

TRIBULUS

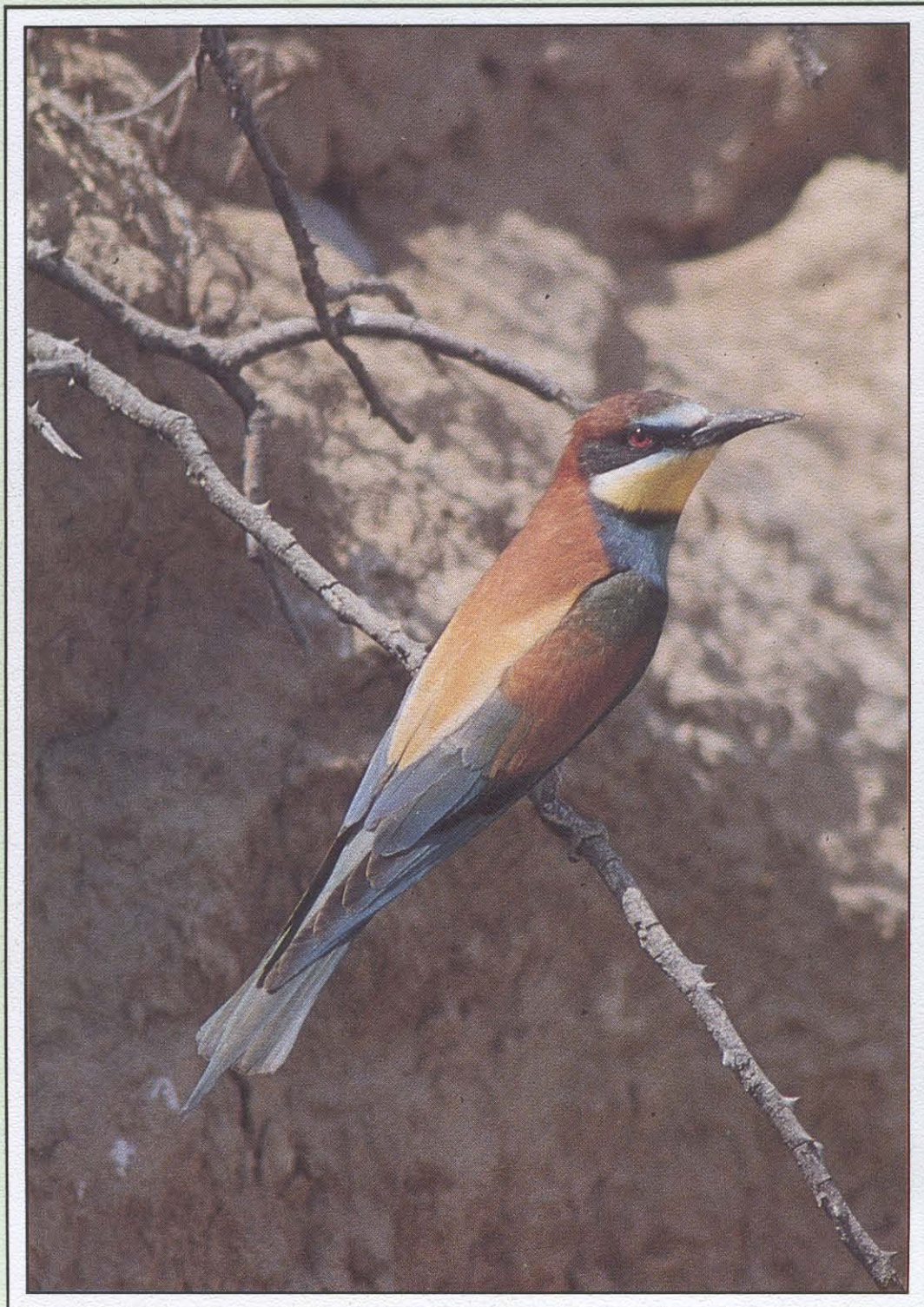


Bulletin of the Emirates Natural History Group

Vol. 1.2

OCTOBER 1991

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NOTES FOR CONTRIBUTORS

TRIBULUS is the new name given to the Bulletin of the Emirates Natural History Group. The group was founded in 1976, and over the next fourteen years, 42 issues of the Bulletin were published. The revised format of TRIBULUS permits the inclusion of black and white and colour photographs, not previously possible.

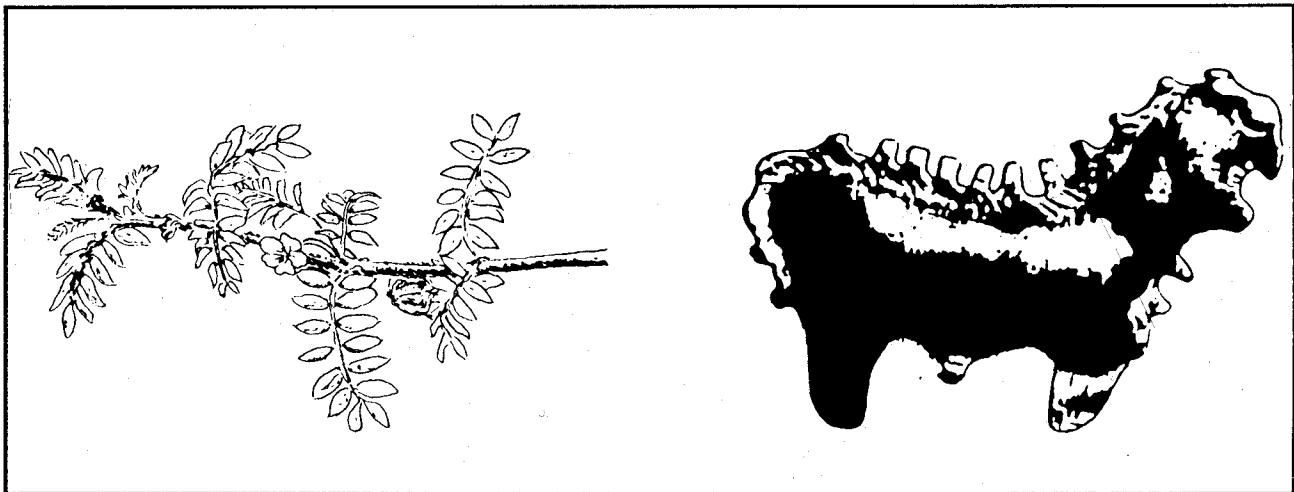
TRIBULUS is published twice a year, in April and October. The aim of the publication, as for the Bulletin, is to create and maintain in standard form a collection of recordings, articles and analysis on topics of regional history and natural history, with the emphasis focussing on the United Arab Emirates and adjacent areas. Articles are welcomed from Group members and others, and guidelines are set out below. The information carried is as accurate as the Editorial Committee can determine, but opinions expressed are those of the authors alone.

Correspondence and enquires should be sent to:

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H.E. Sheikh Nahyan bin Mubarak al Nahyan, Patron
R.A. Western, Chief Editor,
J.N.B. Brown,
P. Hellyer.



The plant motif above is of the genus *Tribulus*, of which there are five species in the UAE. They all have pinnate leaves, yellow flowers with free petals and distinctive five-segmented fruits. They are found throughout the country, except in coastal sabkha.

The animal motif above is of a tiny golden bull, excavated from the early Second Millennium grave at Qattarah, Al Ain. The original is on display in Al Ain Museum, and measures above 5 cm by 4 cm.

Manuscripts should be typed, on one side only, and double-spaced, and may be submitted in either English or Arabic. A short abstract should precede the article, with the address(es) of the author(s) at the end. For Arabic contributions, a short summary in English, of not more than 200 words, should also be supplied.

Photographs may be submitted and should be either glossy black-and-white prints or colour slides, which should be clearly captioned. Line drawings and maps should be in black ink on strong white or translucent paper.

References should give the author's name, with the year of publication in brackets, and with the list of articles, showing title and publisher, in date order.

Scientific names should follow customary nomenclature in Latin, while the English and, if appropriate, available Arabic names should also be supplied.

TRIBULUS

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Arabic : <i>European Kingfisher, (Alcedo atthis), a winter visitor and passage migrant, (D. Robinson).</i>	

The Editorial Board of TRIBULUS and the Committee of the Emirates Natural History Group acknowledge, with thanks, the support of the Group's Corporate members: Abu Dhabi Petroleum Ports Operating Company, ADPPOC, ANZ Grindlays Bank, The British Council (Abu Dhabi), Mobil Abu Dhabi and the Union National Bank.

