Ministry of Agriculture project for the re-introduction of large mammals. As a result of strict protection over the past 10 years, al Talila’s steppes are in excellent condition with good shrub coverage, a unique circumstance in the Syrian steppe (Serra et al 2005). A small number of Common Cranes Grus grus winters in the reserve every year with larger numbers stopping over in mid-March, and the reserve has attracted species such as

<table>
<thead>
<tr>
<th>Date</th>
<th>Bird nos</th>
<th>Site</th>
<th>Source</th>
<th>Habitat</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>24/2/98</td>
<td>7</td>
<td>Deir ez-Zor – Ashhola, Euphrates valley</td>
<td>Wester (unpub)</td>
<td>Undulating steppe with shrubs</td>
<td>No other information is available.</td>
</tr>
<tr>
<td>14/2/01</td>
<td>5</td>
<td>al Talila reserve</td>
<td>Serra et al 2005</td>
<td>Flat steppe with scattered shrubs</td>
<td>Possibly 10–15 present</td>
</tr>
<tr>
<td>7/3/01</td>
<td>17</td>
<td>Near al Talila reserve</td>
<td>Serra et al 2005</td>
<td>Flat steppe with scattered shrubs</td>
<td>Two flocks of 4 and 13</td>
</tr>
<tr>
<td>7–8/3/03</td>
<td>1 shot</td>
<td>Near al Talila reserve</td>
<td>Serra et al 2005</td>
<td>Flat steppe with scattered shrubs</td>
<td>Shooter reported a small flock to G Serra</td>
</tr>
<tr>
<td>9/2/04</td>
<td>1</td>
<td>Lake of Horns, W Syria</td>
<td>Murdoch et al 2004</td>
<td>Lake shore / inundated field</td>
<td>In flock of 2000 Lapwings</td>
</tr>
<tr>
<td>21/2/04</td>
<td>3</td>
<td>Between Tal Brak &amp; al-Hasakah, NE Syria</td>
<td>Murdoch et al 2004</td>
<td>Meadows</td>
<td>In flock of 44 Lapwings</td>
</tr>
<tr>
<td>22/2/04</td>
<td>4</td>
<td>al Talila reserve</td>
<td>Murdoch et al 2004</td>
<td>Flat steppe with shrubs</td>
<td>In flight</td>
</tr>
</tbody>
</table>
Asian Desert Warbler *Sylvia nana* (Murdoch et al 2004). Four of the seven records of Sociable Plover in Syria in the last ten years have come from *al Talila*, the observations becoming almost regular during the FAO project from 2001 to 2004. Observer bias has probably played a part but we suggest that the high-quality habitat encourages Sociable Lapwings to make a prolonged stopover in late winter or during migration.

A Sociable Lapwing monitoring scheme was included in *al Talila* reserve’s 2004–2006 management plan but unfortunately it was not implemented after the FAO project ended. The pattern of observations indicates that *al Talila* is still a regular site for Sociable Lapwing. We therefore recommend strongly that the African-Eurasian Migratory Waterbirds Agreement (AEWA) and BLI become actively involved procedurally in making resources available so that the staff of *al Talila* can undertake regular surveys for the species throughout the winter. We also ask that other organisations, such as OSME, retain an active interest in Syria, specifically in the Sociable Lapwing.

It is clear that the threats to Sociable Lapwing, its ecology, migration patterns and even its wintering range are very poorly understood. Because it is Critically Endangered, urgent action is needed. We therefore recommend that the staff of *al Talila*, as employees of the Syrian Ministry of Agriculture, should undertake national surveys of appropriate habitat to determine the present status of Sociable Lapwing in Syria. If significant overwintering or passage populations are discovered, it is essential to identify and preserve key habitats.

**PRIMARY REFERENCES**


**SECONDARY REFERENCES**


Middle Asia versus Central Asia in OSME usage

P. J. COWAN

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email: desertmammal@yahoo.com

Geographically, central Asia consists of Xinjiang and surrounding areas in Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan¹, Afghanistan, Pakistan, Kashmir, Tibet, Qinghai, Gansu, Inner Mongolia, Mongolia and the Russian Federation. Bräunlich (2002), for example, wrote about ‘Birding in Central Asia: an introduction to Mongolia’ (though eastern Mongolia is east Asia). OSME expanded its area of interest in 2000 (Sandgrouse 22: 82) to include the Caucasus region and the former states of the Soviet Union between the Caspian Sea and China but referred to the latter area, of western and west-central Asia, as ‘Central Asia’.

I first aired the topic of using Middle Asia rather than ‘Central Asia’, for OSME usage, at the 2001 OSME AGM (Sandgrouse 23: 82), after correspondence with the then OSME Chairman Andrew Grieve. My interest has been rekindled by the following comments by Henry Le Houérou, the eminent arid-lands ecologist, in his review (Le Houérou 2005) of the bilingual, Russian-English, Botanical Geography of Kazakhstan and Middle Asia (Desert Region). He stated, “The term ‘Middle Asia’ is used [in the book under review] in the sense as accepted by most Russian-speaking authors, that is, the area including S. Kazakhstan, Turkmenistan, Uzbekistan, Tajikistan and Kirghizstan, the CIS’s (former USSR) south Asian republics. Middle Asia opposes Central Asia, which corresponds with Western China (Xingjiang) and Outer and Inner Mongolia.” Le Houérou (2005) highlighted the climatic differences between Middle and Central Asia as defined and continued, “Unfortunately some modern scientists confuse these two fundamental notions (e.g., the author of the book’s Preface, G. Winkler, and even Russian speaking authors, such as A. G. Babaev from the Desert Research Institute of Ashgabat, Turkmenistan, and others).”

However, there is a history of using ‘Central Asia’ for these former Soviet republics and this meaning is in danger of becoming entrenched in English-language usage. The following English-language geographies of the USSR used ‘Central Asia’ or ‘Soviet [or ‘Russian’] Central Asia’, rather than Middle Asia: Suslov (1961, a translation from Russian), the Economist Intelligence Unit (1963), Cole (1968, 1984) and Lydolph (1977). Kazakhstan was partially (Suslov 1961) or completely (Cole 1968, 1984, Lydolph 1977) excluded from ‘Central Asia’, the Economist Intelligence Unit (1963) was not explicit. Cole (1984) referred to Middle Asian mountains and uplands in Kazakhstan and ‘Central Asia’. Howe (1983), in another geography of the USSR, described Soviet economic macro-regions of

¹I have left all spellings, quotations in the text and the paper’s style as the author employed them, rather than change to the Sandgrouse style for this thought-provoking paper. I concede the academic and intellectual weight of his argument and conclusion, but I fear that usage and acceptance of the term ‘Central Asia’, inconsistent in the past and perhaps only now approximating a more widespread consensus (Especially in the Russian Federation?), may already represent a step too far for any successful reversion to the eminently logical ‘Middle Asia’. I invite readers to comment. Ed.
Kazakhstan and ‘Central Asia’ and considered ‘Soviet Central Asia’ to be a major relief region consisting essentially of the Caspian-Turanian lowland of the Caspian-Aral-Balkhash basin. He treated the ‘Mountains of Central Asia’, of Tajikistan northeast to the Tarbagatay of Kazakhstan, as a ‘physical-geographical region’ of the USSR but used Middle Asia to refer to Kazakhstan, Turkmenistan, Uzbekistan, Tajikistan and Kyrgyzstan collectively.

Stamp’s (1967) ‘Soviet [and ‘Russian’] Central Asia’ included Kazakhstan, and he also described “The dead heart of Asia”, namely Tibet, the Pamirs, ‘Chinese Turkistan’ and the Mongolian region, in his geography of Asia. The Translator’s Foreword to the Flint et al (1984) field guide to birds of the USSR noted, “In this publication [Flint et al 1984], the authors often separate out Kazakhstan (due to its size) when referring to that republic, as well as referring to ‘the rest of Central Asia.” Micklin (1987) stated, “Traditionally, the area [Middle Asia] has been designated ‘Central Asia’ by the Russians and ‘Soviet Central Asia’ by foreigners to distinguish it from adjacent lands outside the USSR.” Derbyshire & Goudie (1997) described briefly “The deserts of [former Soviet] Central Asia” and presented a map of “the deserts of central and eastern Asia”, of China and Mongolia. Mayhew et al (2004) used ‘Central Asia’, not Middle Asia, for their Lonely Planet guide and noted, “The Central Asia of this book includes Kazakhstan, which in Soviet parlance was considered a thing apart. It is true that Kazakhstan’s enormous territory actually extends westward across the Ural River, the traditional boundary between Europe and Asia, but Kazakhstan still shares many geographic, cultural, ethnic and economic similarities and ties with Central Asia ‘proper’.”

Knystautas (1987, 1993), in his books on the natural history of the USSR and birds of the former USSR respectively, used ‘Central Asia’ for Middle Asia though his usage at times encompassed a larger area eg “The fauna of the eastern Pamir, although sparse, includes some species typical of the Central Asian tableland, especially of Tibet” (Knystautas 1987) and “Pallas’s Sandgrouse...is a truly Central Asian species, which occurs in Russia [i.e. former Soviet Union], Mongolia and China” (Knystautas 1993). In Kappeler’s (2001) history of the Russian empire the term Middle Asia (it excluded the Kazakh steppes) was used appropriately, but ‘Central Asia’ was used for the larger area: Middle Asia plus Sinkiang, Afghanistan and Mongolia. Goudie’s (2002) review of world deserts stated, “Central Asia is split into two parts that are separated by high mountains, including the Pamirs, the Tien Shan, Borohoro Shan, and Dzungarshkiy Alatau. To the west lie the deserts of the former Soviet Union, while to the east lie the deserts of China and its neighbours.”Lioubimentseva et al (2005) called the arid lowlands of Middle Asia, which they considered extend well into Kazakhstan, the ‘Central Asian arid region’ but noted that it “is bounded by the Middle Asian mountains (up to 7450m) on its southern and southeastern edges”. However, they referred also to “the Chinese part of Central Asia” and noted, “It is possible that western China remained a desert at a time when other parts of Central Asia were steppe-covered.”

Cressey (1960) referred to ‘Soviet Middle Asia’ in his review of the deserts of Asia. In their ecological reviews, Walter & Box, in West (1983), and Walter & Breckle (1989) used Middle Asia for southern Kazakhstan and the Soviet region to its south, east of the Caspian Sea, and Central Asia for areas in China and Mongolia including the Tibetan plateau (and the Pamirs of Tajikistan). Gavrilov et al (1993) distinguished between Kazakhstan and the ‘Middle Asian Republics’ of the former Soviet Union in their review of wader migration studies in the Middle Asian - West

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Siberian region. Middle Asia is defined in volume 24 of the English-language translation of the third edition of the Great Soviet Encyclopedia (Prokhorov 1980) as "the part of the Asian USSR that stretches from the Caspian Sea in the west to the Chinese border in the east and from the Aral-Irtysh Divide [in north-central Kazakhstan] in the north to the frontiers with Iran and Afghanistan in the south." It noted that, "The term 'Middle Asia' also refers to the territory comprising the Uzbek, Kirghiz, Tadzhik, and Turkmen SSR's, which together form the Middle Asian Economic Region" and "In foreign geographic works, the concepts of Middle Asia and Central Asia are not always clearly distinguished." The western and northern boundary of Central Asia, according to volume 28 (Prokhorov not dated), roughly corresponds to the national border between the USSR and China and Mongolia. As well as defining Central Asia, the latter volume defined, and described briefly the fauna of, the 'Central Asian' subregion of the Holarctic zoogeographic region, which "comprises the steppes, semideserts, and deserts of northern Kazakhstan and eastern Middle Asia; all of Afghanistan, Mongolia, and the Tibetan Highlands; and the steppes and semideserts of the European USSR. Some zoogeographers exclude the European USSR but include the Middle and Central Asian deserts and, sometimes, Iran."

An appendix to Cole's (1968) geography included the statement that "Central Asia should more precisely be translated Srednyaya Aziya (Middle Asia)." Srednyaya Aziya was translated twice as Central Asia, once as Middle Asia and Tsentral'nya Aziya as Central Asia in Russian-language reading-list titles on page 333 of Lydolph's (1977) geography. Kovshar' (2003) compiled the Russian-language "Ornithologists of Kazakhstan and Middle Asia: XX century", the English-language title provided in the book, and yet the same book’s English summary speaks only of "The region of Central Asia and Kazakhstan" and the "central Asian fauna".

Comparison of the quotations that follow, from books originally published in Russian, is remarkably informative. The Translator's Note, prior to the introduction in Dement'ev & Gladkov (1966), presented a brief explanation of a few geographic terms that included "...Soviet Central Asia (or briefly Central Asia, i.e., 'Srednyaya Aziya') refers to the five Soviet Republics (SSR) of Kazakhstan, Turkmenia, Kirgizia, Tadzhikistan and Uzbekistan, while Middle (non-Soviet) Asia (or briefly Middle Asia, i.e., 'Tsentral'nya Aziya,' rendered by 'Middle' instead of 'Central' since this, as just seen, is nomen prooccupatum), chiefly comprises Mongolia, Gobi, Sinkiang and Tibet." Conversely, in Petrov (1976), a book on world deserts (also a product of the Israel Program for Scientific Translations), it is stated "The terms Middle Asia and Central Asia, which recur frequently throughout the book, are defined as follows: Middle Asia (Srednyaya Aziya) is the geopolitical unit comprising the Soviet Asian Republics. It stretches from the Caspian Sea in the west...to the Aral- Irtysh water divide (including the Balkhash basin) in the north" and "Central Asia (Tsentral'nya Aziya) is a vast territory of desert plains and mountain ranges in the interior of Asia (China and Mongolia),..."

Jevgeni Shergalin translated three website extracts from Russian that described the history of usage in Russian of Middle and Central Asia and a recent trend in Russian-language usage to replace Middle Asia with 'Central Asia' or to expand the term Central Asia westwards to include Middle Asia. An English-language contribution on the physical geography of the mountains of 'Central Asia' and Kazakhstan by Merzylyakova (2002) stated, "In the FSU [former Soviet Union], two terms are used with respect to this area: Central Asia and Middle Asia. The term
Central Asia is used in a political and administrative context as a reference to the republics of Turkmenistan, Tajikistan, Uzbekistan, and Kyrgyzstan. In the physical geographical context, however, the region is known as 'Middle Asia' while 'Central Asia' refers to Dzungaria [in Xinjiang], the Takla-Makan [Xinjiang], and Gobi. The term 'Central Asia' is used in this chapter because it is how the region [Middle Asia] is known worldwide."