We also acknowledge the support and encouragement of our Patron, H.E. Sheikh Nahyan bin Mubarak al Nahyan, who has helped to make the publication of TRIBULUS a viable proposition.

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Editorial

This second issue of TRIBULUS continues the variety of articles that was included in Volume 1.1. One of the strengths of the Group is the Bird Recording section which has been detailing observations monthly over the past decade or more. The accumulated data, in addition to intermittent records going back to the 1960's, has enabled the Recorder to issue irregular checklists of the birds of the UAE. The last updating was in January 1989, and since then Colin Richardson's guide to the status and distribution of UAE species has been published. Now we are pleased to publish a further updating in TRIBULUS, compiled by Colin himself and Bob Richardson, which we hope will be of use not only to observers within the country but also to researchers abroad. As recordings and records are collated over a period of years it is interesting to note changes in species distribution as well as introductions. One of the most important aspects, of course, is to establish which are regular and which are casual or rare breeders, as such information can serve as a guide to possible future distribution.

While on the subject of ornithology, Crab Plovers are again in the news. The discovery of a large breeding population on Abu al Abyad island was recorded in the Recorder's report for 1990 and in this issue Bish Brown, Maarten Verhage and Rob Morris give us a welcome update on the status of this species.

We are also fortunate in publishing here an update on the breeding of Gordon's wildcats in captivity, by Marijcke Jongbloed. Marijcke's last report was in the Group's old-style Bulletin 41 (July 1990), which detailed early progress in the breeding programme from May 1986. As recently as five years ago this species was threatened with imminent extinction but thanks largely to Marijcke's initiative and the support of zoos in Europe and the USA, there has been substantial success in maintaining and increasing a healthy population while keeping the gene pool as wide as possible. Whether their eastern Arabia habitat will survive remains to be seen.

Peter Hellyer follows up his report on archaeological work at Ad Door with details of Geoffrey King's excavations at Julfar earlier this year. This important port, the precursor to Ras al Khaimah town, has been threatened with both urban development and the ravages of wind and tide in recent years. This is something of a rescue 'dig', therefore, and the finds prove the importance of Julfar as a medieval trading link with both East Africa and the Far East.

Early editions of the old Bulletin used to include a summary of the previous year's weather and this

practice is revived with Nigel Bottomley's report. This is of particular interest in 1991 with the ongoing effects on the Gulf region of burning oil wells in Kuwait. Such records are also of vital importance when correlating information on seasonal plant growth and bird breeding records. They may also in time give us a local indication of the extent of global warming and its effects.

Botany is represented in this issue by a survey of the Mahdah area of Oman (near Buraimi), conducted by the Recorder and Bish Brown in late April 1989. Two small but defined areas approximately 4 kms apart were reconnoitred and compared, and the results prepared in a checklist with comments. Though such surveys may seem to have limited application in the short term, they do attempt to give us accurate a record as possible for a site in one brief moment of time, which can then be used as a data base for future research. Such sampling, provided it is conducted scientifically, can prove rewarding and is one area where many members can contribute, whatever their speciality. Such records were made by the late Dame Violet Dickson in Kuwait in the 1950's and 1960's and have proved invaluable to later botanists. It can only be hoped that something of that country's plant life will survive present conditions.

While it is accepted that many members do not feel qualified or perhaps are not interested enough in writing a full article for TRIBULUS, there remains plenty of scope for short reports and observations. The section on Notes and Queries is thus aimed at all those of you who wish to contribute, in however small a way.

Finally, this second issue of TRIBULUS concludes with two articles in Arabic. The UAE law on hunting is not directly applicable to Group members, but hunting does still continue in the Emirates, both in land and at sea, and the E.N.H.G. feels that every effort must be made to uphold the statutory law. In a country as small as this, wildlife is up against enough pressures as it is. The second article is on the tiny roadside mosque at Bidiya on the East Coast just north of Khor Fakkan. This is undoubtedly one of the oldest mosques in the country and worthy of preservation for its architectural uniqueness.

Your Committee and Editorial Board hope that this issue of TRIBULUS meets with the same pleasure and interest as No. 1. If you have any suggestions for improvement or future variety, please contact any Committee member.

ROB WESTERN
October 1991

A list of the birds of the United Arab Emirates

compiled by C. Richardson & R.A. Richardson

This is the first official list of all the birds of the UAE. It is the result of the efforts of many people who have taken the trouble to co-ordinate reports from a great many birdwatchers over the years.

Partial lists have been produced since the late 1960's including one for Sharjah by R.G. Griffiths (1969), for Abu Dhabi by J.D. Wellings (1973), waders by J. Stewart-Smith (1977) and UAE migrants by G. Ramadan-Jaradi (1985).

Much work in assembling all available records was done by Mrs. Effie Warr, whose regular contact with Gulf birders led to the production of early accurate lists, so forming a basis for this list.

Records have been kept by the Emirates Natural History Group since 1977 and by the Dubai Natural History Group since 1984 and a review of all the records from all known sources by their Bird Recorders has culminated in the production of this checklist.

The list follows the one published in **The Birds of the United Arab Emirates** (1990) and should be read in conjunction with it. Of the 367 species listed in the main section, six have been added since publication of BOUAE. These are Little Crane (October 1990), Long-toed Stint (September 1990), Sabine's Gull (June 1991), Grey-headed Kingfisher (April 1990), Dusky Warbler (October 1990) and Black Drongo (1986 reviewed). These are marked (#) in the first column. Other recent updates are included and some species receive special note pertaining to status. Rare sightings are credited to the observer/s and most are detailed with date and place.

The species order follows Voous (1977) and the numbers in the first column are those used by Eurring and ABBA (the Atlas of the Breeding Birds of Arabia).

The letters in the last column signify status and upper case is used when species is common. They are abbreviated as follows:

— هذه هي أول قائمة علمية رسمية لطيور الامارات،
صنفت من مدوني الطيور بجمعية الامارات
للتاريخ الطبيعي وجمعية دبي للتاريخ
الطبيعي. يرجع تاريخ تسجيلها إلى أواخر
الستينات.

- cb — casual breeder
- mb — migrant breeder
- pm — passage migrant
- rb — breeding resident
- sv — summer visitor (non-breeding)
- wv — winter visitor
- E — escaped or recently introduced
- ? or () — some doubt as to species' status
- V — vagrant

In choosing which species are vagrant (V) the criteria of 10 or less records in the last 10 years (to average one sighting or less per year) has been adopted.

Observers submitting records should send them to the Bird Recorder, Emirates Natural History Group, P.O. Box 2380, Abu Dhabi. A short description of sightings of species marked (*) may be required.

The List

- | | |
|---|---|
| <p>0007 Little Grebe <i>Tachybaptus ruficollis</i> ww/cb
Regular migrant September to March.
Has rapidly colonised freshwater sites since 1988 and is locally resident. viz. Zabeel water treatment plant, Saffa Park, Ramtha tip, Hatta Lake.</p> | <p>*0038 Flesh-footed Shearwater <i>Puffinus carneipes</i> V/(sv)
One 17 December 1987 in mixed seabird flock off East Coast 25° 00' N, 57° 07' E (W.R.P. Bourne).</p> |
| <p>*0009 Great Crested Grebe <i>Podiceps cristatus</i> wv</p> | <p>*0041 Wedge-tailed Shearwater <i>Puffinus pacificus</i> V
Likely to occur in late summer on the edge of the continental shelf.
A few recorded off East Coast 20 June 1977 (W. Weitkowitz); nine 16 November 1983 offshore Khor Fakkan/Fujeirah and two 27 October 1986 offshore Khor Fakkan (J.A.D. Chapman).
Note: Reported at sea off Oman, March-November. Other reports of Jouanin's Petrel/Wedge-tailed Shearwater in the UAE have not been identified to species and are therefore not listed.</p> |
| <p>*0010 Red-necked Grebe <i>Podiceps grisegena</i> V
One late December 1984 to early January 1985 (J.A.D. Chapman/H.v.d. Veer)</p> | <p>0049 Audubon's Shearwater <i>Puffinus lherminieri</i> WV</p> |
| <p>0012 Black-necked Grebe <i>Podiceps nigricollis</i> WV</p> | <p>0050 Wilson's Storm-Petrel <i>Oceanites oceanicus</i> sv</p> |
| <p>*0035 Jouanin's Petrel <i>Bulweria fallax</i> sv
Small numbers feed far offshore (usually from late summer to late autumn) occasionally reaching Arabian Sea. Can be confused with Wedge-tailed Shearwater. (See below)
One 17 December 1987 offshore Fujeirah (W.R.P. Bourne), only accepted record for now.</p> | |

- *0055 **Leach's Storm-Petrel** *Oceanodroma leucorhoa* V
One found dying 8 June 1969 old Sharjah airfield (R.G. Griffiths/J.M. Laphorne), preserved in BM (Natural History), Tring, U.K.
- 0064 **Red-billed Tropicbird** *Phaethon aethereus* rb
- *0067 **Red-footed Booby** *Sula sula* V
One 27 August 1979 on northbound ship off East Coast (P.W.G. Chilman)
- *0068 **Masked Booby** *Sula dactylatra* V
One 2 May 1973 off Sha'am, RAK (D.A. Scott); reported off East Coast winter 1987/88 (W.R.P. Bourne per F.E. Warr); one juvenile 19 May 1988 off Abu Dhabi island (J.A.D. Chapman) no details.
- *0070 **Brown Booby** *Sula leucogaster* V
One adult 26 October 1986 on oil platform NE of Fateh field (M. Harvey); one 16 January 1987 off Sha'am beach (J.A.D. Chapman).
- 0072 **Great Cormorant** *Phalacrocorax carbo* WV
- 0081 **Socotra Cormorant** *Phalacrocorax nigrogularis* RB
- *0088 **White Pelican** *Pelecanus onocrotalus* pm
Three 30 November off Abu Dhabi island (J. Stewart-Smith); five 8 May 1973 flying north off Khor Fakkan (M.D. Gallagher); two pelican species 18 February 1976 near Umm al Qaiwain (P.H. Rathbone); one dead 6 April 1980 Abu Dhabi (Ramadan-Jaradi 1985) no details; four 10 March 1981 Jumeirah, Dubai (Ramadan-Jaradi 1985); other reports autumn and winter (though none confirmed since 1981).
- *0089 **Dalmatian Pelican** *Pelecanus crispus* V
One 16 December 1970 Abu Dhabi island (J. Stewart-Smith) no details; one immature photographed 19 January 1980 Zakum offshore oil platform Abu Dhabi (J.N.B. Brown).
- *0095 **Bittern** *Botaurus stellaris* pm
- 0098 **Little Bittern** *Ixobrychus minutus* PM/wv
- 0104 **Night Heron** *Nycticorax nycticorax* PM/WV
- 0107 **Little Green Heron** *Butorides striatus* rb
- 0108 **Squacco Heron** *Ardeola ralloides* pm/wv
- *0109 **Indian Pond Heron** *Ardeola grayii* wv
- 0111 **Cattle Egret** *Bubulcus ibis* pm/wv
- 0118 **Western Reef Heron** *Egretta gularis* RB
- 0119 **Little Egret** *Egretta garzetta* PM/WV
- 0121 **Great White Egret** *Egretta alba* WV
- 0122 **Grey Heron** *Ardea cinerea* WV/PM/sv
One bird observed carrying nest material 28 May 1988, Dubai.
- 0124 **Purple Heron** *Ardea purpurea* pm/wv/sv
- *0131 **Black Stork** *Ciconia nigra* V
All reports lack detail, though assume species unmistakable. One 22 March 1973 Abu Dhabi island (J. Stewart-Smith/J.D. Wellings); one 28 March - 2 April 1979 Al Ain and one 24 March 1981 Ain al Faydah (Ramadan-Jaradi 1985) no details. Former report, September 1979, withdrawn.
- 0134 **White Stork** *Ciconia ciconia* pm
Occasional and localised in winter.
- 0136 **Glossy Ibis** *Plegadis falcinellus* pm/wv
Also recorded in summer months.
- *0142 **Sacred Ibis** *Threskiornis aethiopicus* E?/V?
Two 10 October 1982 Khor Dubai (M. West)
- 0144 **Spoonbill** *Platalea leucorodia* WV/pm/sv
- 0147 **Greater Flamingo** *Phoenicopterus ruber* WV/SV
Courtship and nest-building recorded Khor Dubai 1984 and 1985.
- *0152 **Mute Swan** *Cygnus olor* V/E
Three (1 adult, 2 immatures) 13 December 1984 Abu Dhabi sewage farm (M. Crumie et al)
- *0159 **White-fronted Goose** *Anser albifrons* wv
Seven (or Lesser White-fronted) 5 February 1971 off Sharjah coast (B. Etheridge); on 7 January 1978 inland, and one 4 January 1980 Sir Bani Yas Island (Ramadan-Jaradi 1985); party of four 8 November 1985 Safa Park, declining to one bird 4 February 1986 at Zabeel Water treatment plant, Dubai (J.A.D. Chapman/C. Richardson); one 25 November 1989 Sir Bani Yas Island (J.A.D. Chapman).
Note: Sir Bani Yas island birds may be from feral stock.
- 0161 **Greylag Goose** *Anser anser* wv
- *0171 **Ruddy Shelduck** *Tadorna ferruginea* V
One 26 October-9 November 1978 Abu Dhabi (M.A. Hollingworth et al); one 19 January 1981 Khor Dubai (G.A. Miles); one summer 1982 Abu Dhabi sewage farm (ENHG); up to four 22 November-5 December 1989 Khor Dubai (D. Brown/C. Richardson); one 15 December 1989 Ramtha tip (S. Turner); one 9 January 1991 Ain al Faydah (J.A.D. Chapman); two 9/10 May 1991 Ramtha tip (S. Turner/C. Richardson/J. Bannon).
- 0173 **Shelduck** *Tadorna tadorna* pm/wv
- *0176 **Cotton Teal** *Nettapus coromandelianus* V
One female 7-9 November 1984 Safa Park (J.S. Ash/N.E. Baker/J.A.D. Chapman/M. West); three 1 February 1985 Hatta lake (J.A.D. Chapman).
- 0179 **Wigeon** *Anas penelope* wv
- 0182 **Gadwall** *Anas strepera* wv
- 0184 **Teal** *Anas crecca* WV/pm
- 0186 **Mallard** *Anas platyrhynchos* WV/E
Feral birds now resident Dubai, Abu Dhabi and Sir Bani Yas Island.
- 0189 **Pintail** *Anas acuta* WV
- 0191 **Garganey** *Anas querquedula* PM
- 0194 **Shoveler** *Anas clypeata* WV/PM
- *0195 **Marbled Teal** *Marmaronetta angustirostris* V
25 Abu Dhabi island 1 March 1972 (J. Stewart-Smith) no details: two October 1975 Rams, Ras al Khaimah (S. Dexter).
- *0196 **Red-crested Pochard** *Netta rufina* V
One female 24 December 1970 Dhayah (F.E. Warr); one 18 December 1981 Saadiyat Island, Abu Dhabi (Ramadan-Jaradi 1985); one female 3-6 December 1987 Zabeel water treatment plant (C. Richardson); one male 28 December 1990 Ramtha tip, later died (C. Richardson); three 5-30 January 1991 Zabeel water treatment plant (C. Richardson).