Publications in English have used 'Central Asia' to refer to areas of the former USSR, to areas of China and Mongolia and to areas that cross the former-Soviet / Chinese border. Use of Middle Asia by OSME would avoid this ambiguity. OSME's primary area of interest concerns the ornithology of the Middle East, Caucasus and Middle Asia, where Middle Asia is used broadly to include Kazakhstan.

ACKNOWLEDGEMENTS

Jevgeni Shergalin drew my attention to three relevant website extracts in Russian, which he translated. Mike Wilson informed me about Kovshar' (2003). I thank them both for their interest in this topic.

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Fan-tailed Raven *Corvus rhipidurus* – first record for Turkey

GEOFF AND HILARY WELCH

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In the two days immediately leading up to 22 March 2005, HJW and I had been exploring the valleys south of Antalya looking for potential migration watchpoints south of the well-known location of Belen, near İskenderun. Throughout this period the weather had been mixed, often cloudy with showers, and extremely windy, with winds predominantly from the south. We had seen very few migrants, large or small, which, given the movement observed on 22nd, suggests that birds may have been held up further south waiting for conditions to improve.

Having observed a few Lesser Spotted Eagles *Aquila pomarina* and Common Buzzards *Buteo buteo* from the roadside, HJW and I settled down at the site of the old observation point established a few years ago by KAD (Kuş Aristirmalar Derneği – the Turkish Bird Research Society) to count the migration that was taking place. During the period 08.50 to 12.50 we recorded 13 880 White Storks *Ciconia ciconia*, 632 raptors of 11 species, 126 Cranes *Grus grus* plus numerous passerines. At 11.03, I was scanning the hill to the east of our observation site when I saw a single dark bird approaching from the southeast. Upon looking at it with my binoculars, I immediately identified it as a Fan-tailed Raven *Corvus rhipidurus* because of the distinctive shape, but my brain was telling me I must be wrong as it was so unlikely! I shouted to Hilary and gave her directions as to the bird’s location by which time I had found it in my telescope which removed all doubt as to the bird’s identity. We both watched it as it flew north-north-west, joining a Marsh Harrier *Circus aeruginosus* which was passing through, until it was lost to sight. We were both confident with the identification having seen the species on numerous occasions elsewhere in the Middle East and Djibouti and Hilary prepared a series of sketches (Figure 1).

**Figure 1.** Sketches of Fan-tailed Raven *Corvus rhipidurus* made to support the first record for Turkey. © Hilary Welch.
We judged it to be smaller than Common Raven C. corax – about two-thirds the wingspan of the Marsh Harrier – and less heavily built, especially around the head and bill. The plumage, bill and bare parts were entirely black, with a slight sheen to the plumage when the sun broke through. The most distinctive feature was the extremely short tail which was well rounded and formed almost a continuous curve along the trailing edge of the wings which were noticeably broad at the base. This feature could be seen in normal flight and especially well when the bird performed a characteristic mid-air ‘tumble’. When seen gliding away, its wings were held slightly downcurved but with the wing tips swept upwards.

There were no signs of moult or damage to any of the feathers and the views were such that the possibility of the bird being a Common Raven which had lost some of its tail feathers could be ruled out. Similarly the head and bill size were smaller than for Common Raven. The wing and tail shape also ruled out Brown-necked Raven C. ruficollis and any of the crows. Although considered to be resident or only undertaking local dispersion, there are observations from Yemen of birds joining flocks of migrating raptors (Phillips 1982) and this seems to be the most likely explanation for this bird’s appearance in Turkey. The nearest regular location for the species is the northern end of the Dead Sea in Israel and Jordan, though the species has been recorded as a vagrant in Syria.

The record has been submitted to the unofficial Turkish Records’ Committee and posted on the Turkish national birdwatchers’ e-mail group Toygar for consideration and acceptance as the first record for the country.

REFERENCE


Distribution and Calendar of Swift Species in Turkey

LEVENT TURAN

Four Swift species have been recorded in Turkey, Common Swift Apus apus, Alpine Swift Tachymarptis melba, Little Swift A. affinis and Pallid Swift A. pallidus, all summer visitors to Turkey and passage migrants. Common Swift and Alpine Swift are recorded more often than the other two swift species, and in greater numbers. The distributions and arrival and departure dates differ for all four species. The Apodidae are the most aerial terrestrial bird family. In Europe the prominent behaviour of several swift species has attracted systematic observations of their phenology, systematic records having been made since the 18th century. These data are lacking in Turkey for swift species, as they are for many other bird species.

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Studies such as that by Turan (1992) on the distribution of Common Quail Coturnix c. c. coturnix in Turkey are urgently needed, but regular systematic recording of the phenology of species, to establish their annual calendar and to improve knowledge of species distributions form the basis of further work. Distributions for many species have been estimated from a variety of sources to produce useful guides (Porter et al 1996, Roselaar 1995), but remain small-scale or patchy. This study aims to improve our understanding of swift species in Turkey and to encourage others to emulate it for other species. After all, the work of Hintz (1857) begun in Pomerania on establishing ‘pathways’ of migrants, including Common Swift, continues today.
Methods
The scope of this study covers the recording of the movements of the 4 Swift species recorded (Kirwan et al 1998) in Turkey, the times of arrival of returning migrants and of departure of outward migrants in 2001–2003. Some 324 observations were realized in 2001, 409 in 2002 and 430 in 2003 (summarised in Table 1). These totals include my own records and those from reliable birdwatchers and researchers as posted on the Web (Toygar 2001–2003). Earliest and latest records are given in Table 2. From my evaluation of these observations, I have begun to compile distribution maps for swift species.

Analysis of these data confirmed that Common and Alpine Swift may gather in hundreds in many locations, particularly in early June (see Table 3), but the extent and periods over which these gatherings occur has yet to be established. Assemblies of smaller groups are far commoner.

SPECIES’ STATUS
Common Swift *Apus* *apus*
The most widespread (Map 1) and numerous of the swift species in Turkey, Common Swift is a breeding summer visitor and passage migrant. Usually, it breeds in occupied or ruined buildings, but more rarely in caves and high rocky areas, where 36 of 324 observations in 2001 datum were made. Of the 309 observations in 2002, 54 were of dates of arrival or departure.

Alpine Swift *Tachymarptis melba*
Common and widespread summer breeding visitor, especially in south and southwest Turkey, but it is also locally common elsewhere (Map 2). Dates were obtained from 13 of the 2001 records and from 14 of the 2002 records.

Table 1. Observations of swift species in Turkey, 2001–2003.

<table>
<thead>
<tr>
<th>Sources/Years</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author</td>
<td>45</td>
<td>36</td>
<td>37</td>
</tr>
<tr>
<td>Others</td>
<td>279</td>
<td>373</td>
<td>393</td>
</tr>
<tr>
<td>Totals</td>
<td>324</td>
<td>409</td>
<td>430</td>
</tr>
</tbody>
</table>

Table 2. Earliest (E) and latest (L) recording dates of swift species in Turkey, 2001–2003.

<table>
<thead>
<tr>
<th>Species</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>E</td>
<td>L</td>
<td>E</td>
</tr>
<tr>
<td><em>Apus apus</em></td>
<td>29.03</td>
<td>07.10</td>
<td>13.03</td>
</tr>
<tr>
<td><em>Tachymarptis melba</em></td>
<td>19.03</td>
<td>15.09</td>
<td>31.03</td>
</tr>
<tr>
<td><em>Apus affinis</em></td>
<td>11.04</td>
<td>30.09</td>
<td>12.05</td>
</tr>
<tr>
<td><em>Apus pallidus</em></td>
<td></td>
<td>24.09</td>
<td>02.04</td>
</tr>
</tbody>
</table>

Table 3. Some records of large gatherings of swifts Turkey.

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Species</th>
<th>No of birds</th>
<th>Observers</th>
</tr>
</thead>
<tbody>
<tr>
<td>29.09.2001</td>
<td>Mersin</td>
<td><em>A. affinis</em></td>
<td>85</td>
<td>L. Turan</td>
</tr>
<tr>
<td>02.06.2002</td>
<td>İzmir Karine Lake</td>
<td><em>A. apus</em></td>
<td>200</td>
<td>Toygar 2002</td>
</tr>
<tr>
<td>06.06.2002</td>
<td>Konya-Kulu</td>
<td><em>A. apus</em></td>
<td>500</td>
<td>Toygar 2002</td>
</tr>
<tr>
<td>08.06.2002</td>
<td>Ankara-Çeltikçî</td>
<td><em>A. apus</em></td>
<td>500</td>
<td>Toygar 2002</td>
</tr>
<tr>
<td>09.06.2002</td>
<td>Konya-Bolluk Lake</td>
<td><em>A. apus</em></td>
<td>500</td>
<td>Toygar 2002</td>
</tr>
<tr>
<td>12.06.2002</td>
<td>Mersin</td>
<td><em>A. apus</em></td>
<td>100</td>
<td>Toygar 2002</td>
</tr>
<tr>
<td>15.06.2002</td>
<td>Nigde Aladağlar</td>
<td><em>A. apus</em></td>
<td>80</td>
<td>Toygar 2002</td>
</tr>
<tr>
<td>19.06.2002</td>
<td>Adiyaman-Nemrut</td>
<td><em>T. melba</em></td>
<td>300</td>
<td>H.&amp;J. Eriksen 2003</td>
</tr>
<tr>
<td>20.06.2002</td>
<td>Van-Erçek Lake</td>
<td><em>A. apus</em></td>
<td>400</td>
<td>H.&amp;J. Eriksen 2003</td>
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<td>Ağrı-Doğubayazıt</td>
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<td>150</td>
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<td><em>A. apus</em></td>
<td>100+</td>
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<tr>
<td>25.10.2003</td>
<td>İstanbul</td>
<td><em>T. melba</em></td>
<td>1600+500</td>
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</table>
Little Swift *Apus affinis*
Summer breeding visitor, it has been recorded in small numbers locally in south and west Turkey (Map 3). In 2001, there were only 5 observations and in 2003 only one. More effort clearly is needed for this species, especially in spring.

Pallid Swift *Apus pallidus*
This is a very scarce summer breeding visitor to Turkey, breeding in northwest Anatolia and a few other localities (Map 4), being recorded in limited numbers everywhere. Most may be transit in here, but it is very difficult to identify it reliably and separate it from Common Swift. No arrivals were recorded in 2001 in 324 sets of observations, nor in 2003.
Gatherings
It is not uncommon to see large gatherings of swifts (most often of Common Swift), either of non-breeders or of birds preparing for return migration (Table 3, Map 5).

Threats to swift species in Turkey
- The most important known cause of mortality is starvation of the young, mostly through poor weather conditions affecting food availability.
- Losses of recently-fledged birds through inability to find food, the parents feeding only at the nest.
- Change of land-use reducing insect populations.
- Some long-established rock-wall nest-sites have been flooded as newly-built dams fill, especially in SE Turkey.
- The loss of nest-holes in older buildings through renovation and the construction of new buildings without nest-holes.

It may be that in Turkey swifts often find themselves stranded on flat ground after severe weather – further investigation is merited.

Discussion
In descending order, the frequency of observations in Turkey over the 2001–2003 period was: Common, Alpine, Pallid and Little. Apart from Pallid Swift, for which data are lacking, the first return migrants arrive within a 4-week period (early March to early April) from their African wintering grounds, aligning well with Common Swift arrival dates (late April to late May, as originally shown by Hintz [1857]) further down the migration route in north-central Europe. Tigges (2000) records Common Swift reaching Berlin on 7 May and leaving around 11 August. South of Turkey, the Common Swift migration calendar begins earlier, Cornfeld (2002a) giving 19 February for early arrivals in Jerusalem in 2001 and leaving in late June (Cornfeld 2002b). Geron (2002) noted swift migration in mid-August, with resident birds starting to depart from Tel Aviv in early June.

According to Tigges (2001), the Common Swift arrives in Europe in 4 waves, as it does in the Middle East. The first wave comprises very small groups or lone individuals. Some 12–14 days later, the second wave comprised of slightly larger groups arrives; it is likely that the first two waves comprise non-breeding birds, less than two years old. The 3rd wave is the largest comprising the breeding birds, arriving 2–3 days after the second wave. The fourth wave, again non-breeders, arrives some 4–6 weeks later. So far studies in Turkey have not addressed this aspect, which should present valuable data for analysis. A further issue to be addressed is whether more than one subspecies of Common and Alpine Swifts are present, but it is likely that this issue will require a capture programme to examine birds in the hand.

The Turkish observations show a considerable variation in dates of last records, from the end of September to early November, which may be due variation in large-scale weather patterns, as suggested by Tigges (2000) to account for variations in Germany of up to 17 days over 25 years.

PRIMARY REFERENCES

First Record of Long-tailed Shrike *Lanius schach* for Jordan

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On Sunday 11 April 2004, our next to last day in Jordan, Christian Dortu, Edouard Melchior, Guy Conrady and I were birdwatching in Aqaba coastal gardens, which comprise a narrow stretch of cultivated areas of land on the southern edge of Aqaba city between the coastline and the main boulevard. The place is rather busy, being a recreational park for locals and tourists alike and it is known for attracting many migrants (Andrews 1995), most of which are tired and very confiding. Most birds take advantage of the numerous palm trees and cultivated areas to feed before continuing their migration. At around 1700, after having already seen some 7 Eurasian Wrynecks *Jynx torquilla*, two Thrush Nightingales *Luscinia luscinia*, a White-throated Robin *Irrina gutturalis*, 8 Semi-collared Flycatchers *Ficedula semitorquata* (an influx of which was underway), 5 Masked Shrikes *Lanius nubicus* and many commoner migrants, we reached the southernmost garden.

There, I suddenly saw a bird, obviously a large shrike, take off from a palm tree and immediately return to its perch. At first glance, the large amount of black on the forehead led me briefly to assume it was a Lesser Grey Shrike *L. minor*. When the bird moved again, it revealed its upperparts. Seeing a very long tail with graduated edges and a back and scapulars predominantly cinnamon-rufous in colour was quite a shock! “Mega-rarity” came to mind! I shouted out, “There’s a Long-tailed Shrike. It’s the “Bird of the Trip”!” Despite their initial scepticism, they had to admit that the bird was very unusual, for it remained active amongst the treetops. I was familiar with the species mainly from the pictures of the very few vagrants to the Western Palearctic and it is rather straightforward to identify, but I little imagined I would find one in the region!