- 0198 **Pochard** *Aythya ferina* WV
- 0202 **Ferruginous Duck** *Aythya nyroca* wv
- 0203 **Tufted Duck** *Aythya fuligula* WV
- *0221 **Red-breasted Merganser** *Mergus serrator* V
Two 29 October 1972 South Farayah Island, Abu Dhabi (J. Stewart-Smith) no details: up to 15 Al Jazeerah Khor 25 November-9 December 1988 (J.A.D. Chapman/C. Richardson/J.N.B. Brown *et al*).
- *0231 **Honey Buzzard** *Pernis apivorus* V
First recorded 1987 and oddly most records Abu Dhabi.
Two 26 December 1987 Abu Dhabi (J.M. Hollingworth); one 24 February 1988 Abu Dhabi (J.A.D. Chapman); one 1 December 1988 Abu Dhabi (W. Dolleman); one 16 April-4 May 1989 Bateen wood, Abu Dhabi (J.M. Hollingworth); one 30 September-2 October 1989 Abu Dhabi (P. Hellyer); one 20/22 October 1989 Abu Dhabi (P. Hellyer); one 15 November 1989 Asab (L. Reaney); one 21 January 1990 Abu Dhabi (J.A.D. Chapman); one 2 March 1990 Abu Dhabi (J.A.D. Chapman); one 1 November 1990 (C. Richardson/M. Pitt/R.A. Richardson); one 30 November 1990 Bani Yas (R.A. Richardson).
- *0235 **Black-shouldered Kite** *Elanus caeruleus* V
One juvenile 24 February 1984 Jumeirah, Dubai (M. West) – Incorrectly noted as adult female in BOUAE (1990).
- *0238 **Black Kite** *Milvus migrans* pm/wv
All records since 1986 listed.
One 9 June 1989 over Abu Dhabi lagoons (ENHG); one 16 March 1990 Wadi Ham, Fujeirah (M. Pitt); one 23 November 1990 Jebel Hafit (J.A.D. Chapman); one 2 December 1990-11 February 1991 (M. Pitt/C. Richardson).
- *0240 **Brahminy Kite** *Haliastur indus* V
One 12 April 1986 Zabeel Area, Dubai (J. Platt); one 21 October 1986 Port Rashid, Dubai (G. W. Ricks); two 20-25 December 1986 Saffa Park, Dubai (J.A.D. Chapman/C. Richardson); one 9-3 January 1987 Zabeel water treatment plant (C. Richardson *et al*) – winter records may all refer to same bird/s.
- *0242 **Pallas's Fish Eagle** *Haliaeetus leucoryphus* V
One 29 October 1972 Ras al Khaimah (L. & S.J. Tyler).
- 0247 **Egyptian Vulture** *Neophron percnopterus* RB/pm
- 0251 **Griffon Vulture** *Gyps fulvus* wv/pm
- 0254 **Lappet-faced Vulture** *Torgus tracheliotus* rb
- 0256 **Short-toed Eagle** *Circaetus gallicus* pm/wv/rb?
Nesting suspected Ras al Khaimah, Hatta and possibly East Coast foothills.
- 0260 **Marsh Harrier** *Circus aeruginosus* WV/pm
- *0261 **Hen Harrier** *Circus cyaneus* pm
- 0262 **Pallid Harrier** *Circus macrourus* PM/wv
- *0263 **Montagu's Harrier** *Circus pygargus* pm
One male 7 March 1971 Umm al Qaiwain (M.C. Jennings/F.E. Warr); one male 20 April 1978 Khor Kalba (M.A. Hollingworth); one male 1 & 8 April 1981 Abu Dhabi (Ramadan-Jaradi 1985); one male 15 November 1984 Dubai (J.S.Ash/N.E. Baker); three males 19 July-early August 1991 Al Habab fodder field, near Dubai (C. Richardson/E. Hirschfeld).
Females and immatures prior to 1985 not listed here while species not confirmed 1985-1990.
- *0265 **Dark Chanting Goshawk** *Melierax metabates* V
One 15 April 1988 Abu Dhabi (D. Robinson/J.A.D. Chapman); one trapped on Dalma Island February 1989, later caged on nearby Sir Bani Yas Is. (*per* J.A.D. Chapman).
- *0267 **Goshawk** *Accipiter gentilis* V
One 15 October 1976 Abu el Bukhoosh oil field (D.M. Simpson); one 13 April 1984 Mushrif park, Dubai (J.A.D. Chapman).
Other detailed reports January, late March and April.
- 0269 **Sparrowhawk** *Accipiter nisus* wv/pm
- *0273 **Levant Sparrowhawk** *Accipiter brevipes* V
One female 28 October 1977 Dhaid (M.A. Hollingworth).
- 0287 **Buzzard** *Buteo buteo* pm/wv
Sub-species *B.b. vulpinus* (Steppe Buzzard) is prevalent.
- 0288 **Long-legged Buzzard** *Buteo rufinus* wv/pm/rb
- *0292 **Lesser Spotted Eagle** *Aquila pomarina* V
One 20-22 February 1990 Zabeel water treatment plant (C. Richardson/E. List); one 10 March 1990 Khor Dubai (C. Richardson), probably same bird.
- 0293 **Spotted Eagle** *Aquila clanga* pm/wv
- 0294 **Steppe Eagle** *Aquila nipalensis* PM/wv
- *0295 **Imperial Eagle** *Aquila heliaca* pm/wv
- *0296 **Golden Eagle** *Aquila chrysaetos* rb?
Two immatures Al Ain Zoo April 1981, origins unknown (M. D. Gallagher); one 12 April 1986 Zabeel area, Dubai (J. Platt) no details; one 23 November 1990 Jebel Hafit (J.A.D. Chapman/D. Robinson). Several observations, mainly September to April and 8 chicks brought to Al Ain Zoo in 7 years (Ramadan-Jaradi 1984).
- 0298 **Booted Eagle** *Hieraaetus pennatus* pm/wv
- 0299 **Bonelli's Eagle** *Hieraaetus fasciatus* rb
- 0301 **Osprey** *Pandion haliaetus* RB/WV
- 0303 **Lesser Kestrel** *Falco naumanni* pm
- 0304 **Kestrel** *Falco tinnunculus* WV/PM/rb
- *0309 **Merlin** *Falco columbarius* V
One adult female 3 August 1989 Al Wathba (J.A.D. Chapman/ D. Robinson); one 4 November 1990 Zabeel water treatment plant (D. Brown), awaits verification.
- 0310 **Hobby** *Falco subbuteo* pm
- 0312 **Sooty Falcon** *Falco concolor* mb
- *0314 **Lanner Falcon** *Falco biarmicus* E/?
- 0316 **Saker Falcon** *Falco cherrug* E/wv
- 0320 **Peregrine Falcon** *Falco peregrinus* E/wv
- *0321 **Barbary Falcon** *Falco pelegrinoides* E/rb?
Recent reports suggest there may be small numbers resident throughout most of the mountain areas.

- *0355 **Chukar** *Alectoris chukar* E/rb?
- 0363 **Sand Partridge** *Ammoperdix heyi* RB
- 0365 **Grey Francolin** *Francolinus pondicerianus* RB
- 0370 **Quail** *Coturnix coturnix* pm/E
- 0407 **Water Rail** *Rallus aquaticus* wv
- 0408 **Spotted Crane** *Porzana porzana* PM
- *#0410 **Little Crane** *Porzana parva* V
One 2-11 October 1990 Saffa Park (C. Richardson/M. Pitt).
- *0411 **Baillon's Crane** *Porzana pusilla* pm
- 0421 **Corncrake** *Crex crex* pm
Possibly more regular than following records indicate.
Two caught exhausted within 2 days of each other autumn 1973 in a Sharjah garden (P. Carson); one 8 October 1981 Saffa Park (M. West); one 20 March 1985 Saffa Park (C. Richardson); one 11 April 1985 Saffa Park (J.A.D. Chapman); one 26 September 1986 Saffa Park (C. Richardson/M. West); one 1 October 1987 Saffa Park (J. Bannon); one 30 October 1987 Abu Dhabi (J.M. Hollingworth); one 27 April 1990 Emirates golf course (D. Brown); one 11 September 1990 Asab (L. Reaney); one 23-27 April & 13 May 1991 Saffa Park (J. Bannon/C. Richardson); one 2/3 May 1991 Sir Bani Yas Island (ENHG); one 7 May 1991 Emirates golf course (C. Richardson); one 14 May 1991 Ras Ghanada (R. Morris).
- 0424 **Moorhen** *Gallinula chloropus* PM/wv/cb
- *0426 **Purple Gallinule** *Porphyrio porphyrio* V
One arrived 30 October 1984 (died weeks later) Jebel Ali hotel grounds (P. Holmes/C. Richardson).
- 0429 **Coot** *Fulica atra* WV
One overwintered Dubai 1991. (Casual breeder in Qatar and Southern Oman).
- *0433 **Common Crane** *Grus grus* V
One 13 September 1977 Khor Kalba (M.A. Hollingworth); up to three 18-25 February 1980 Mazyad, Al Ain (Ramadan-Jaradi 1985), no details; one 5 October 1984 Qarnain Island (I. Foxall); two from early July 1991 Abu al Abyad (R. Morris), origins unknown. Other early 1970's records unclear.
- *0441 **Demoiselle Crane** *Anthropoides virgo* V
One 5 October-14 November 1983 and one 27 December 1983 (M. Crumby). Two early 1970's records not substantiated.
- 0444 **Houbara Bustard** *Chlamydotis undulata* wv
- 0450 **Oystercatcher** *Haematopus ostralegus* WV/pm/sv
- 0455 **Black-winged Stilt** *Himantopus himantopus* PM/wv/cb
Opportunist breeder, depending on availability of suitable wetland sites.
- 0456 **Avocet** *Recurvirostra avosetta* pm/wv
- 0458 **Crab Plover** *Dromas ardeola* WV/pm/rb?
Breeding confirmed 1990 & 1991 Abu al Abyad, eggs May, chicks in June (M. Verhage/J.N.B. Brown/J.A.D. Chapman).
- 0459 **Stone Curlew** *Burhinus oedipnemos* pm/wv/E
- 0464 **Cream-coloured Courser** *Cursorius cursor* rb/pm?
- 0465 **Collared Pratincole** *Glareola pratincola* PM
- *0467 **Black-winged Pratincole** *Glareola nordmanni* V
One 10 December 1984 near Khor Dubai (J.A.D. Chapman).
- *0468 **Little Pratincole** *Glareola lactea* V
One 4-23 November 1978 Abu Dhabi (M.A. Hollingworth *et al*); one 5-8 March 1984 Khor Dubai and one 9 February 1985 Khor Dubai (J.A.D. Chapman); one 15 December 1985 Zabeel water treatment plant (C. Richardson).
- 0469 **Little Ringed Plover** *Charadrius dubius* PM/MB
- 0470 **Ringed Plover** *Charadrius hiaticula* PM/WV/sv
- 0477 **Kentish Plover** *Charadrius alexandrinus* RB/WV/PM
- 0478 **Lesser Sand Plover** *Charadrius mongolus* PM/WV/sv
- 0479 **Greater Sand Plover** *Charadrius leschenaultii* PM/WV
- *0480 **Caspian Plover** *Charadrius asiaticus* pm
- *0482 **Dotterel** *Charadrius morinellus* V
Six 19 December 1970 Jumeirah, Dubai (W. Wyper); one 5 July 1979 Abu Dhabi (T. Giles); one 10 January 1984 Qarnain Island (I. Foxall); one 8 November 1985 (J.A.D. Chapman); one 10 August 1987 Das Island, and another there 17 August 1987 (L. Reaney); up to three 27 September-1 October 1987 Emirates golf course and one there 11 November 1987 (C. Richardson); one 7-12 October 1989 Emirates golf course (C. Richardson); one 17 November 1989 Khor Khan, Sharjah (J. Oldfield); one 30 November 1989 Al Jazeera Khor (S. Turner); 14 at Al Wathba 14/15 February 1991 (J.A.D. Chapman/R.A. Richardson/J.M. Hollingworth); one 18 July 1991 near Emirates golf course (C. Richardson). Appears to be irregular passage migrant, most occurring autumn.
- 0484 **Pacific Golden Plover** *Pluvialis fulva* WV/PM
- 0486 **Grey Plover** *Pluvialis squatarola* WV/PM/sv
- 0490 **Red-wattled Lapwing** *Hoplopterus indicus* rb/pm/mb?
- *0491 **Sociable Plover** *Chettusia gregaria* V
One 12-20 November 1984 Saffa Park (C. Richardson); one 1-25 February 1986 Saffa Park (C. Richardson/J.A.D. Chapman); one 18-31 March 1986 Bateen air base, Abu Dhabi (M. Crumby); one 10 February 1988 Ras al Khor, Dubai (J. Oldfield).
- 0492 **White-tailed Plover** *Chettusia leucura* pm/wv
- 0493 **Lapwing** *Vanellus vanellus* wv
Mostly ones and twos end October to mid December (*per* F.E. Warr); seven 7 October 1977 Umm al Qaiwain & three 13 October 1978 Ras al Khaimah (Ramadan-Jaradi 1985); one 9 January 1984 Saffa Park, Dubai (C. Richardson); up to 18 near Awir sewage plant 2-15 December 1988 (J. Oldfield/C. Richardson); c. 12 near Ras al Khaimah airport 27 January 1989 (S. Turner); one 14 October 1989 Khor Dubai (J. Hart); up to five 30 November 1990 to 4 February 1991 Ramtha tip (C. Richardson/S. Turner/R. Green). Regular in Northern Emirates.
- *0495 **Great Knot** *Calidris tenuirostris* V
One 8 November 1986 Khor Kalba (C. Thomas/J. Utley *et al*) and one there 12 November 1986 (J.A.D. Chapman); up to five 7-9 March 1990 Khor al Beidah (A. Forsten/T. Numminen).

- *0496 **Knot** *Calidris canutus* V
One 16 June 1978 Das Island in breeding plumage (M.A. Hollingworth)
Several pre-1983 reports lack detail and have been omitted.
- 0497 **Sanderling** *Calidris alba* PM/WV/sv
- *#0503 **Long-toed Stint** *Calidris subminuta* V
One 14 September 1990 Ramtha tip (M. Pitt); one 28 September-2 November 1990 Zabeel water treatment plant (J.A.D. Chapman/D. Robinson/C. Richardson); three 1 October 1990 Al Wathba & up to two Al Ghar lake 1-5 October (J.A.D. Chapman).
- 0501 **Little Stint** *Calidris minuta* PM/WV/sv
- 0502 **Temminck's Stint** *Calidris temminckii* PM/wv
- 0509 **Curlew Sandpiper** *Calidris ferruginea* PM/wv/s
- 0512 **Dunlin** *Calidris alpina* WV/PM/sv
- 0514 **Broad-billed Sandpiper** *Limicola falcinellus* PM/WV
- 0517 **Ruff** *Philomachus pugnax* PM/wv
- 0518 **Jack Snipe** *Lymnocyrtus minimus* wv
- 0519 **Common Snipe** *Gallinago gallinago* PM/WV
- *0520 **Great Snipe** *Gallinago media* pm
- *0521 **Pintail Snipe** *Gallinago stenura* V
One 10 December 1977-1 January 1978 Abu Dhabi (M.A. & J.M. Hollingworth); one 8 March 1979 Abu Dhabi (M.A. Hollingworth); one 24 October-2 November 1990 Zabeel water treatment plant (C. Richardson/M. Pitt).
- *0529 **Woodcock** *Scolopax rusticola* V
Two 20-22 January 1974 Dubai (P. Carson); two 18 December 1976 Ras al Khaimah (W. Weitkowitz); one 4 November 1983 Al Wathba, later died (M. Crumby); one 16 November 1988 Safia Park (C. Richardson).
- 0532 **Black-tailed Godwit** *Limosa limosa* PM/WV
- 0534 **Bar-tailed Godwit** *Limosa lapponica* WV/PM/sv
- 0538 **Whimbrel** *Numenius phaeopus* PM/wv
- 0541 **Curlew** *Numenius arquata* WV/PM/sv
- 0545 **Spotted Redshank** *Tringa erythropus* pm/wv
- 0546 **Redshank** *Tringa totanus* WV/PM/sv
- 0547 **Marsh Sandpiper** *Tringa stagnatilis* pm/wv
- 0548 **Greenshank** *Tringa nebularia* WV/PM/sv
- 0553 **Green Sandpiper** *Tringa ochropus* PM/WV
- 0554 **Wood Sandpiper** *Tringa glareola* PM/WV
- 0555 **Terek Sandpiper** *Xenus cinereus* PM/WV
- 0556 **Common Sandpiper** *Actitis hypoleucos* PM/WV
- 0561 **Turnstone** *Arenaria interpres* PM/wv
- 0564 **Red-necked Phalarope** *Phalaropus lobatus* PM/WV
Winters offshore in Arabian Sea.
- *0565 **Grey Phalarope** *Phalaropus fulicarius* wv
At least one 5 February 1988 offshore Fujairah (W.R.P. Bourne); 10 in summer plumage 30 May 1989 Didiman, Arabian Gulf and two 3 June 1989 off Fujairah (W.F. Curtis per W.R.P. Bourne) await confirmation.
- 0566 **Pomarine Skua** *Stercorarius pomarinus* PM/WV
- 0567 **Arctic Skua** *Stercorarius parasiticus* PM/wv
- *0568 **Long-tailed Skua** *Stercorarius longicaudus* V
Two 26 March 1989, 40 miles off Fujairah and two 5 April 1989 near Dubai (W.F. Curtis per W.R.P. Bourne).
- *0569 **Great Skua** *Stercorarius skua* V
One 14 February 1989 off Jumeirah beach, Dubai (D. Brown).
- 0571 **Sooty Gull** *Larus hemprichii* RB/mb/pm
- 0573 **Great Black-headed Gull** *Larus ichthyæetus* WV/pm
- *#0579 **Sabine's Gull** *Larus sabini* V
One from 24 June 1991 for several weeks, Ramtha tip, Sharjah (C. Richardson/R.A. Richardson/S. Turner), only known Arabian record.
- 0582 **Black-headed Gull** *Larus ridibundus* WV
- *0583 **Brown-headed Gull** *Larus brunnicephalus* V or wv?
One 26 January 1988 offshore Fujairah and one immature 3 February 1988 Port Rashid (W.R.P. Bourne); one 5 December 1990 east of Dibba (W.R.P. Bourne); one immature 5 January 1991 5 nm off Dubai (W.R.P. Bourne).
- 0585 **Slender-billed Gull** *Larus genei* PM/WV/sv
- *0590 **Common Gull** *Larus canus* V
One 23 November 1965 Abu Dhabi (P.A.D. Hollom); one 8 November 1972 Khor Fakkan (L. & S.J. Tyler); one 13 January 1988 Hamriyah (S. Newton); one 27 January & 1 February 1988 Port Rashid (W.R.P. Bourne); one 28 January 1988 Zabeel water treatment plant (P. Antrobus); one 26 March 1988 Abu Dhabi (P. Hellyer). Most reports lack details.
- 0591 **Lesser Black-backed Gull** *Larus fuscus* PM/WV
- 0592 **Yellow-legged Gull** *Larus cachinnans* PM/WV
- 0592A **Armenian Gull** *Larus armenicus* WV/PM
Status based on offshore observations during winters of 1987/88 and 1990/91 by W.R.P. Bourne.
- 0605 **Gull-billed Tern** *Gelochelidon nilotica* PM/wv/sv
- 0606 **Caspian Tern** *Sterna caspia* wv/pm/rb?
- 0608 **Swift Tern** *Sterna bergii* MB/wv/rb
- 0609 **Lesser Crested Tern** *Sterna bengalensis* MB
- 0611 **Sandwich Tern** *Sterna sandvicensis* PM/WV/SV
- *0614 **Roseate Tern** *Sterna dougallii* V
One 23 October 1986 Jazirat al Hamra (Dubai Shorebird Project); two 10 May 1989 near Jebel Ali (W.F. Curtis per W.R.P. Bourne).
- 0615 **Common Tern** *Sterna hirundo* pm
- 0620 **White-cheeked Tern** *Sterna repressa* MB
- 0622 **Bridled Tern** *Sterna anaethetus* MB
- *0623 **Sooty Tern** *Sterna fuscata* sv
Two 17 May 1974 off East Coast (P.W.G. Chilman), only substantiated record. Species breeds on Musandam and may pass through UAE waters annually.
- *0624 **Little Tern** *Sterna albitrons* pm
Few certain records. Separation from *S. saundersi* requires consideration and is always difficult.
- 0625 **Saunders' Little Tern** *Sterna saundersi* PM/mb
- 0626 **Whiskered Tern** *Chlidonias hybrida* PM/wv
Non-breeders occasionally present in summer.