After a while, the bird became more confiding, enabling us to watch it for an extended period as it was feeding or perching in the palm trees, in the tops and much lower. Best of all was when it chose a two-metre stick. We spent the whole evening watching and photographing it avidly. Subsequently on 12 April (morning and evening) and 13 April (morning), we photographed it again at the same place. Latterly we were joined by Robert Franzen and his wife and daughter from Sweden. We are uncertain if the bird remained after we had left Jordan.
Description
Large *Lanius* shrike intermediate, between Great Grey *L. excubitor* and Lesser Grey Shrikes in size. Remarkable mainly for its long graduated tail. Broad black facial mask sharply demarcated from whitish chin/throat and grey cap. This ‘bandit-mask’ extends from the lores to ear-coverts (encircling the eyes) as well as to the forehead to an extent intermediate between that of Southern Grey Shrike *L. meridionalis* of the middle eastern race *aucheri* and Lesser Grey Shrike. However, the first head-on glimpse had suggested Lesser Grey Shrike. The bird possessed the following features:

- Very indistinct thin whitish line over the eyes between the black facial mask and the grey cap, visible on the pictures but not noticed in the field.
- Cap: an average grey extending on to the upper back, then fading into the rufous hue of the lower back and scapulars.
- Scapulars and lower back: a remarkably warm cinnamon-rufous, which extended on to the uppertail-coverts and rump.
- Flanks, breast and undertail-coverts: obviously washed with the same warm cinnamon-rufous colour.
- Belly and lower breast: pale beige or dingy white.
- Throat dingy white.
- Flight-feathers black, secondaries and tertials being edged ochre-rufous, the tertials’ fringes being larger.
- Primary projection rather rounded with five tips visible beyond the tertials including three thinly edged with beige.
- Long, remarkably graduated tail with black upper surface, the tip being rather rounded or wedge-shaped depending on the bird’s aspect. Tail undersurface was greyer, especially the tips of the rectrices but graduating darker towards the end, the tips being almost white. The lateral movement of the tail was reminiscent of a clock pendulum.
- Bill totally black, and deep with a marked hook.
- Legs black.
- Eyes black.

Behaviour
When it was discovered, the Long-tailed Shrike was behaving very nervously. It would perch only for short periods and flew frequently between perches. After a while, it relaxed, spending long periods in the palm trees, mostly in a rather restricted area. In the palm canopy, it usually selected on the lower leaves perches with panoramic views. From such vantage points it would catch large insects that it would immediately impale on the palm thorns. Sometimes, it would descend further, even to the ground, affording us breathtaking views.

On our subsequent visits, it behaved in the same confident way, rarely straying far from its favoured area. On several occasions, it approached within 10m. It seemed unconcerned by local people’s activities in the gardens, concentrating on catching prey. Twice, we witnessed an ‘attack’ performed by a male Red-backed Shrike *L. collurio*, provoking the Long-tailed Shrike into uttering its characteristically loud harsh calls, from which its onomatopoeic species name ‘schach’ was derived by Linnaeus (Cabard & Chauvet 2003) whose knowledge of German allowed a pun, because ‘Schach’ has two meanings - the game of chess itself and the (often loud) exclamation for ‘Check!’.

Status
As described by Lefranc and Worfolk (1997), the Long-tailed Shrike is almost exclusively an Asian bird. Eight subspecies breed in Asia and one in the Australasian region in Papua New Guinea. In East Asia, the nominal subspecies *schach* reaches easternmost China and in the west of its asiac range, the subspecies *erythronotus* reaches south-east Turkmenistan, eastern Uzbekistan and southern Kazakhstan as a summer breeding bird. Its presence nowadays even further west in the Khorasan in Iran remains unconfirmed though apparently it was recorded
there in the past. Derek Scott did not find it there and noted (in litt to Keith Betton), “As far as I know, there have been no reports of Lanius schach in Iran since Zarudny’s time. He lists the form erythronotus as a breeding bird and passage migrant in N and S Khorasan (NE Iran). Erard and Etchécopar (1970), in their brief summary of the breeding bird fauna of Iran, say simply, ‘Nichérait d’après Zarudny dans le nord du Khorasan’”.

It was originally thought that the bird belonged to the eastern nominate ssp schach because of its rather dark upperparts. Indeed, the very small white patch at the base of the primaries also raised some questions on its subspecific identity but shrike expert Brian J Small (in litt 9 Jun 2004) commented as follows after seeing the pictures of the bird: “I am in no doubt that the subspecies is erythronotus, on the basis of the colour of the upper and underparts. Having studied specimens at Tring, I can tell you that the amount of white at the base of the primaries is variable in all races, and in fact is often less than described or portrayed in various books. Most frequently it is a little more extensive than on your bird, but sometimes even absent – the amount on your bird is fine for erythronotus”. Thus, this bird is considered to belong to the ‘expected’ western subspecies erythronotus.

In the Western Palearctic, there are only four prior records - Jordan becomes the fifth country to have hosted the species:

- Israel: Sede Boqer, Negev mountains, Nov 1982 to late Feb 1983. The ssp erythronotus was identified only on 26 Jan 1983 (Shirihai & Golan 1994).
- Turkey: near Birecik, 24 Sep 1987. Although trapped and collected, the race remains undetermined (Shirihai & Golan 1994).

An additional record from 21 Apr 1979 at Féhértó in Hungary was subsequently rejected on the grounds that the bird was considered a hybrid Woodchat Shrike L. senator x Lesser Grey Shrike L. minor (Stevenson 2000).

In the Middle East, there are 13 further records, some unconfirmed (K Betton in litt):


United Arab Emirates: 3 recent records. 9–11 Sep 1999 at Khalidiyah, Abu Dhabi; 3–21 Mar 2003 at Dubai Airport Hotel, 24 Oct 2003–20 Mar 2004 at Fujairah National Dairy Farm. This Aqaba record has been accepted by the Jordan Birds Records Committee.

ACKNOWLEDGEMENTS

I wish to thank Dawn Balmer and Keith Betton for compiling the previous Middle Eastern records, Ian Andrews, Steve Gantlett and Guy Kirwan for their help in the writing process of this note, Brian Small for his comments on the subspecies, Derek Scott for his comments on the status of the species in Iran and Edouard Melchior, Guy Conradi and Christian Dortu for their company during the trip and their refreshing enthusiasm for this Long-tailed Shrike record.

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The first record of White-throated Kingfisher
*Halcyon smyrnensis* for Bulgaria

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On 23 May 2005 I was in North-east Bulgaria beside the Bolata freshwater wetland (just a few hundred metres from the Black Sea coast and north from Cape Kaliakra, UTM P10) when I observed an adult White-throated Kingfisher *Halcyon smyrnensis*. The wetland lies at the far end of a relatively narrow canyon cut into the Dobrudzha plateau, which is covered with steppe vegetation. The wetland is overgrown with emergent vegetation (*Typha* sp and *Phragmites* sp) and its periphery possesses such as walnut tree *juglans regia*, wild plum *Prunus cerasifera*. The weather conditions were excellent – sunny, clear and warm with a weak west-southwesterly and good visibility.

Initially, I had noticed a bird leaving the area of open water and heading towards and disappearing into walnut-trees amid scrub, some of which was dried out or had bare branches, at the far end of the wetland, about 100m from me. A few seconds later the bird reappeared and perched on a bare branch slightly further away (c120m) and returned to the scrub.

**Description**

*Size and shape:* In flight, the bird seemed bigger than European Bee-eater *Merops apiaster* because its wings were broader and its body more compact body. Bee-eaters were flying or alighting on the trees near the kingfisher, allowing a good size comparison. The kingfisher perched in typical fashion, facing me, revealing its body shape and especially its white chest. **Head:** Proportionally very large in comparison with the body. **Bare parts:** The saturated-red bill was extremely large relative to the body. **Upperparts:** In flight as it turned, its gleaming blue back, tail and secondaries stood out against its dark coverts, the first aspect that caught my attention. **Wing pattern:** Very bright blue secondaries contrasted with its dark (almost black) coverts. The primaries had dark tips. The bill colour and the bright plumage indicated that it was an adult bird.

The White-throated Kingfisher has a predominantly Asian distribution, which just extends into Asia Minor in southern Turkey and Europe in Azerbaijan (Burfield & van Bommel 2004). It is basically resident throughout its range, but migration is evident, especially towards its breeding range limits (Fry et al 1992), some individuals wandering to an unquantified extent outside the breeding season. Its occurrences in Greece, Lebanon, Cyprus and the former USSR (Cramp 1985), outside its breeding range, are mostly between August and March, suggesting that these individuals are casual visitors or vagrants. There are no previous Bulgarian records of White-throated Kingfisher. This observation is extremely unusual, not only because it occurred during the breeding season, but also because the nearest population in Turkey, some 80–120bp, having declined by 80% since 1990 (Burfield & van Bommel 2004), is so small. Although the smaller (10–50bp) Azerbaijan population is probably stable, the species’ European population has been placed on the European IUCN Red List’s ‘Endangered’ category (BirdLife International 2004).
First documented case of Lesser Kestrel *Falco naumanni* breeding in an open nest in Israel

MOTTI CHARTER AND YOSSI LESHEM


On April 30, 2003 while searching for Common Kestrel *Falco tinnunculus* nests, a female kestrel holding a field vole *Microtous guntheri* in its beak was observed perched on a date palm tree in plantation at Kibbutz Sde Eliyahu, Israel (32°30'N, 35°30'E), in the Jordan Rift Valley, 7km from Beit Shean city, some 200m below sea level. A few seconds later, an adult male Lesser Kestrel, at

**Plate 1.** Lesser Kestrel *Falco naumanni* pair near their open nest, Israel. 2003 © Ronen Vaturi.  

**Plate 2.** Lesser Kestrel *Falco naumanni* chicks in open nest, Israel. 2003 © Ronen Vaturi.
least two years old, was noted calling from the adjacent date palm tree. The male mated with the female, which then flew to another tree and started eating the vole. Experienced birders using a telescope and hearing the calls identified the female as a Lesser Kestrel. The closest Lesser Kestrel colony is 5km away.

Using a hydraulic lift from Kibbutz Sde Eliyahu, we found the nest 7m up a date palm tree, facing east. It lay cupped between a two branch offshoots and the tree-trunk, 1.5m below the crown. The first egg of a clutch of four was laid on 4 May 2003. The nest was similar to that used by Common Kestrels in Israel and was completely open, unlike the typical cavity site. Consequently, we could observe the parents by telescope from below while they were incubating. Three two-day old nestlings were found on 2 June. There was a cache of 5 uneaten house mice Mus musculus and a half-eaten field vole next to the nestlings. However, in the first week after hatching, the brood was lost to an unknown predator as was the brood of a Common Kestrel only 29m away.

This is the first documented case in Israel of Lesser Kestrels nesting in an open nest. This pair was unusual for other reasons: the nest was solitary, remote from any colony, and the main prey items were small rodents.

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The first ‘Caucasian’ Water Pipits Anthus spinoletta coutellii and Rock Pipit Anthus petrosus in Greece

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During the winter of 2004–5 I made a detailed study of the ornithologically little-known east coast of Crete. Although I was based near Palekastro, just to the south of Crete’s northeastern extremity (Cape Sideros), I was able to visit the coastal lagoon at Xerokampos, at the island’s strategic southeastern corner, almost weekly from 7 November until 7 April. Xerokampos proved to be the only location for wintering Water Pipits Anthus spinoletta, numbers peaking at 14 in late January.
The shallow Xerokamos lagoon is saline, being separated from the sea only by a narrow sand bar, and its level is kept topped up by seawater filtering through the bar and by waves overlapping it at high tide and during onshore winds. Three different habitats were used by Water Pipits: the inner margins of the lagoon itself, which are intersected by muddy channels; an area of brackish marsh behind the beach to the north of the lagoon (the most favoured habitat), and, occasionally, a fairly small rocky-sided pool in a seasonal watercourse behind a pebble beach to the north of the saltings. The pool’s salinity varied when it was absorbed by the stream emanating from the adjacent gorge after the main winter rains.

‘Caucasian’ Water Pipits

It was this last locality that attracted two individuals of the Caucasian race of Water Pipit A. s. coutellii. On 23 November 04, after a northerly gale with hail showers the previous day, I had seen only one Water Pipit of the nominate race at the main lagoon. When I reached the pool there were two birds feeding together on the concrete causeway that crosses the watercourse on the inland side: a male beema Yellow Wagtail (Motacilla flava), astonishingly in full summer plumage, and a nondescript pipit which was clearly too pale to be a ‘normal’ Water Pipit. Fortunately, the stunning wagtail made an early departure, leaving me to concentrate on the ‘less exciting’ pipit. Having had no previous experience of coutellii, I was unsure of its identity and took a detailed description. From this I was able to identify the bird as a Water Pipit of the Caucasian race, which although occurring on Cyprus (Flint & Stewart 1992), had never been recorded in Greece or, as far as I am aware, anywhere else in Europe.

Although very shy at first, the bird gradually became more confiding and I was able to photograph it on 2 December (Plates 1 and 2). Apart from the general paleness of the plumage, the main features were the finely streaked upperparts (including the crown), plain grey/brown nape, large pale area on the throat, vestigial pale brown malar patch, diffuse buffish brown streaking on the breast and flanks and a prominent greyish wing panel extending from the median coverts to the primary coverts. Less obvious were narrow white ‘braces’ on the mantle - a feature totally absent in nominate spinoletta. It was less vocal than the nominate race, partly because it was reluctant to fly (preferring to skulk in fringing vegetation when disturbed) but I was unable to detect any significant difference in its call. Its behaviour and habitat preference were very different, however. Any nominate spinoletta visiting the pool flew straight back to the saltings when flushed. In contrast, coutellii was clearly at home in rocky surrounds and never joined the other pipits on the marsh.

This individual was last seen on 11 December. Seven weeks later, on 30 January 05, after five days of south to south-east winds bearing a sandy haze from the deserts of North Africa, another pipit appeared at the same pool showing the same general plumage and behavioural characteristics. The individual plumage differences were too great to allow the possibility of wear changing the appearance of the first bird to such an extent. In particular, the upperparts were slightly darker and greyer (but still much paler than nominate spinoletta) rendering the greyish wing panel less prominent, the pale brown streaking on the underparts was less diffuse and the legs were dark red, not black.

Unfortunately, I was unable to get a photograph of this individual, and it did not stay. The number of Water Pipits peaked on this day and it is probable, given the weather conditions, that these were birds moving back north from North Africa (perhaps the Nile Delta) and had brought a second coutellii with them. Both records have been accepted by the Greek Rarities Committee.