- 0628 **White-winged Black Tern** *Chlidonias leucopterus* PM
Non-breeders occasionally present in summer.
- *0633A **Indian Skimmer** *Rhynchops albicollis* V
One 15 January 1988 coast near Khor Kalba (W.R.P. Bourne).
- 0657 **Lichtenstein's Sandgrouse** *Pterocles lichtensteinii* RB
- *0658 **Coronated Sandgrouse** *Pterocles coronatus* rb?
Two 29 January 1988 Wadi Siji (P. Antrobus), only recent report. Previous records appear unclear.
- *0659 **Spotted Sandgrouse** *Pterocles senegallus* rb?
One 19 February 1970 foothills near Rams (F.E. Warr), only sure recent record. Some skins from UAE birds in British Museum (Natural History).
- 0660 **Chestnut-bellied Sandgrouse** *Pterocles exustus* RB
- 0661 **Black-bellied Sandgrouse** *Pterocles orientalis* E
- 0665 **Rock Dove** *Columba livia* RB
Feral pigeons are widespread in all towns and many villages.
- 0684 **Collared Dove** *Streptopelia decaocto* RB/wv
- 0687 **Turtle Dove** *Streptopelia turtur* PM/mb
- *0689 **Eastern Turtle Dove** *Streptopelia orientalis* V
One 7 October 1977 Abu Dhabi (D.M. Corfield & M.A. Hollingworth); five 16 November 1984 Al Ain Zoo area (J.S. Ash & N.E. Baker); one 24 October 1986 Das Island (L. Reaney).
- 0690 **Palm Dove** *Streptopelia senegalensis* RB
- *0692 **Namaqua Dove** *Oena capensis* V
One 22/23 May 1988 Asab (D. Robinson); one female 27 May 1989 Asab (L. Reaney); one male 14 September 1989 Ramtha tip (S. Turner); two 8 February 1990 Shah, Western desert (P. Hellyer); one 19 April 1991 Digdaga (J. Bannon/C. Richardson/S. Turner).
- 0712 **Rose-ringed Parakeet** *Psittacula krameri* RB/pm
- 0724 **Cuckoo** *Cuculus canorus* pm
- *0724A **Indian Koel** *Eudynamis scolopacea* V
One 21-24 March 1977 Dubai (J. Armitage); one 16 February 1988 Abu Dhabi (J.A.D. Chapman).
- 0735 **Barn Owl** *Tyto alba* rb
- *0738 **Bruce's Scops Owl** *Otus brucei* mb/rb?
- 0739 **Scops Owl** *Otus scops* PM
- 0744 **Eagle Owl** *Bubo bubo* rb
- 0757 **Little Owl** *Athene noctua* rb
- *0767 **Long-eared Owl** *Asio otus* V
One 19 October 1979 Port Rashid, Dubai (W. Wyper); one 29 January 1971 Sharjah (B. Etheridge); one 28 March 1978 at sea off Khor Fakkan (Royal Naval Birdwatching Society).
- 0768 **Short-eared Owl** *Asio flammeus* wv
- 0778 **European Nightjar** *Caprimulgus europaeus* PM
- *0781 **Egyptian Nightjar** *Caprimulgus aegyptius* pm
Two 28 March 1971 Jebel Faiyah (Ex-Lapwing); one each 4th, 6th & 8th October 1972 on ship off Jebel Dhanna (Casement 1974 & P.W.G. Chilman); one each 8th & 28th September 1978 Zakum offshore oilfield (D.M. Simpson); reported mid-March to early April (Ramadan-Jaradi 1985) no details; one 23 July 1989 Bateen wood, Abu Dhabi (D. Robinson); one 4 August 1989 Al Wathba (J.A.D. Chapman/D. Robinson).
- 0795 **Common Swift** *Apus apus* PM
- 0796 **Pallid Swift** *Apus pallidus* MB/pm
- *0798 **Alpine Swift** *Apus melba* V
Two 6 August 1975 near Dubai Airport (W. Wyper); one 9 June 1978 Umm al Qaiwain (M.A. Hollingworth/R. McNiff); one 7 May 1982 Saffa Park (M. West); recorded end May and mid October 1985 (Ramadan-Jaradi 1985), no details.
- *0800 **Little Swift** *Apus affinis* V
One 14 July 1971 Sharjah creek (F.E. Warr); one 24 March 1971 Khor Kalba (W.A.C. Smith/T.D. Rogers); reported 28 February 1978 & 6/7 March 1980 Al Ain (Ramadan-Jaradi 1985), no details; one 24 January 1988 Das Island (L. Reaney); one 21 February 1991 Khor Kalba (C. Richardson).
- *#0829 **Grey-headed Kingfisher** *Halcyon leucocephala* V
One 14-17 April 1990 Asab (L. Reaney).
- 0830A **White-collared Kingfisher** *Halcyon chloris* rb
- 0831 **Kingfisher** *Alcedo atthis* WV/PM
- *0833 **Pied Kingfisher** *Ceryle rudis* V/wv?
One 27 February & 13 March 1980 Umm al Qaiwain (T. Nightingale/C.M. Saunders); one 18 November 1986 to January 1987 & 20 March 1987 Eastern Lagoon, Abu Dhabi (J.M. Hollingworth *et al*); one December 1986 to February 1987 Dubai beach palace (K. Hyland); one 27 October 1989 Khor Kalba (J. Hart/J. Footitt); one 4-10 November 1989 Ramtha tip (S. Turner); one 2 November 1990-11 February 1991 Ramtha tip (S. Turner/C. Richardson/R. Green *et al*); two 2-7 December 1990 & 18 January 1991 Ramtha tip (J.A.D. Chapman/R. Green).
- *0837 **White-throated Bee-eater** *Merops albicollis* V
One 20 November 1989 Emirates golf course (C. Richardson/J. Bannon); one 5 March 1990 Emirates golf course (A. Forsten/T. Numminen). Photograph seen.
- 0838 **Little Green Bee-eater** *Merops orientalis* RB
- 0839 **Blue-cheeked Bee-eater** *Merops superciliosus* PM/mb
Breeds Fujairah (and other East Coast localities) and Ras al Khaimah — probably irregular other sites in Northern Emirates.
- 0840 **European Bee-eater** *Merops apiaster* PM/mb
Breeds Ras al Khaimah, numbers vary annually.
- 0841 **European Roller** *Coracias garrulus* #PM/cb
Breeding first reported 1990, Digdaga area, Ras al Khaimah.
- 0843 **Indian Roller** *Coracias benghalensis* RB/pm?
- 0846 **Hoopoe** *Upupa epops* PM/wv/mb/rb?
- 0848 **Wryneck** *Jynx torquilla* pm/wv
- 0953 **Black-crowned Finch Lark** *Eremopterix nigriceps* RB
Subject to nomadic or seasonal movements.
- 0957 **Desert Lark** *Ammomanes deserti* RB
- 0958 **Hoopoe Lark** *Alaemon alaudipes* RB