The breeding range of A. s. coutellii extends from the Caucasus eastwards to northern Mongolia (Vaurie 1959) although BWP (Cramp 1988) also includes eastern Turkey. In winter the race reaches as far west as Egypt, the Near East and eastern Arabia (Vaurie 1959). BWP erroneously attributes all Cyprus records to this race on the basis that specimens collected in spring were all coutellii. Sight records of Water Pipits in winter there are not definitively assigned to race (Flint & Stewart 1992) and it seems inconceivable that nominate spinoletta does
not occur in Cyprus, particularly in hard winters. The direction of movement of \textit{coutilii} from the breeding grounds is predominantly south or southeast, so some vagrancy to the west of the range is predictable. This distinctive race could also conceivably reach northern Europe through misorientation (see Berthold 2001).

The association of the late November bird with an eastern race of Yellow Wagtail, immediately after a weather system which brought other arrivals from the north-east, is perhaps indicative of its origin. In late January the weather was conducive to the arrival of the second bird from the extreme west of the wintering range, in Egypt. It may be significant that nominate \textit{spinoletta}, with which it may have arrived, seem to leave their winter territories very early. Only 6 of the 14 Xerokampos birds were still present on 2 February and only two 10 days later.

The marked plumage differences from other races of Water Pipit, the choice by both birds of a rocky pool close to areas of more typical Water Pipit wintering habitat and the apparent lack of overlap in breeding ranges suggest, given current taxonomic trends, that \textit{coutilii} is as good a candidate for specific status as Water/Rock Pipit.

**Rock Pipit**

On 17 December 04, after more than a week of strong, cold north-westerly winds, which had brought exceptional numbers of northern birds like Fieldfare \textit{Turdus pilaris} and Brambling \textit{Fringilla montifringilla} to eastern Crete, I was looking through the Meadow Pipits \textit{A. pratensis} and Water Pipits on the marshy ground to the north of the Xerokampos lagoon. When disturbed the pipits flew, as usual, into the adjacent olive grove, but one bird remained faithful to a line of boulders traversing the marsh which marked the edge of a disused track. Even at first glance it was much duller overall than Water Pipit, lacking the contrast between the upperparts and whitish underparts of that species. After several brief, but good, views I realised it was beyond doubt a Rock Pipit \textit{Anthus petrosus}. Although it looked very like the birds I was familiar with in Scotland (nominate \textit{petrosus}) it would almost certainly have been of the eastern race \textit{littoralis}, which looks similar in winter, is more migratory and has occurred in Sicily and Malta (Cramp 1988). Although the first comprehensive checklist of the birds of Greece assumed that \textit{littoralis} probably occurred (Bauer et al 1969) other claims, including some from British bird-watchers in Crete and one of two birds in April from nearby Karpathos (Kinzelbach & Martens 1965) have either not been submitted or not accepted as proven (Handrinos & Akriotis 1997).

The Xerokampos bird frequented the same area until at least 2 January 05, but remained frustratingly shy, skulking in the low marsh vegetation when approached, and defying all attempts at photography. A detailed description compiled from observations made over three visits was submitted to the Greek Rarities Committee, which accepted the record as the first for the country. The diagnostic features were the dull olive/grey/brown upperparts, sullied underparts with bold dark streaking on the breast and flanks (much denser than on Water Pipit), truncated pale supercilium not extending behind eye, prominent black malar patch and greyish outer tail feathers. When it was last seen, the supercilium appeared slightly paler and more extensive, reinforcing the probability that it was \textit{littoralis}.

**REFERENCES**


\textbf{Bonn. Germany.}

Derek Harvey OBE, 1928 - 2006

Derek was a medical doctor who spent much of his life working abroad. I got to know him and his wife, Meriel, in the Yemen in the 1990s when he was the medical officer for the Joint Oil Companies’ Medical Clinic. They were wonderful hosts for a travelling birder. Previously he had been posted in Zambia, Oman and Brunei and for all these countries made a valuable contribution to their developing birding activities and networks. In Oman he was an active member of the Oman Bird Records Committee, being variously its meetings secretary and sponsoring the transfer of their central card Index to microfiche. He also took a great interest in preserving the Lansab Lagoons.

In Yemen Derek ably picked up a smouldering Yemen Ornithological Society torch in 1993 and kindled it through social unrest and the ’94 civil war until his final departure - and retirement - in 1996. Under his guidance YOS was given a credibility and effectiveness that it had not previously enjoyed. Derek helped co-ordinate the Yemen records for the Atlas of Breeding Birds of Arabia (ABBA) for several years as well as bringing the diplomatic community and influential Yemenis into the conservation fold. He also founded the Yemen Times Conservation Group and in 1993 ensured the success of the OSME expedition to southern Yemen and Socotra by acting as the Mr Fix-it. In 1996 he was awarded an OBE for services to the community in Yemen.

When Derek and Meriel moved back to England he became actively involved with OSME (he was a life member) sitting on its council from 1997 to 2001 where he was responsible for the features in Sandgrouse.

Derek was a large man both in frame and personality. Always with a twinkle in his eye, he was a great communicator and orator and his pen flowed with the enjoyment of keeping in touch with his friends.

Richard Porter
PHOTOSPOT - Pharaoh Eagle-Owl

GRAHAM R. LOBLEY

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The accepted taxonomy of Pharaoh Eagle-Owl *Bubo ascalaphus* is currently in a state of flux. Several recent authors (Sinclair & Ryan 2003, Clements 2001, König et al. 1999) recognise this charismatic desert bird as a full species, whereas others (eg Mullarney et al. 1999) retain it as the *ascalaphus* subspecies of Eurasian Eagle-Owl *Bubo bubo*. More recently, the International Ornithological Congress has now listed the Pharaoh Eagle Owl as a full species (in litt to Editor¹). The patchy and poorly-known distribution ranges from parts of the Sahara (Sinclair & Ryan 2003) in North Africa to throughout the Arabian deserts (Jennings 1995, Richardson 1990). In North Africa, it is thought to be uncommon to rare (Sinclair & Ryan 2003) and in Arabia it is considered to be a widespread resident in the northern and central deserts (Jennings 1995). In eastern Saudi Arabia, it is generally well established in its favoured habitat of broken escarpments and isolated rocky outcrops in the desert (Bundy et al. 1989). Pairs reportedly occupy most suitable habitat east of the Dahna Sands, but not further west around Riyadh and the Tuwayk escarpment (Bundy et al. 1989).

In the past, I have had distant or nocturnal silhouette views of eagle-owls in Dhahran, eastern Saudi Arabia, but it was not until March–April of 2005 that I enjoyed close and diagnostic encounters with this iconic desert species. I located an occasionally used roost spot – a small hole in a quarry face on the southern edge of Dhahran in late March. This position was north-facing, but at 0630 on April 2 2005, I noticed the owl basking at the entrance to the hole in clear early morning sunlight. Very carefully, I approached incrementally, taking monopod-supported pictures at each extended pause, until I was eventually only about 15m away. Elated, I decided to return the following morning with a tripod, to optimise photography. The bird was completely relaxed and began scratching and generally monitoring its surroundings. I had an exciting hour of observation and photography before the bird retreated further into the shadows of the small cavity as the sun and temperature rose. It was extremely fortunate that this was during a three-day weekend, allowing me to observe the bird on consecutive mornings. I saw the owl at this roost spot on several occasions, on either mornings or afternoons, between 28 March and 6 May; it was conspicuously silent in flight. The species’ reported habitat in Arabia is normally in remote areas, including hillsides, rocky outcrops and cliffs, as well as more open desert (Gallagher & Woodcock 1980, Richardson 1990), so a virtually urban quarry location was initially somewhat surprising (under 1km from a residential community), although this bird is elusive and might possibly have been overlooked. However, I have since learnt informally that quarry locations have been reported in Arabia (Mike Jennings pers comm, Colin Richardson pers comm), the former near Dhahran and the latter within 10km of Dubai centre (1987 and 2002). There is also an ABBA database report of breeding at a quarry near Dhahran in spring of 1997 and 1998 (Ian Phillip’s record).

Notable field characters (Plates 1 & 2) of this large nocturnal raptor included: large orange-yellow eyes, prominent dark-lined face, apparently short ear tufts when relaxed, white throat patch and short bold streaks on the upper breast. The breast being delicately barred and the wings being blotched and barred beige, brown and white affords the bird excellent camouflage at roost. Other distinctive features included finely feathered legs and feet, relatively long legs and short tail. I noted the approximately cylindrical owl pellets at the base of the cliff face. On 22 April I took one, about 50mm long and 25mm in diameter, for closer examination. On opening it with toothpicks, I found this comprised entirely tiny bones and fine fur, suggesting that small mammals, probably gerbils, had formed this owl’s

¹ See Editorial, this issue.
principal prey. In Arabia, food reportedly consists mainly of desert rodents, but also can include birds, reptiles and even hares (Gallagher & Woodcock 1980). Subsequently, I learnt of a more formal pellet analysis (Richardson 1993) of a UAE sample, which revealed the owl’s diet primarily comprises rodents (gerbil and sand rat) and lizard fragments.

Subsequently, in early August, Stuart Lilly reported a large, ‘horned’ owl which he had noticed recently on several mornings at Dhahran Hills. Stuart kindly took me the exact site. On my first visit at 0500 on August 8, I did not see the owl during a 45-minute vigil, although I was well-rewarded with good views of two Rüppell’s sand foxes Vulpes ruppelli sabaea. However, I connected with the owl during the following weekend (August 11 & 12). These mornings afforded excellent views of this individual, which was still relatively active between 0600 and 0745, ie after the sun was already well up. It occasionally flew between two small limestone outcrops, or jabals (Plate 3). Generally, it sought the shady side, but on several occasions, it was well lit in bright sunshine (Plate 4). It was generally alert, although I did not actually see it feeding. Its ear tufts were raised and very conspicuous when it was alert (Plate 4), though when it relaxed, the tufts were lowered. When perched on the rocks, it sometimes opened its wings partially, occasionally preening and scratching. This behaviour was different from ‘sunning’, in that it did this in the shade and its feathers were not fluffed out. I imagine that the partly opened wing posture was to provide a cooling effect; I have seen perched Blue-cheeked Bee-eaters Merops persicus in Saudi behave similarly during warm weather. During several good flight views, the bird’s underwings were conspicuously pale, almost white, with black-tipped primaries and a black subterminal primary band (Plate 5), as illustrated in Sinclair & Ryan (2003). The plain creamy-white underwing coverts were also apparent in the semi-open wing posture. The owl was a medium-sized raptor, which looked about buzzard-sized Buteo sp in flight, though it wings were broad and almost square-tipped.

Despite several more visits during August and early September, the owl was sighted again only on August 18, when at 0640, I witnessed a remarkable encounter between it and a sand fox. The latter approached the owl, which was perched on a low rock, within about 5m. The two just looked at each other, and then the fox walked on by, keeping its distance. This stand-off was intriguing – presumably either the fox had decided against attacking the owl, or the two predators paid prudent respect to their respective powers. The August owl appeared quite lean, making me suspect that survival may be quite a challenge throughout summer. In the hot season, potential prey such as gerbils apparently retreat deep into their burrows and eat seeds stored from better times in side tunnels – some may even aestivate to conserve energy (Brown 1979). This wonderful owl is difficult to see well within Dhahran and my amazing owl encounters in spring and summer 2005 certainly rank among my top birding experiences in Arabia.

As an unexpected coda to the day’s experiences, on that afternoon, while photographing the jabal habitat, I also enjoyed superb views at close range of three handsome male Black-crowned Sparrow-Larks Eremopterix nigriceps, another uncommon bird within Dhahran, though further inland towards Abqaiq, less so.

ACKNOWLEDGEMENTS

Special thanks to Mike Blair for encouragement and critiquing the text. Thanks also to Mike Jennings and Colin Richardson for providing some updated Arabian information on owl records relatively close to inhabited areas.

REFERENCES

Plate 1. Pharaoh Eagle-Owl *Bubo ascalaphus* relaxing in the early morning light 2 April 05 Dhahran. © Graham R. Lobley.

Plate 2. Pharaoh Eagle-Owl *Bubo ascalaphus* scratching in the early morning light 2 April 05 Dhahran. © Graham R. Lobley.

Plate 3. Owl habitat at Dhahran Hills, 12 August 05. Dhahran Hills. © Graham R. Lobley.


Plate 5. Pharaoh Eagle-Owl *Bubo ascalaphus* in flight, 12 August 05, Dhahran Hills. © Graham R. Lobley.
A mystery *Passer* sparrow from southern Yemen

GUY M KIRWAN, RF PORTER AND NICK DYMOND

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During the second OSME expedition, to southern Yemen and Socotra, in March–May 1993 a rather small, juvenile sparrow was trapped at Wadi Himarah, near Yashbum, on 8 April (Plate 1; see map in Porter et al 1996). In the expedition report, Martins et al (1996) referred to this sparrow as ‘superficially resembling a House Sparrow *Passer domesticus*’, but speculated that the bird might have been Somali Sparrow *P. castanopterus* or a hybrid between the latter and House Sparrow; such a hybrid being known from Somalia (Ash & Colston 1981). Measurements, taken by J. N. Dymond, are presented in Table 1.

Plate 1 (left). House Sparrow *Passer domesticus*, Wadi Himarah, near Yashbum, Yemen, 8 April 1993. © Guy M Kirwan

Plates 2–3 (below). Specimen (NHM 1923.8.7.2269) of Somali Sparrow *Passer castanopterus* from Berbera, Somalia (Guy M Kirwan, © Natural History Museum, Tring)
Table 1. Published and unpublished mensural and weight data for House *Passer domesticus indicus* and Somali Sparrow *P. castanopterus castanopterus*, and for the mystery Yemen sparrow (no comparable measurement was taken for the culmen-length of this bird). All measurements in mm; weight in g. Personal measurements (from specimens in The Natural History Museum, Tring) were taken using a standard metal wing-rule with a perpendicular stop at zero (accurate to 0.5mm), and digital callipers (accurate to 0.01mm).