- *0962 **Bimaculated Lark** *Melanocorypha bimaculata* V
One 17 February 1972 Sharjah (M.D. Gallagher);
one 16 November 1978 Abu Dhabi (M.A. Hollingworth); two 13 November 1982 Das Island (G. Jones); one 12 November 1984 Jebel Ali (J.S. Ash/N.E. Baker); one 1 October 1987 Emirates golf course (J. Bannon/C. Richardson); two 5 November 1987 Das Island (L. Reaney); one 15 April 1988 Jebel Dhanna (J.N.B. Brown/P. Hellyer), no details; up to 16 Al Wathba 1-15 February 1991 (R.A. Richardson).
- 0968 **Short-toed Lark** *Calandrella brachydactyla* PM
May breed locally.
- 0970 **Lesser Short-toed Lark** *Calandrella rufescens* pm/wv/mb?
- 0972 **Crested Lark** *Galerida cristata* RB
- 0976 **Skylark** *Alauda arvensis* WV
- *0979 **Temminck's Horned Lark** *Eremophila bilopha* V
One 28 December 1982 Jumeirah, Dubai (J.A.D. Chapman).
- 0981 **Sand Martin** *Riparia riparia* PM/wv
- 0990 **Pale Crag Martin** *Hirundo obsoleta* RB
- *0991 **Crag Martin** *Ptyonoprogne rupestris* pm
- 0992 **Swallow** *Hirundo rustica* PM/cb?
- 0995 **Red-rumped Swallow** *Hirundo daurica* pm
- 1001 **House Martin** *Delichon urbica* pm
- *1002 **Richard's Pipit** *Anthus novaeseelandiae* pm/wv
- 1005 **Tawny Pipit** *Anthus campestris* PM/WV
- *1007 **Long-billed Pipit** *Anthus similis* wv/rb?
Reported breeding in mountains. probably some resident, with seasonal movements.
- *1008 **Olive-backed Pipit** *Anthus hodgsoni* V
One 23 March 1973 Abu Dhabi (J. Stewart-Smith) no details; three 23 November 1977 Abu Dhabi (D.M. Corfield/M.A. Hollingworth); one 12 December 1989 Abu Dhabi (J.A.D. Chapman/P. Hellyer); four (possibly eight) 17 October 1990 Abu Dhabi (C. Moores).
- 1009 **Tree Pipit** *Anthus trivialis* PM/wv
- *1010 **Pechora Pipit** *Anthus gustavi* V
One 4 November 1988 Mussafah, Abu Dhabi (J.A.D. Chapman/ D. Robinson).
- 1011 **Meadow Pipit** *Anthus pratensis* wv
- 1012 **Red-throated Pipit** *Anthus cervinus* PM/wv
- 1014 **Water Pipit** *Anthus spinoletta* wv
- *1016 **Forest Wagtail** *Dendronanthus indicus* V
One November 1987 Bateen wood, Abu Dhabi (D. Robinson); one 27 November 1989 Bu Hasa (D. Robinson); one 6 December 1989 Shah, Liwa oasis (D. Robinson).
- 1017 **Yellow Wagtail** *Motacilla flava* PM/wv
- 1018 **Citrine Wagtail** *Motacilla citreola* pm/wv
- 1019 **Grey Wagtail** *Motacilla cinerea* PM/wv
- 1020 **White Wagtail** *Motacilla alba* WV
- 1035 **White-cheeked Bulbul** *Pycnonotus leucogenys* rb
- 1036 **Yellow-vented Bulbul** *Pycnonotus xanthopygos* RB
- 1037 **Red-vented Bulbul** *Pycnonotus cafer* RB
- 1049 **Hypocolius** *Hypocolius ampelinus* pm/wv?
- 1095 **Rufous Bush Chat** *Cercotrichas galactotes* pm/mb
- 1099 **Robin** *Erithacus rubecula* wv
- *1103 **Thrush Nightingale** *Luscinia luscinia* pm
- 1104 **Nightingale** *Luscinia megarhynchos* PM
- 1106 **Bluethroat** *Luscinia svecica* WV/PM
- 1117 **White-throated Robin** *Irania gutturalis* pm
- *1118 **Eversmann's Redstart** *Phoenicurus erythronotus* wv
One 26 March 1971 Tawi Bissat, near Jebel Faiyah (Ex-Lapwing 1971); one for 3-4 days early February 1972 Sharjah garden (F.D. & P. Carson); reported 29 January 1978, 11 February 1978, 18 February 1979, 25 February 1980 and 7 March 1980 (Ramadan-Jaradi 1985), no other details; one male 6 February 1981, Dhayah (C.M. Saunders); reported spring 1982 Saffa Park, Dubai (G.A. Miles); one male 15 November 1986 Das Island (L. Reaney); one mid-January to 9 February 1988 Jumeirah, Dubai (A. Woodward/C. Richardson); one female 7 November 1990 Emirates golf course (C. Richardson/W.R.P. Bourne); one female 18-19 November 1990 Asab (L. Reaney).
- 1121 **Black Redstart** *Phoenicurus ochruros* WV
- 1122 **Redstart** *Phoenicurus phoenicurus* PM/wv
- 1137 **Whinchat** *Saxicola rubetra* pm
- 1139 **Stonechat** *Saxicola torquata* wv/pm
- 1144 **Isabelline Wheatear** *Oenanthe isabellina* PM/WV
- 1146 **Northern Wheatear** *Oenanthe oenanthe* PM
- 1147 **Pied Wheatear** *Oenanthe pleschanka* PM
- *1148 **Black-eared Wheatear** *Oenanthe hispanica* pm
- 1149 **Desert Wheatear** *Oenanthe deserti* WV/pm
- *1150 **Finsch's Wheatear** *Oenanthe finschii* wv
One March 1984 Abu Dhabi (M.C. Crumbe); one 3 February 1985 Jebel Ali (J.A.D. Chapman); one 24 October 1987 Asab (D. Robinson); one 21 January 1988 Emirates golf course (J. Oldfield); one (possibly two) 1/2 March 1989 Abu Dhabi (J.M. Hollingworth); one 3 March 1990 Umm al Qaiwain (A. Forsten/T. Numminen); one 23 March 1990 Ras Gharain (E. Hirschfeld); one 2 April 1991 Khan, Sharjah (D. Evans).
- 1152 **Red-tailed Wheatear** *Oenanthe xanthopyrma* WV/pm
- *1153 **Eastern Pied Wheatear** *Oenanthe picata* wv(pm)
Some reports of this species and odd Hume's Wheatear sightings under review.
- *1154 **Mourning Wheatear** *Oenanthe lugens* wv
One 24 November 1972 foothills south of Khatt, RAK (M.D. Gallagher/L. Tyler); one 28 November 1972 Digdaga RAK (L. Tyler); one 16 November 1988 Jebel Dhanna (D. Robinson); one 10 January-13 February 1989 Jebel Dhanna golf course (D. Robinson); one 2 March 1989 Khali-diyah spit (J.M. Hollingworth); one 10 November 1989 Mirfa (J.A.D. Chapman/P. Hellyer); one 30 November 1989 Dalma Island (J.A.D. Chapman) Following sightings on UAE record, though probably within Wilayat of Mahdah, Oman — Two 27 February 1976 & one 13 March 1976 at 1,200 ft. in mountains near Hatta (W. Wyper); one 29 October 1986 Hatta road (Dubai Shorebird Project); one 15 November 1988 Wadi Sharm (J. Bannon/C. Richardson).