<table>
<thead>
<tr>
<th>Taxon</th>
<th>Region</th>
<th>Sex</th>
<th>Sample size</th>
<th>Wing-length</th>
<th>Tail-length</th>
<th>Culmen (to skull)</th>
<th>Weight</th>
<th>Reference</th>
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<tr>
<td><em>P. d. indicus</em></td>
<td>India and Myanmar</td>
<td>male</td>
<td>31</td>
<td>70–78</td>
<td>—</td>
<td>11.5–13.5</td>
<td>—</td>
<td>Vaurie (1949)</td>
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<td></td>
<td>un unstated</td>
<td>male</td>
<td>unstated</td>
<td>70–83</td>
<td>16.5–20.0</td>
<td>11.5–15.0</td>
<td>—</td>
<td>Summers-Smith (1988)</td>
</tr>
<tr>
<td></td>
<td>Female un unstated</td>
<td>female</td>
<td>unstated</td>
<td>70–80</td>
<td>51–57</td>
<td>13–15</td>
<td>—</td>
<td>Vaurie (1949)</td>
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<tr>
<td><em>P. d. biblicus</em></td>
<td>Cyprus and Near East</td>
<td>male</td>
<td>10</td>
<td>78.0–84.5</td>
<td>—</td>
<td>15.2–16.5</td>
<td>—</td>
<td>Roselaar (1995)</td>
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<tr>
<td></td>
<td>un unstated</td>
<td>male</td>
<td>unstated</td>
<td>75–85</td>
<td>—</td>
<td>13–15</td>
<td>—</td>
<td>Summers-Smith (1988)</td>
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<tr>
<td></td>
<td>NW Iran</td>
<td>male</td>
<td>18</td>
<td>79–85</td>
<td>—</td>
<td>13.0–14.5</td>
<td>—</td>
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<tr>
<td></td>
<td>Cyprus and Near East</td>
<td>female</td>
<td>5</td>
<td>73.5–79</td>
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<td>72–82</td>
<td>—</td>
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<td>—</td>
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<td><em>P. c. castanopterus</em></td>
<td>Somalia</td>
<td>male</td>
<td>1</td>
<td>70</td>
<td>—</td>
<td>—</td>
<td>17.8</td>
<td>Ash &amp; Colston (1981)</td>
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<tr>
<td></td>
<td>un unstated</td>
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<td>unstated</td>
<td>70–75</td>
<td>c50 (mean)</td>
<td>—</td>
<td>c18 (mean)</td>
<td>Summers-Smith (1988)</td>
</tr>
<tr>
<td></td>
<td>Somailand</td>
<td>female</td>
<td>16</td>
<td>66–70</td>
<td>50–54</td>
<td>10.12–11.88</td>
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<td>Yemen sparrow</td>
<td>Wadi Himarah</td>
<td>male</td>
<td>1</td>
<td>68</td>
<td>54</td>
<td>—</td>
<td>18.3</td>
<td>Martins et al (1996)</td>
</tr>
<tr>
<td><em>P. domesticus</em> x <em>P. castanopterus</em></td>
<td>near Mogadishu, Somalia</td>
<td>male</td>
<td>1</td>
<td>73</td>
<td>54</td>
<td>—</td>
<td>23.7</td>
<td>Ash &amp; Colston (1981)</td>
</tr>
</tbody>
</table>

The bird in question appears to be a young male: no bib is apparent, and the bill colour also still has the yellow tinge. Further D. Summers-Smith (in litt. 2005) reports that some male House Sparrows appear not to gain full plumaging during the breeding season, and it is conceivable that the bird in question is an old male that has not yet acquired full plumaging. It is also possible that the bird in question is a hybrid between *P. domesticus* and *P. castanopterus*. However, further study is required to confirm this hypothesis.
secure a female or nest site. In arriving at this identification a number of other species were considered and rejected as possibilities. Arabian P. euchlorus and Sudan Golden Sparrows P. luteus (the latter unknown from Arabia) should both appear rather more uniform on the upperparts and wings, and both lack a distinct supercilium as shown by the Yemen bird. Dead Sea Sparrow P. moabiticus, which was initially considered at the time of observation, can be largely discounted on grounds of size (see mensural data in Summers-Smith 1988), although there are also several plumage anomalies. The unlikely event of a Sind Jungle Sparrow P. pyrrhonotus wandering to south-west Arabia can also be discounted, as noted by D Summers-Smith (in litt 2005), again on grounds of size. Somali Sparrow, despite showing rather close approach to our bird in some mensural characters (see Table 1), can also be eliminated, as this species shows a rather pronounced yellow wash to the underparts in nearly all plumages, although there is one female in NMZ (1923.8.7.2269; Plates 2–3) that is unusually pale, lacking almost any trace of yellow, on the breast and belly, and also has an upperwing pattern rather like the bird trapped in Yemen. Its provenance seems certain (Berbera, British Somaliland, 20 November 1917), making this slightly anomalous specimen worthy of further research when opportunities for field work in Somalia improve. Berbera (10°26′N 45°00′E) is in extreme north-west coastal Somalia, relatively close to the borders with Eritrea and Ethiopia (Ash & Miskell 1998).

With the above species satisfactorily discounted, one is left with P. domesticus and Spanish Sparrow P. hispaniolensis. Although rather small for P. d. indicus or the more northerly ranging P. d. biblicus (see Table 1), Spanish Sparrow is typically even larger (see Summers-Smith 1988). Thus, it seems safest to assign this bird to P. domesticus and to suggest, as noted by D. Summers-Smith (in litt 2005) that the bird might be slightly xanthochroic. In publishing this note we seek to firmly discount the possibility that Somali Sparrow has occurred in Yemen, given the comments in Martins et al (1996) alluded to above, but nonetheless we invite others to comment on the identity of this interesting bird. Such remarks can be directed to any of the authors at the addresses above.

ACKNOWLEDGEMENTS

We thank the following for comments on the identity of this sparrow: John Ash, Hanne & Jens Eriksen, Ian Harrison, David Parkin, Hadram Shirihi and Denis Summers-Smith. Andrew Grieve assisted GMK’s research at the Natural History Museum, and Robert Prŷs-Jones and Mark Adams kindly provided access to the collection there.

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The Birds of the State of Kuwait by George Gregory. 2005. 219pp. £20.00 Softback – available OSME sales.

Ordered by Iraq, Saudi Arabia and the Gulf and covering some 18,000 km², Kuwait is at the join between the Western Palearctic and the Arabian Peninsula, therefore benefiting from an interesting mixture of birds. Although publications and papers have referred to Kuwait, this is the first avifauna to cover the State in detail. It is based mainly on records since 1991 as much previous data were destroyed during hostilities. Some 37 key locations are described with lists of typical species and are accompanied by a simple map. Latitude and longitude details would have been helpful. The status of 431 species is described. The occurrence of regular migrants is illustrated on charts in which each month is split into thirds. Photographs of a number of species as well as habitats are included. This is a well produced book that will be invaluable to anyone visiting Kuwait.

Keith Betton

The Complete Fauna of Iran by Eskandar Firouz. 2005. 322pp. £49.50 Hardback. Published by I. B. Tauris. ISBN 185043 946 X.

There is relatively little recent literature on the fauna of Iran, and so this book is much needed.

The author is a former Director of the Department of the Environment. Introductory chapters include summaries of zoological work in Iran over the years, conservation activities and the network of national parks and protected areas. The major habitat types are detailed. Separate chapters are allocated to mammals (168 species), birds (514 species), reptiles (198 species), amphibians (20 species) and freshwater fish (173 species).

The most useful aspect of the bird chapter is that a code is given to each species to indicate its status, as determined by Derek Scott. The 514 species are described as native breeders (324), possible breeders (18), introductions (4), visitor migrants (81), passage migrants (33), vagrants (37), non-breeding visitors to the south coast (4), and those of uncertain status (13). However the remainder this section's text is disappointing, being simply brief descriptions of each family with little information on their distribution or status in Iran.

A small number of illustrations are included.

Although overall a useful book, it does not satisfy the need for a comprehensive assessment of Iran's birdlife.

Keith Betton


This booklet describes how the four vulture species inhabiting Georgia – Egyptian, Griffon, Black and Lammergeier – were radio-tagged to allow satellite tracking within their local range and also overseas. Details are given of the techniques used and these are backed up by many photographs. Some Griffon and Black Vultures travelled to Saudi Arabia for the winter, while Egyptian Vultures travelled to Africa. However, this booklet is weaker on the results generated by this research, focussing more on the technology and techniques employed.


Covering about 70,000 sq km, Georgia is a largely mountainous country with the Great Caucasus mountains in the north and Lesser Caucasus mountains in the south, while Kolkhida Lowland opens to the Black Sea in the west and the Mtkvari River Basin opens to the east to Azerbaijan. Around 360 species have been recorded. This booklet describes 28 sites to visit in order to see them. Suggestions on transport, accommodation are given along with lists of the main target species and other wildlife.


This is the first comprehensive field guide to all raptors and owls recorded in Georgia, describing 45 species including breeding birds, migrants and rare visitors. Practical information on identification, behaviour, habitat, food,
nesting and population is given. There are 447 small-scale colour illustrations, depicting plumage variation according to age, sex and race. The descriptive texts are brief, but in combination with illustrations they are sufficient for identification purposes. Also included are: maps illustrating distribution patterns in Georgia; information on raptor migration; raptor conservation status, and a summary of conservation and monitoring activities.

Keith Betton

The title says it all: the identification enthusiast probably will not find it so useful, but the behavioural ecologist will - it is an interesting read. Professor Panov has spent large much of his life since 1965 studying various members of this fascinating group of birds - his captivation by them is evident. Many of the chapters for each of the fourteen Palearctic wheatears covered are perhaps as detailed, if not more so, than BWP, covering habitat, social and courtship behaviour, vocalisations including sonograms, breeding ecology and migration in depth. Panov has had to depend solely on the literature for some species in areas he was unable to visit and study - this in thinner chapters and limited accounts for Red-rumped, Hume's and Hooded Wheatear.

Originally translated from Russian, the English version has been ably edited by Michael G. Wilson from the EGI. Panov's behavioural studies seem to agree with most present day systematics though there is a different interpretation for one taxon recognised in the west, Cyprus Pied Wheatear, which Panov still considers to be a subspecies of Pied Wheatear. Panov does propose the splitting of Red-tailed Wheatear into two species (xanthoprygma and chrysopygia) which has now been adopted in the west and he suggests that Eastern Pied Wheatear may be three distinct species. Recent suggestions that the eastern and western forms of Black-eared Wheatear may be candidates for splitting and that Mourning Wheatear be split into at least three species are not supported by Panov. Because South Arabian Wheatear Oenanthe lugentoides is outside the presently accepted Palearctic boundary it is only briefly mentioned in this book.

There is also a substantial chapter which attempts to explain the reasons for the hybrid populations of Black-eared and Pied Wheatear in three discrete zones around the Caspian Sea. Despite his extensive research in this area and in the field, some of the answers to these and other aspects of wheatear ecology require further morphological studies and extensive molecular research; unfortunately the latter field has hardly been covered in this book. There is therefore plenty of scope for further study into this enchanting group of birds.

Andrew Grieve


Titled accurately, this extremely well-thought out primer provides a high-quality introduction for people discovering birds. Species are arranged in five broad habitat categories, indicated by colour-coding the outer top corners of the pages, each of which contains at least one large (digital?) colour image, a concise informative paragraph on the species' status, another on description, a colour-coded seasonal occurrence map and a 12-month occurrence bar. 228 species are covered - an additional 27 species appear on two text pages, followed by an index of scientific names and an English name index that forms part of the Oman checklist. The helpful map inside the front cover needs a paler blue sea so that the black font can more easily be read, but that quibble apart, this sturdy book is ideal for birding beginners, for tourist families and when produced in Arabic will set the standard for locally-produced bird books in the Middle East.

Mike Blair


Jeff Gordon compiled the first 75% before moving from Cyprus to southern Russia. Colin compiled the remainder and edited the results to his usual high standards. Now that BirdLife Cyprus has become the primary bird conservation organisation in Cyprus, working with the various other organisations, the rewards of widespread cooperation are evident. The new layout is similar to many other bird reports in Europe, but the standard reached is very high. You will need this report if you are going to Cyprus to give you a feel for current trends and to obtain up to date background information. Although there are only 8 pages of colour pictures (plus an excellent study of a little Bittern Ixobrychus minutus by Michael Gore), the imagery is generally superb.

Mike Blair
Around the Region

compiled by
Dawn Balmer and Keith Betton

Records in *Around the Region* are published for interest only; their inclusion does not imply acceptance by the records committee of the relevant country. All records relate to 2005 unless otherwise stated.

Records and photographs for *Sandgrouse* 28 (2) should be sent by 15 June to: Around the Region, OSME, c/o The Lodge, Sandy, Bedfordshire SG19 2DL, UK; or to aroundtheregion@osme.org

Dawn Balmer, c/o BTO, The Nunnery, Thetford, Norfolk, IP24 2PU.
Keith Betton, 8 Dukes Close, Folly Hill, Farnham, Surrey GU9 0DR, U.K.

**ARMENIA**

A Red-necked Grebe *Podiceps grisegena*, a rare localized breeder and uncommon passage migrant, was in Ararat Province on 8 Sep. A Great White Pelican *Pelecanus onocrotalus* was in Ararat Province on 20 Apr and 26 were counted in Shirak Province on 11 September. The Dalmatian Pelican *Pelecanus crispus* is rare, very much a localized breeder and uncommon passage migrant, so four in Ararat Province on 20 Apr and four in Shirak Province on 11 Sep are notable. A Bittern *Botaurus stellaris* seen on 26 Jan in Ararmir Province was a typical date for this winter visitor. Seven Black Stork *Ciconia nigra* were seen in Aragatsotn Province on 6 Sep and three in Shirak Province on 11 Sep. The Bewick's Swan *Cygnus columbianus* is a rare, but regular winter visitor and 11 on 18 Jan in Lake Sevan basin and 14 on 22 Jan in Ararat Province are typical. Forty-one Goldeneye *Bucephala clangula* on Lake Sevan on 18 Jan is an excellent record of this uncommon winter visitor. There was a Greater Spotted Eagle *Aquila clanga* in Ararat Province on 20 Apr. The first Eleonora's Falcon *Falco eleonorae* was recorded in Kotayk Province on 2 Jun. Merlin *Falco columbarius* were seen in Ararat Province on 22 Jan and 12 Mar. The See-see Partridge *Ammoperdix griseogularis* is a recent localized colonist, so three in Syunik Province on 8 Jun are noteworthy. An adult Purple Swamphen *Porphyrio porphyrio* was collected by a local hunter in Shirak Province on 27 Aug; a vagrant to Armenia. Fourteen Common Crane *Grus grus* were in Shirak Province on 3 Sep. Records of uncommon passage migrant waders include a Grey Plover *Pluvialis squatarola* and two Sanderling *Calidris alba* in Lake Sevan basin on 7 Sep and a Temminck's Stint *Calidris temminckii* in Ararat Province on 20 Apr and four in Shirak Province on 4 Sep.

On 15 Jun a Terek Sandpiper *Xenus cinereus* was in Ararat Province and a Marsh Sandpiper *Tringa staquatilis* was in the same province on 3 Apr. A Bar-tailed Godwit *Limosa lapponica* was in Lake Sevan

Bee-eaters *Merops apaster* by D. Price
basin on 7 Sep and a Eurasian Curlew Numenius arquata was seen in Armavir Province on 9 Apr. The Common Gull Larus canus is an uncommon and irregular passage and winter visitor so one on 22 Jan and three on 3 Apr in Ararat Province are notable. The fourth record of a Lesser Black-backed Gull Larus fuscus fuscus (Baltic Gull) concerns an adult in Ararat Province on 16 May. A Caspian Tern Sterna caspia on 9 Apr in Armavir Province was the seventh national record. A Black Tern Chlidonias niger was in Ararat Province on 16 May; an uncommon passage migrant. The second Great Spotted Cuckoo Clamator glandarius for Armenia was in Kotayk Province on 17 May. An Eurasian Wryneck Jynx torquilla was apparently holding territory in Syunik Province on 9 Jun. Two previously unknown breeding colonies of Spanish Sparrow Passer hispanioides were discovered on 31 May in Tavush Province and on 11 Jul in Syunik Province.

BAHRAIN
A Muie Swan Cygnus olor, only the second record for Bahrain, was seen flying north towards the race course lake from Zallaq on 16 Nov. The first Grey Hypocolius Hypocolius ampelinus of the season were seen on 16 Oct.

CYPRUS
Four Black-necked Grebes Podiceps nigricollis were at Larnaca Sewage Works on 31 Aug; very early returns. A Pygmy Cormorant Phalacrocorax aristotelis was reported flying near Akrotiri Salt Lake on 11 Sep and taken in flight by a Peregrine Falco peregrinus! A Great White Pelican Pelecanus onocrotalus was present at Larnaca Sewage Works throughout Aug. A Greylag Goose Anser anser of the eastern race rubirostris was seen at Phasouri Reeds beds on 9 Aug. At least two Gadwall Anas strepera were at Larnaca Sewage Works on 21 Aug – an unusual record. An excellent passage of Honey Buzzards Pernis apivorus was recorded, 5923 birds being reported in Sep, with a peak of 2680 on 9 Sep at Phasouri Reedbed. Good numbers of Black Kite Milvus migrans were also recorded during Sep including five at Phasouri Reeds beds on 30 Sep. Egyptian Vultures Neophron percnopterus are scarce migrants and so five records are noteworthy; one juvenile at Phasouri Reeds beds 9 Sep, one juvenile at RAF Akrotiri and another juvenile at Akrotiri Salt Lake on 29 Sep, one immature at Mandria 1 Oct and a juvenile at Phasouri Reeds beds 9 Oct. Ten Griffon Vultures Gyps fulvus together in the Dhiarizos Valley on 23 Sep is a good record. A Short-toed Eagle Circaetus gallicus was at Kouklia on 17 Sep. Late spring passage Western Marsh Harriers Circus aeruginosus were at Arminou Dam and Akhna Dam 5 Jun and Larnaca Sewage Works 6 Jun. A Lesser Spotted Eagle Aquila pomarina was at Phasouri Reeds beds 22–23 Sep and a juvenile Eastern Imperial Eagle Aquila heliaca was there on 25 Oct; only twice reported since 1995 when it became extinct as a breeding species in Cyprus. There was a good passage of Red-footed Falcons Falco vespertinus, peaking on 26 Sep with 199+ at Mandria. A juvenile Saker Falco cherrug at Akrotiri Salt Lake on 29 Sep was a good find.

Some 1,018 Demoiselle Cranes Anthropoides virgo were counted 28–31 Aug, mostly passing over southeastwards, from sites in the southwest of the island, between Polis and Akrotiri. There were a few late records of PiedAvocet Recurvirostra avosetta, of birds possibly nest prospecting at Larnaca Sewage Works, including 11 on 11 Jun and two at Phasouri Reeds beds on 27 Jun. A moultling adult Eurasian Dotterel Charadrius morinellus was at Mandria on 3 Oct and was the first record since 2001. The third Pacific Golden Plover Pluvialis fulva for Cyprus was at Paphos Headland on 21 Oct and two winter adult Red Knot Calidris canutus were at Larnaca Sewage Works on 24 Sep; the first record since 2002. The 13th record of Bar-tailed Godwit Limosa lapponica was at Larnaca Sewage Works on 5 Sep. A Great Black-headed Gull Larus ichthyaetus was seen at Larnaca Sewage Works on 29 Dec, the 16th record. The first Marsh Warbler Acrocephalus palustris since 2000 was at Cape Greco on 25 Oct and an Icterine Warbler Hippolais icterina was recorded at Ayios Minas in the Akamas on 24 Sep. An Isabelline Shrike Lanius isabellinus was at Aspro Pools 23–25 Oct (the 17th record). Incredibly a flock of six Dead Sea Sparrow Passer moabiticus were reported at Akrotiri Salt Lake on 19 Sep; the first record for eight years, if accepted.

EGYPT
An adult Goliath Heron Ardea goliath was at Wadi Lahami on 6 Nov and 29+ Lappet-faced Vultures Aegypius tracheliouos were recorded at Ber Shalaten on 18 Sep. On 10 Oct a Demoiselle Crane Anthropoides virgo (with 130 Common Crane Grus grus) flew west at Hurghada; part of an influx into Egypt during the autumn. At Hamata Mangroves, 134 Crab-plovers Dromas ardeola were counted on 18 Sep. A first-winter Lesser Sandplover Charadrius mongolus was at Wadi Lahami on 6 Nov and five White-tailed Lapwings Vanellus gregarius were between Hurghada and Quseir on 23 Sep. A Bridled Tern Onychoprion anaethetus at Hurghada on 16 Oct and two on 19 Oct, represent late dates for this species. On 18 Sep, a first-year Sooty Tern O. fuscata was at Hamata. An African Skimmer Rynchops flavirostris was at Aswan on 3 Dec. Around 80–100 Crowned Sandgrouse Pterocles coronatus were between Hurghada and Quseir on 23 Sep. A juvenile Namaqua Dove Oena capensis was at Hurghada Airport on 15 Oct and 26 Oct; a good record for the area. On 11 Nov an African Pied Wagtail Motacilla aguimp was at Abu Simbel. A first-year male Pied Wheatear Oenanthe pleschanka was at Hurghada on 18 Oct (a rare passage migrant) and a Rufous-tailed Wheatear O. xantiphyrnna was at Giza Pyramids on 16 Nov. Red-breasted Flycatchers Ficedula parva are scarce passage migrants,
so a first-year at Hurghada on 9 Oct was a good record.

GEORGIA

Three booming male Great Bitterns Botaurus stellaris were at Lake Khanchali on 22 Jul and 500+ Ruddy Shelducks Tadorna ferruginea were at Lake Bugdasheni (both Jacksoni volcanic plateau) on 23 Jul. A pair of Levant Sparrowhawks Accipiter brevipes, with three flying young were at Tchatchuna National Park on 27–28 Jul and 11 Eastern Imperial Eagle Aquila heliaca (including three pairs) were at the same place on 26–29 Jul. A minimum of 11 Caucasian Snowcock Tetraogallus caucasicus minimum were in the Kazbegi area on14–15 Jul (on the very steep slopes east of the city and the scree on Mt Kazbek). Two pairs and three singing male Black Francolin Francolinus francolinus were recorded in the Tchatchuna National Park on 26–29 Jul. Records of Spotted Crake Porzana porzana came from Poka with two singing males on 21 Jul and from Lake Khanchali (both Jacksoni volcanic plateau) with one singing male on 22 Jul. At least 28 Citrine Wagtails Motacilla citreola (including juveniles) were around the Javakheti lakes area 22–25 Jul. Three breeding pairs of Guldentädt’s Redstarts Phoenicurus erythrogastrus with juveniles were on the slopes of Mt Kazbek on 15–17 Jul. Fifteen Finsch’s Wheatears Oenanthe finschii were at David Gareja on 20 Jul. An adult Upcher’s Warbler Hippolais langei feeding a juvenile was at David Gareja on 21 Jul and eight were recorded at Tchatchuna National Park on 27 Jul. A flock of 500 Rose-coloured Starlings Sturnus roseus (mainly juveniles) were at Sagaredjio and another flock of 500 (again mostly young) was about 30km west of Dedoplistskaro on 26 Jul.

IRAN

A female White-headed Duck Oxyura leucophala was at Abyshinne Dam, in Hamedan province in west Iran, on 23 Nov. A group of 21 Steppe Eagle Aquila nipalensis at a carcass near Naen on 27 Dec 2002 is a very late record for such a large concentration of this species in north-central Iran. Two Great Snipe Gallinago media at Khojir on the outskirts of Tehran on 22 Dec 2001 represent a very late record. This species is a fairly common passage migrant in suitable habitat in the Alborz foothills in spring and autumn, but rarely recorded between late Mar and mid-Nov. Amongst the nesting terns (White-cheeked Tern Sterna repressa and Bridled Tern Onychophrion annaethetus) on Shidvar Island, in the Hormoqan province, three pairs of Swift Tern S. bergii and 26 nests of Lesser Crested Tern S. bergalensis were counted. Two Goldcrests Regulus regulus were at Khojir on 22 Dec 2001, a good record.

ISRAEL

A European Shag Phalacrocorax aristotelis, the first for Israel, was off Ma’agan Michael 18 Jul to the end of Oct. On 5 Oct a Yellow-billed Stork Mycteria ibis was seen over Kfar Ruppin on 5 Oct. Two Greylag Geese Anser anser over-wintered in the Jordan Valley and two Cinereous Vultures Aegypius monachus were at Sde Boker, with another at Gamla, during Dec. A Shikra Accipiter badius was seen briefly, and photographed, at Kfar Ruppin on 14 Nov and is the second record for Israel. A record 52 256 Lesser Spotted Eagles Aquila pomarina were counted passing through the northern valleys on 2 Oct, with 22 000 passing Tivon-elroy between 1120–1300hrs. This resulted in an autumn total of 95 000 Lesser Spotted Eagles in this area. Other counts included 69 000 Levant Sparrowhawks Accipiter brevipes, 415 000 European Honey Buzzards Pernis apivorus and 335 000 White Storks Ciconia ciconia. A Verreaux’s Eagle Aquila verreauxii was seen in the Eilat Mountains on 30 Nov and a Little Bustard Tetrax tetrax was at Bnei Yisrael Reservoir, Golan Heights on 17 Nov. Around 150 Eurasian Dotterel Charadrius morinellus were between Hazerim base and Beer Sheva wadi on 24 Nov. An adult female and first-year male Greater Painted Snipe Rostratula benghalensis were seen during Sep at Ein Ha’Horeh (central coastal plains); breeding has not been proved at this site yet. One remained until 13 Dec. A Terek Sandpiper Xenus cinerae at Ma’agan Michael 17–21 Jul was unseasonal. Nine Lesser Crested Terns Sterna bengalensis and 18 Bridled Tern Onychophrion annaethetus were off Eliat’s North Beach on 27 Jul. A White-cheeked Tern S. repressa was seen copulating with a Common Tern S. hirundo at Ma’agan Michael 14–26 Jul. On 21 Oct a Dunn’s Lark Eremalauda dunni was at Be’er Sheva. Oriental Skylark Alauda arvensis were at Mitzpe Ramon (Central Negev) on 17 Oct and Hula on 24 Oct and three at Yotvata on 29 Oct. A Radde’s Accentor Prunella cossicolor was at Elrom, Golan Heights on 25 Nov and a Wallcreeper Tichodroma muraria was at Arbel on 6 Dec. Three Red-fronted Serin Serinus pusillus were at Jerusalem on 16 Nov and three were at Rosh Pinna, Galilee on 13 Dec. A Pine Bunting Emberiza leucocephalus was at Atlone Habaskan, Golan Heights on 6 Dec.

KAZAKHSTAN

The probable Eyebrowed Thrush Turdus obscurus reported on 14 May from Great Almaty Lake (Sandgrouse 27(2)) was re-identified as a second-calendar-year Naumann’s Thrush T. naumannii, the second record for Kazakhstan. A Dark-throated Thrush T. ruficollis of the race relicta (black-hooded) was seen in May in the Altai, opposite the Buktharma Valley; this race breeds in damp valleys in the Russian part of the Altai.

KWUAI

Four Little Gebeses Tachybaptus ruficollis were present at Doha South from 1–8 Dec at least. A Great Crested Grebe Podiceps cristatus was at Sabah Al-Salem pool on 14 Jul and three Black-necked Grebes P. nigricollis were at Doha South from 1–8 Dec. A Great White Pelican Pelecanus onocrotalus at Jahra East outfall, present since 17 Jun, was last seen on 8 Sep. Eight White Storks
Ciconia ciconia were at Jahra East on 25 Aug and 14 were at Jahra East outfall on 15 Sep. A Eurasian Spoonbill Platalea leucorodia was at Doha Spur on 2 Dec. A pair of Common Pochard Aythya ferina, and a drake Tufted Duck A. fuligula were at Doha South pools on 1–7 Dec. A Ferruginous Duck A. nyroca was at Jahra East Outfall on 1 Jul. An adult Egyptian Vulture Neophron percnopterus was at Sabah Al-Ahmed Natural Reserve (SAANR) on 4 Sep and a Griffon Vulture Gyps fulvus was found injured at Jebel Al-Benayah near Khiran on 7 Dec. On 14 Oct a Shikra Accipiter badius and a Levant Sparrowhawk A. brevipes were at Al Abra on 14 Oct. Upto six Purple Swamphens Porphyrylus porphyrio were resident at Doha South pools but breeding has not yet been confirmed. A Macqueen’s Bustard Chlamydotis macqueenii was in the SAANR on 1 Dec. Eight Great Knots Calidris tenuirostris were on Bubiyan Island on 10 Feb and one was at Jahra East Outfall on 6 Mar. A maximum of 456 Crab-plovers Dromas ardeola were wintering in Salaibihikt Bay on 2 Dec.

Two White-tailed Lapwings Vanellus leucurus were seen at Doha East on 29 Sep and three Northern Lapwings V. vanellus were at Jahra East outfall on 27 Oct. A male Pintailed Sandgrouse Pterocles alchata was at SAANR on 14 Sep. Seven Eurasian Scops Owls Otus scops were found roosting at Tulha, SAANR on 25 Sep (the highest daily count), with only 1 present on 29 Sep. At Doha South a Pied Kingfisher Ceryle rudis was recorded on 1 Dec and at Jahra Farms an Indian Roller Coracias benghalensis was seen on 9 Dec. At least 20 Oriental Skylarks Alauda gulgula were positively identified amongst over 1000 Skylarks A. arvensis in many flocks (average 70 birds) scattered throughout the SAANR on 2 Dec. Two Richard’s Pipits Anthus richardi were at Salaibihikt reserve on 24 Sep and a Citrine Wagtail Motacilla citreola was there on 14 Aug. On 4 Nov a Rufous-tailed Wheatear Oenanthe xanthopygma was seen on Failaka Island. A

Greenish Warbler Phylloscopus trochiloides was discovered at the Tulha drinking pool SAANR on 22 Sep and was still present on 25 Sep. Two Red-breasted Flycatchers Ficedula parva were at Al Abra on 14 Oct (1 still on 17 Oct) and four Rose-coloured Starlings Sturnus roseus were at Tulha drinking pool SAANR on 26 Aug. A Common Chaffinch Fringilla coelebs was seen at Rawdatain on 1 Oct. A record 32 first-winter Black-headed Buntings Emberiza melanocephala were at Tulha drinking pool in SAANR on 26 Aug. Black-headed Buntings were recorded at this site on many dates in Aug and Sep (4 Aug to 25 Sep) probably involving up to 80 individuals all first-winters; an exceptional autumn passage for a species previously considered scarce.

LEBANON
All records are for the Aammiq area unless stated. A significant breeding colony of Night Herons Nycticorax nycticorax was re-established with about 50 pairs nesting, and a post-fledging congregation of 215 was noted on 31 Aug. An unusual winter record was that of a Black Stork Ciconia nigra seen three times in Jan and Feb. The maximum day total during spring migration was 302 on 13 Mar. A female Mallard Anas platyrhynchos with eight young on 24 Jun was the first breeding record for Lebanon, while a female Garganey Anas querquedula with 10 ducklings on 31 May was the second breeding record. An impressive passage of Lesser Spotted Eagles Aquila pomarina took place on 9 Apr, with 1550 north along Jebel Barouk ridge; unusually, one individual over-summed in fields alongside Aammiq, from 3 May to 14 Sep. Unseasonably warm weather saw Black Kites Milvus migrans lingering into Dec, and a record site count of 141 was made on 2 Dec. An immature male and two female Western Marsh Harriers Circus aeruginosus summered, and although displaying was observed breeding did not occur. In the first winter period up to three Pallid Harriers C. macrourus roosted in the reedbed. Late in the year, a first-winter was seen there on 15 and 28 Dec. A pair of Long-legged Buzzards Buteo rufinus fledged one young and significant numbers now winter with up to 50 present from Oct to the year end. An immature Red-footed Falcon Falco vespertinus was seen on the late date of 7 Nov.

A good passage of Little Crakes Porzana parva occurred between late Mar and late Apr with up to 70 being seen, while a Baillon’s Crane Porzana pusilla was recorded on 25 and 27 Mar and 22 Apr, and again on 10 Sep. A Spur-winged Lapwing Vanellus spinosus was seen on 22 Mar, plus a pair in early May. A total of 19 Great Snipe Gallinago media was observed between 5 Apr and 19 May, but the only autumn record was on 11 Oct. Three Stock Doves Columbus oenas were seen on 16 Feb and another on 29 Oct. This species has now been recorded at least once annually in the Bekaa since 1999, prior to which there were only four records for Lebanon. Eurasian Eagle Owl Bubo bubo bred successfully in the Bekaa Valley in 2004 and 2005. A White-breasted Kingfisher Halcyon smyrnensis wintered through from 2004, and was joined by a second in early Apr. One returned from 15 Jul, and two were again present from Sep to the end of the year. A Ring-necked Parakeet Psittacula krameri on 30 Apr was the first for the site. Two juvenile Barn Swallows Hirundo rustica of the dark Egyptian race savigni were seen on 19 Jul. A Redwing Turdus iliacus on 18 Mar was a rare visitor. Single Semi-collared Flycatchers Ficedula semitorquata were seen on 6 Apr and 3 May. At least 50 Penduline Tits Remiz pendulinus wintered. A Carrion Crow Corvus corone from 24–27 Oct represents the first record for Lebanon. Four Griffon Vultures Gyps fulvus were seen between Feb and May at Tannourine, raising the possibility of breeding in the area. Twenty-eight Common Cranes Grus grus along the Anti-Lebanon past Jibb Jennine on 1 Dec were unusual on that date. Cream-coloured Courser Cursorius cursor were
recorded in Jun and Jul in the Hermel area, and a group of 20 on 8 Jul included young birds. A Spur-winged Lapwing *Hapolypterus spinosus* was seen on 22 Mar, plus a pair in early May and a pair behaving agitatedly on shores of Lake Qaraoun on 15 Jul. At Cheikh Zennad there were three Broad-billed Sandpipers *Limicola falcinellus* on 14 Aug, and four on 21 Aug, plus three *Terek Sandpipers* *Xenus cinereus* on 7 Aug and a single on 21 Aug and three Spotted Redshank *Tringa erythropus* on 14 Aug and three on 21 Aug.

An Arctic Skua *Stercorarius parasiticus* was haranguing gulls off Ras Beirut on 5, 27 and 28 Dec, and was apparently the first sighting since 1997. A first-winter Mediterranean Gull *Larus melanocephalus* passed Ras Beirut on 5 Dec. Sightings of four Great Black-headed Gulls *Larus rhihaetus* at Ras Beirut on 5 Mar, plus two on 12 Mar and six on 28 Dec indicate that this former vagrant is now both a winter visitor and passage migrant. A Bar-tailed Lark *Ammonanas cincturus* was seen feeding a juvenile near Hermel on 9 Jun, representing the first proven breeding of this species in Lebanon. Two singing male White-throated Robins *Irania gutturalis* were discovered at 1740m near Tannourine Cedars Reserve on 11 May, with a pair collecting food at the same site on 2 Jun. This represents only the second breeding site for Lebanon. A male *Cyprus Pied Wheatear Oenanthe cyprica* was watched near Rechaya, Anti-Lebanon range on 8 and 9 Apr. At least three *Scrub Warblers Scotocerca iniqua* were in a wadi north of Ras Baalbek on 3 Dec. This is the third record for Lebanon, although the species was first reported from around this location in 2001. Two Bearded Tits *Pamurus biarmicus* were seen briefly at Aanjar Marshes on 5 Apr, being the second record for Lebanon. At least two pairs of Penduline Tits *Remiz pendulinus* bred successfully at Aanjar in late May representing the second breeding site for Lebanon. At least five Northern Ravens *Corvus corax* were at Lake Qaraoun, Jebel Sannine and Kefraya Pass. At Rium/Sannine a pair was observed on more than one visit. These records suggest that this species is perhaps more common than previously thought.

**OMAN**

On 19 Aug there were 15 Wilson’s Storm-petrels *Oceanites oceanicus* off Qurayyat. A Dalmatian Pelican *Pelecanus crispus* was at Al Ansab Lagoons on 28 Nov and again on 16 and 23 Dec. It visited Seeb Airport Khawr on 5 Dec and will be the second record if accepted (the first being in Feb 2002). Up to three Brown Boobies *Sula leucogaster* were present at Fahal Island throughout the period. Two Abdim’s Storks *Ciconia abdimii* were at Raysut on 25 Aug, Salalah Lagoons on 15 Sep, and again at Raysut from 7 Nov into mid-Dec at least. An unringed immature Sacred Ibis *Threskiornis aethiopicus* of unknown origin was at Salalah on 14 Aug and 7 Sep, and another at East Khawr from 16 Sep–26 Dec at least. Two Greylag Geese *Anser anser* were at Qurayyat on 2 Dec. A European Honey Buzzard *Pernis apivorus* was over Al Beed Farm on 26 Sep, and at Raysut two Crested Honey Buzzards *Pernis ptilorhynchus* on 7 Nov would represent the sixth record if accepted. Black Kites *Milvus migrans* are normally seen only in winter and on passage so a single on 12 Jun at Seeb Airport Flats was unusual. Single Griffon Vultures *Gyps fulvus* were at Al Mintirib on 22 Sep and Sunub on 11 Nov. A Lesser Spotted Eagle *Aquila pomarina* at Qurayyat on 28 Oct and again on 2 Dec would be the sixth record if accepted. Three Amur Falcons *Falco amurensis* were at Hilf on 10 Nov and 24 Sooty Falcons *Falco concolor* were at Ras as Sawdawi on 21 Oct. A Water Rail *Rallus aquaticus* was at Qurayyat from 4–7 Nov and 20 Corncrapes *Crex crex* were at Al Beed Farm and Ayn Hamran on 26 Sep and 25 Oct respectively, while a Spotted Crake *Porzana porzana* was at the former on 3 Nov. The first breeding of Moorhen *Gallinula chloropus* took place at Jabal al Akhdar in the Sayq Plateau in Jun/Jul. A Pheasant-tailed Jacana *Hydrophasianus chirurgus* was at Al Qurm Park on 25 Nov. A Great Stone-curlew *Esacus recurvirostris* was at Shinias from 31 Oct–2 Nov. A Black-winged Pratincole *Glareola nordmanni* at Khawr Taqah on 22 Oct will be the tenth record if accepted, while an Oriental Pratincole *Glareola maldivarum* at Sur Sewage Farm will be the first record if accepted. Sociable Lapwings *Vanellus gregarius* at Sahawat Farm, Salalah totalled 12 on 14 Nov, rising to 13 on 17 Nov, while at Sun Farms, Sohar, a group of four Caspian Plovers *Charadrius asiaticus* on 23 Sep were followed by nine on 16 Oct. Two Great Knot *Calidris tenuirostris* were at Qurayyat on 26 Aug and a single was at West Khawr on 8 Sep, while at East Khawr a Pectoral Sandpiper *Calidris melanotos* on 26 Oct will be the eighth record if accepted. On the same day a Buff-breasted Sandpiper *Tryngites subruficollis* at Sahawat Farm will be the first record for Oman and the Middle East if accepted.

A total of 200 Saunders’s Terns *Sternula antillarum* were at Khawr Dirif on 11 Nov. A Sooty Tern *Onychoptron fuscata* as in the Daymaniyat Islands on 16 Jun and a count of 50 at Musandam on 12 Aug was exceptional. A Black Tern *Chlidonias niger* at Wadi Darbat on 23 Oct will be the fourth record if accepted. A Sooty (Lesser) Noddy *Anous tenuirostris* was at Qurayyat on 19 Aug and 38 Brown (Common) *Noddies Anous stolidus* were in the Daymaniyat Islands on 16 Jun. Single Rufous Turtle Doves *Streptopelia orientalis* were at Sun Farms, Sohar, and Ghabah on 25 Oct and 2 Nov respectively. A Little Swift *Apus affinis* was at Qatib on 28 Nov. Two White-collared Kingfishers *Halcyon chloris* were at Mahawt Island on 7 Jul. An Oriental Skylark *Alauda gulgula* was at Sun Farms, Sohar on 13 Jun and two were there on 3 Dec. An Eurasian Crag Martin *Ptyonoprogne rupestris* was at Raysut on 12 Aug. A series of records awaiting acceptance include
a Wire-tailed Swallow Hirundo smithii at Al Ansab Lagoons on 18 Nov (third record), a Forest Wagtail Dendronanthus indicus at Ayn Hamran on 25 Oct (second record), a Blyth’s Pipit Anthus godlewskii at Hilf on 24 Nov (second record), a Meadow Pipit Anthus pratensis at Qurayyat on 17 Nov (eighth record) and a Buff-bellied Pipit Anthus rubescens at Sun Farms, Sohar, on 20 Nov (second record). Two Grey Hypocolius Hypocolius ampelinus were at Muntasar on 7, 8 and 18 Nov, while a single was at Dawhah on 28 Nov and two were at Qatibit on 28 Nov.

A Ring Ouzel Turdus torquatus at Sayq Plateau on 11 Nov will be the eighth record if accepted, while a Blyth’s Reed Warbler Acrocephalus dumetorum at Wadi Jizzi on 15 Sep would be the second record. Three Upcher’s Warblers Hippopolais lugubra were at Sirab on 8 Jul and were thought to be breeding. Ten Plain Leaf Warblers Phylloscopus neglectus were at Sayq Plateau on 12 Nov while a Hume’s Yellow-browed Warbler Phylloscopus humei was at Qatibit on 7 Nov and a Hume’s Lesser Whitethroat Sylvia curruca althaea at Sayh on 23 Oct would be the third record if accepted. A Thrush Nightingale Luscinia luscinia at South Qatibit on 26 Sep will be the sixth record if accepted. An Eastern Pied Wheatear Oenanthe picata was at Ghabah on 2 Nov and a Black-eared Wheatear Oenanthe hispanica was at Shinas on 7 Nov, while four Isabelline Wheatears Oenanthe isabellina on Sayq Plateau on 7 Jul were suspected of breeding. The nearest breeding sites are in Iran. Four White-breasted White-eyes Zosterops abyssinicus were at Al Beed Farm on 3 Nov and two Oriental White-eyes Zosterops palpebrosus were at Mahawt Island on 7 Jul. Seven Isabelline Shrikes Lanius isabellinus in Jul, including young begging for food, represents the first confirmed breeding record for Arabia – the nearest sites being in Iran. A Common Mynah Acridotheres tristis at East Khawr on 25 Nov demonstrated the spread of this introduced species. A Brahmminy Starling Sturnus pagodarum at Hill on 2 Nov was the fourth record. Two Wattled Starlings Creadopha rinaeacea at Salalah on 29 Sep and a single was at Hill on 2 and 7 Nov. A Rustic Bunting Emberiza rustica was at Qatibit on 4 and 24 Nov while another bird was at South Qatibit on 8 Nov (the fourth and fifth records if accepted).

SAUDI ARABIA

Interesting records from Dhahran included Little Bittern Ixobrychus minutus on 23 Dec and five sightings of Night Heron Nycticorax nycticorax between 1 Sep and 21 Nov with five on 3 Sep. Cattle Egret Bubulcus ibis was previously considered irregular but annual but the species has been wintering regularly for the last few years peaking at over 100 birds. This year they started to arrive on 5 Oct and the lakeside roost peaked at 130 on 31 Dec. Two Great Egrets Ardea alba on 25 Oct were considered rare, while a peak of 11 Purple Herons Ardea purpurea on 8 Sep was more expected. There was a Garganey Anas querquedula on 5 Sep. Black Kites Milvus migrans are normally scarce, but singles were seen on 14 and 20 Oct. Up to two Greater Spotted Eagles Aquila clanga were present between 26 & 28 Oct. Two Northern Lapwings Vanellus vanellus were at the settlement pond on 8 Nov. A peak of 49 Gull-billed Terns Gelochelidon nilotica on 1 Sep was notable. A Pharaoh Eagle Owl Bubo bubo ascalaphus was in the Dhahran Hills on 11, 12 and 18 Aug. An Egyptian Nightjar Caprimulgus aegyptius was in desert habitat near lake just after dusk on 3 and 5 Dec. Following two records last winter, this suggests that the species might winter in the area. Autumn passage of Blue-cheeked Bee-eaters Merops persicus peaked at 38 on 21 Oct while sightings of Spotted Flycatcher Muscicapa striata on 7 and 21 Jul were unexpected at that time. A Rufous-tailed Wheatear Oenanthe xanthopyryna on 9 Dec was also unexpected, and raises the possibility that some may winter locally. Three Black-crowned Finch-Lark Eremopterix nichrigezes at Dhahran Hills on 18 Aug were notable as this species is scarce locally but uncommon over 60 km inland towards Abyaqi. A Grey Hypocolius Hypocolius ampelinus was at the Aramco Golf Course in Dhahran Hills on 26 Oct.

SYRIA

A visit to Sed Wadi Abied (an artificial lake a few kilometers out of Palmyra), on 21 Apr resulted in the sighting of two scarce migrants – a Corncockle Crex crex and two Great Bitterns. Two pairs of Northern Bald Ibis Geronticus eremita nested at the usual site near Palmyra. On 23 Apr a Dunn’s Lark Eremalanoides dumii was seen there. On 23 Apr a Middle Spotted Woodpecker Dendrocopos medius was seen and photographed in a wood near Selunfe. This is the first record of this species, which is found along the southern coast of Turkey about 200 km to the north-west. A Blackstart Cercomela melanura was in the yard of the Finnish Embassy in Damascus on 12 Dec.

TURKEY

An important late record is from Oct 2004 when two Brown Fish Owls Ketupa zeylonensis were discovered at a remote canyon in the Antalya Mountains. Photographs were taken and the birds were subsequently observed on many dates. The last Turkish record was of a bird accidentally caught alive by a fisherman and released in the Adana region in late Apr 1990 (some 400km east). The same fisherman claimed to have shot one at almost the same location in approximately 1970.

Single Common Eiders Somateria mollissima were at Riva Çayı and Riva Adasi on 25 Sep and Riva Adalan, Bogazici the next day. Six Caucasian (Black) Grouse Lyurus mlokosiewiczi were at Ardashan-Posof-Yenikoy Yaylasi on 9 Sep. A Purple Swamphen Porphyrio porphyrio was seen at Karakaya Damm on 27 Nov. A group of eight Sociable Lapwings Vanellus gregarius were in the IBA at...
Erzurum Plain on 18 Oct. Six Cream-coloured Courser Cursorius cursor were at Halieti on 26 Aug. In the Kızılırmak Delta there were seven Bar-tailed Godwits Limosa lapponica on 10 Nov. At Aygir Gölüünden Hemen Sonar there were two Great Snipe Gallinago media on 11 Sep, and a Greater Sand Plover Charadrius leschenaulti was in the Gediz Delta on 26 Nov. A Great Black-backed Gull Larus marinus was at Haydarpaşa Iskelesi on 10 Sep and a single was at Kadıköy-Haydarpaşa Vapur İskelesi from 22–24 Sep. Others were at Mendirek on 30 Sep, the Kızılırmak Delta on 2 Oct, and Haydarpaşa Dağları on 13 Oct and 1 Dec. Great Grey Shrikes Lanius excubitor were at Balıkkalı on 2 Nov and at Akharr Baraj on 2 and 10 Dec. A Common Myna Acridotheres tristis was at Kozyatagi on 12 Aug and nine were at Oto pazarı çevresi ve göller on 10 Sep. Three Desert Larks Anammonaues deserti were near Birecik on 1 Oct. A Bohemian Waxwing Bombycilla garrulus was at Topeto orman işleme tesisleri on 23 Nov. A Common Redpoll Carduelis flammea was at Altınpark on 15 Nov and a Pine Bunting Emberiza leucocephalos was at Karapınar on 1 Dec. The first record of Blackstart Cercomela melaturna has been accepted. The birds were seen on 3 Oct 2004 3 km east of Suceken in Batman province. A Black Tern Chlidonias niger was in the Kızılırmak Delta, Samsun on 18 Dec. A Citrine Wagtail Motacilla citreola at Bafa Lake, Aydınlı on 24 Dec is probably the first winter record.

UNITED ARAB EMIRATES
A Brown Booby Sula leucogaster was on the island at Ras Dibbá from 3–18 Nov. A report of a Lesser White-fronted Goose Anser erythropus at Nad al Sheba, Dubai from 29–30 Dec will be the second record if accepted. A dead bird was also found at same locality. A Northern Goshawk Accipiter gentilis at Fujairah National Dairy Farm on 3 Nov is about the tenth record. A White-breasted Waterhen Amaurornis phoenicurus was at Dubai Pivot Fields from 16–23 Dec at least and a Eurasian Dotterel Charadrius morinellus was present at the Fujairah National Dairy Farm from 28 Oct–24 Nov. A juvenile Black-legged Kittiwake Rissa tridactyla off Ras Dibbá 7 Nov is the fourth record. Up to two (but three individual) Oriental Turtle Doves Streptopelia orientalis were at the Fujairah National Dairy Farm from 28 Oct–4 Nov, while an Asian Koel Eudynamys scolopacea was also here, being about the tenth record. Also here was a White-breasted Kingfisher Halcyon smyrnensis on 28 Oct – the eighth record, and the first since 2001. A Brown-throated Martin Riparia paludicola was also here on 28 Oct and another was at Al Wathba Lake from 23–30 Dec. A Pale Martin Riparia diluta was at Al Wathba Lake on 23 Dec, while a Wire-tailed Swallow Hirundo smithii was present on 16 Dec and a Streak-throated (Indian Cliff) Swallow Petrochelidon [Hirundo] fluviatilis was seen on 23 Dec – the third record. A Pied Stonechat Saxicola caprata was at the Fujairah National Dairy Farm on 28 Oct and a Ring Ouzel Turdus torquatus was in Wadi Bih on 19 Nov–27 Dec. A Moustached Warbler Acrocephalus melanocephalus was at the Dubai Pivot Fields from 16 Dec into 2006. The first Yellow-browed Warbler Phylloscopus inornatus since 1998 was at Khalidiyah, Abu Dhabi from 14 Oct, with two in the Ras Al Akhdar area for at least two weeks in Nov. A Dusky Warbler Phylloscopus fuscatus at the Fujairah National Dairy Farm from 28 Oct–4 Nov, will be the third record if accepted while a Green Warbler Phylloscopus sibilatrix at Mushref Palace Gardens, Abu Dhabi on 21 Oct, will be the fourth record. A Taiga Flycatcher Ficedula [parva] albicilla in a wood on Abu Dhabi island from 22–25 Dec, is the second or third record of this race (split by some from Red-breasted Flycatcher). A Black DrongoDicurus macrocerus at Qurayyah Marsh from 17–18 Nov is the fifth record. A Common Raven Corvus corax in Abu Dhabi city from 11–12 Nov will be the first record if accepted. The nearest population is in Iran. A Rustic Bunting Emberiza rustica at the Dubai Pivot Fields on 4 Nov is the tenth record.

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ADDITIONAL: Appeal for old records from Iraq
Recently, Roger Norman disinterested his bird notes from 1955 at Habbaniya, and these have now been revised and sent to Mudhafar Salim (mudhafarsalim@yahoo.com) in Iraq. Mudhafar Salim advises that he would be grateful for any similar records to be sent in the first instance to the Editor at ed@osme.org for discussion - senior OSME members are asked for any records from trips to Iraq in the past.

Dawn Balmer and Keith Betton

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The Sandgrouse Editorial Committee will consider for publication original papers that contribute to the body of information about birds of the Middle East and related zoogeographical regions; subject categories include, but are not limited to, species distributions, biogeography, identification, taxonomy, phylogeny and conservation. The Middle East for this purpose (the OSME region) includes Turkey, Cyprus and Egypt in the west, the Caucasus republics and Kazakhstan in the north, Kyrgyzstan, Tajikistan, Turkmenistan and Afghanistan in the east, Oman and Yemen (including the Socotra archipelago) in the south, and all states within the region which follows a line that follows the approximate central line of the Red Sea to include all islands belonging to Yemen and Saudi Arabia to the latitude of the Egypt-Sudan border on the western coast; north of this latitude, the Red Sea falls entirely in the OSME region. The Committee reserves the right to recommend that authors send electronic versions of their papers to the OSME (ed@osme.org). Please avoid sending images larger than 1MB if at all possible.

As Word documents on floppy disc diagrams should be in separate documents from the text; drawings, pictures and other graphics should be in popular formats as separate files (eg .jpeg or TIFF files).

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As Word documents on floppy disc diagrams should be in separate documents from the text, and pictures and graphics should be in popular formats as separate files (eg .jpeg files) on separate floppy discs (one per disc).

As hard copy.

It would be appreciated that wherever possible all graphics are also produced in hard copy and mailed to the Editor. Figures should be drawn, without lettering, preferably in black ink on good-quality paper on white or translucent paper, and no larger than 150% of the final image. Captions and figure lettering should be given in full at the end of the text of the paper submitted. Do not incorporate drawings, pictures or graphics into the text — just indicate in the text where you would wish them placed. Transparencies or good-quality prints are most acceptable. Negatives may also be sent; the editor will arrange to have them scanned. Hard copy material authors require to be returned will be so.

OSME is undertaking a review of bird species and current nomenclature. The result is likely to comply generally with the IOC recommendations when these are made known. Until then, authors are asked to follow the Porter et al. (1996) Field Guide to the birds of the Middle East for scientific names and sequence of bird species. Where possible, authors should consult the current (post-2005) issues of Sandgrouse and follow the layout conventions therein. The latest revision is summarised below:

**Layout**

Author addresses will now appear at the start of papers after the summary; where there is no summary, addresses will follow the author names.

**Headings**

The use of side headings (in bold full capitals) for papers will continue, but they no longer require to be underlined. Centre headings, in smaller bold font than the side headings, are retained for 'Acknowledgements' and 'References' at the end of papers, but these will now appear only with initial capitals.

**Tables and Figures - uses of bold type**

- Where a Table or a Figure is identified by a title, the words 'Table' and 'Figure' should be in bold: Table and Figure.
- Similarly, when referring to a Table number or a Figure number in the text, these should appear in bold: Table 1, Figure 1.

The general principle of modern abbreviations is that they do not have full stops (periods) following them, the argument being that abbreviations are now recognised as such, and by definition a shortening of a word to form an abbreviation should not be accompanied by adding a full stop to lengthen it! Hence we have 'in prep', not 'in prepared' for 'in preparation'. Examples are:

- (not a.s.l.) — above sea level
- (pers.obs.) = personal observation(s), not (pers. obs.) or (pers.obs) or (pers. obs.)
- (eg) not (e.g. nor eg) — e.g.

The general rule is that words and abbreviations from Latin and occasionally other languages are in italics.

- (eg) not (i.e. or ic) — that is
- c is the preferred abbreviation for 'circa' — approximately (not c. or c.), and it should be used without a space between it and the quantity, thus: '10 ′ s nanometres'.
- (cf) not and or 'cf' for 'compare'.
- unpub and not unpub. Preferably 'unpub' should be followed by 'data', 'ms', 'notes' or similar.

- 1km (not 1 km or 1 Km or 1 km) = one kilometre

The general rule for abbreviations of quantity is that the abbreviation remains singular when the quantities are plural, eg 9km, 25km or 500km.

- Fig (not Fig or Fig.) = Figure: the use of this abbreviation is preferred in articles, but if 'Figure' is used, please be consistent.

The general rule is that the number of the Figure is also in bold, thus Fig 1 or Fig 6.

**References and Citations**

- In the reference list, the first author's name is followed by the relevant initials. Subsequent authors should have their initials placed before the surname before the name.
- The general rule is that we treat authors of papers first as human beings, and so apart from the lead or sole author whose name must appear first to keep reference lists searchable in alphabetical order, we place the initials first.
- Full stops (periods) are not used to separate an author's initials, hence JFP 'Smith' and not J.F.P. Smith.
- A citation in the text with 3 or more authors should cite only the first author, thus 'Smith et al. 2000', omitting periods (full stops) and without a separating comma (see also and in 'Abbreviations' above).
- A citation with two authors should follow 'Smith & Jones 2000' in the text, using the ampersand (&), but should be written as Smith, J.F.P. and A.B. Jones, 2000 in the Reference List. Note the change from '2000' to '2000'.
- Multiple citations in the text within a single set of brackets normally should be separated by a comma (,), thus: Jones & Smith 1999, Heath et al 2000, Ramadan-Jardari 2004). However, multiple citations of a single author or the same team of authors may require separation by a semicolon, thus: Brown 1998, 1999, 2001; Jones and Smith 1999, Ramadan-Jardari 2004).
- Citing an author by name within the text is unchanged, thus: 'as recorded by Jones (1997).

**General**

- Except in regular news features in Sandgrouse, the first mention of a species in any paper must include the species name, thus: 'House Sparrow Passer domesticus'. Note that placing the scientific name in brackets is no longer required. However, English is such a flexible language that sometimes context may still require the use of brackets. Usually there will be no need to repeat the scientific name in the text unless comparisons between one or more species are being drawn.
- In a species account, if it mentions another species that does not have a preceding species account, that species must have its scientific name included. For example, in an account about, say, Eurasian Sparrowhawk Accipiter nisus, in which a prey species, say, Chaffinch, is named, if Chaffinch does not have a species account in the paper, then Fringilla coelebs should appear after the English name.

**Abbreviations**

Abbreviations and the form they take

<table>
<thead>
<tr>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modern abbreviations</td>
<td>(not a.s.l.) — above sea level</td>
</tr>
<tr>
<td>Latin abbreviations</td>
<td>(eg) not (e.g. nor eg) — e.g.</td>
</tr>
</tbody>
</table>

Note: Details may vary depending on the purpose and context of the abbreviation.
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