- *1155 **Hooded Wheatear** *Oenanthe monacha* vv or rb?
Breeding behaviour noted April 1991 (in song)
and July 1990 (juveniles present) Jebel Hafit.
- 1156 **Hume's Wheatear** *Oenanthe alboniger* RB/pm?
- *1157 **White-crowned Black Wheatear** *Oenanthe leucopyga* V
One 11 April 1987 Das Island (L. Reaney).
- 1162 **Rock Thrush** *Monticola saxatilis* PM
- 1166 **Blue Rock Thrush** *Monticola solitarius* WV/pm
- *1186 **Ring Ouzel** *Turdus torquatus* V
One female 15-18 November 1986 Das Island
(L. Reaney); one male 23 January 1989
Emirates golf course (C. Richardson); one
female 18/19 November 1989 Asab & one male
8-10 November 1989 Asab (L. Reaney); one
29/30 November 1990 & 8-10 December 1990
Bu Hasa (D. Robinson).
- *1187 **Blackbird** *Turdus merula* vv
One 29 October 1970 Fujeirah (W. Wyper); one
17 December 1970 Dubai (D. Shepherd); one
female 26 November & 6 December 1983 Saffa
Park, Dubai (J.A.D. Chapman); one freshly dead
female 11 May 1985 Dubai Drydocks (J.A.D.
Chapman); one male 19 March 1988 Bateen
Wood, Abu Dhabi (P. Hellyer); one male & one
female 8 February 1990 Saffa Park (J.K.
Bannon).
- *1195 **Eye-browed Thrush** *Turdus obscurus* V
One 3/4 October 1988 Asab (D. Robinson).
- 1197 **Black-throated Thrush** *Turdus ruficollis* vv/pm
- *1198 **Fieldfare** *Turdus pilaris* V
One 25 November 1965 Abu Dhabi (P.A.D.
Hollom); one 6 November 1975 Dubai (J.
Armitage); five 18 January 1984 Saffa Park
(J.A.D. Chapman); one 26 January 1988 Dubai
(S. Newton); one end December 1990 Abu Dhabi
(R. Qusted).
- 1200 **Song Thrush** *Turdus philomelos* WV
- *1201 **Redwing** *Turdus iliacus* V
One 20 November 1988 Saffa Park (E. List); one
23 December 1988 Abu Dhabi (J.M.
Hollingworth/L. Graham); one 4 January & three
21 January 1989 Saffa Park (C. Richardson);
one 13 January 1989 Abu Dhabi (D. Robinson).
- *1202 **Mistle Thrush** *Turdus viscivorus* V
Less than a dozen records mid November to
March, all west of the mountains (per F.E. Warr);
one late January 1990 Saffa Park (M. Halonen
per A. Forsten).
- 1227 **Graceful Warbler** *Prinia gracilis* RB
- 1231 **Scrub Warbler** *Scotocerca inquieta* RB
- 1236 **Grasshopper Warbler** *Locustella naevia* pm
- *1238 **Savi's Warbler** *Locustella luscinioides* pm
- *1241 **Moustached Warbler** *Acrocephalus melanopogon* V
One 13 December 1985 Saffa Park pond (C.
Richardson); one (possibly 2) 14-18 May 1990
Saffa Park, Dubai (M. Pitt/C. Richardson).
- 1243 **Sedge Warbler** *Acrocephalus schoenobaenus* pm
- *1250 **Marsh Warbler** *Acrocephalus palustris* PM
- 1251 **Reed Warbler** *Acrocephalus scirpaceus* PM
- 1252 **Clamorous Reed Warbler** *Acrocephalus stentoreus* PM/vv/rb
- *1253 **Great Reed Warbler** *Acrocephalus arundinaceus* pm
- 1255 **Olivaceous Warbler** *Hippolais pallida* PM/mb
- *1256 **Booted Warbler** *Hippolais caligata* pm/mb?
Probably breeds Khor Kalba.
- *1257 **Upcher's Warbler** *Hippolais languida* pm
- *1259 **Icterine Warbler** *Hippolais icterina* V
One 18 May 1985 Saffa Park (J.A.D. Chapman),
uncertain; one 1 May 1986 Das Island (L.
Reaney); one 21 March 1987 Abu Dhabi (P.
Hellyer), no details seen; one 29 August 1989
Saffa Park (C. Richardson); one 1 September
1989 Sir Bani Yas Island (J.A.D. Chapman/C.
Richardson); one 22 February 1990 fish farm (E.
List); one 23 March 1990 Ruwais (J.A.D.
Chapman).
Most records unsure and lack sufficient detail.
- 1266 **Ménétries's Warbler** *Sylvia mystacea* PM/vv
- 1270 **Desert Warbler** *Sylvia nana* WV
- 1272 **Orphean Warbler** *Sylvia hortensis* pm/vv
- 1273 **Barred Warbler** *Sylvia nisoria* pm
- 1274 **Lesser Whitethroat** *Sylvia curruca* PM
- 1274A **Desert Lesser Whitethroat** *Sylvia minula* WV
- *1274B **Hume's Lesser Whitethroat** *Sylvia althaea* V
One 3 December 1988 Huwaylat near Hatta (D.
Robinson); one 10 November 1989 Qarn Nazwa
(C. Richardson); one 20 February 1990 Qarnain
Island (I. Foxall); one 7 December 1990 Asab (L.
Reaney); one 18 March 1991 Emirates golf
course (C. Richardson); one 24 March 1991
Saffa Park (C. Richardson).
Note: Only recorded separately from other
Lesser Whitethroats since 1988.
- 1275 **Common Whitethroat** *Sylvia communis* PM
- 1276 **Garden Warbler** *Sylvia borin* pm
- 1277 **Blackcap** *Sylvia atricapilla* PM
- *1300 **Yellow-browed Warbler** *Phylloscopus inornatus* pm/vv
One 15 March 1985 Dubai garden (J.A.D.
Chapman); one 2 December 1985 to 4 March
1986 Das Island (L. Reaney); one 7-9 February,
one 24 April, one 8 September, one 28-29
October, one 2-5 December 1986 Das Island (L.
Reaney); on 5-13 November 1987 & another 18
November 1987 Das Island (L. Reaney); one
14-15 October & one 28 November 1989 Asab
(L. Reaney); one 16 January to 24 February
1990 Asab (L. Reaney).
- *1303 **Dusky Warbler** *Phylloscopus fuscatus* V
One 19 October 1990 Saffa Park pond (M. Pitt).
- *1307 **Bonelli's Warbler** *Phylloscopus bonelli* V
One 18 April 1985 Sir Abu Nu'air Island (J.M.
Hollingworth).
- 1308 **Wood Warbler** *Phylloscopus sibilatrix* pm
- *1309 **Plain Leaf Warbler** *Phylloscopus neglectus* vv
- 1311 **Chiffchaff** *Phylloscopus collybita* WV/PM
- 1312 **Willow Warbler** *Phylloscopus trochilus* PM
- *1327 **Blue-and-white Flycatcher** *Muscicapra cyanomelana* V
One in non-breeding plumage 17-30 November
1980 Jebel Ashker, Ras al Khaimah (C.M.
Saunders).

- 1335 **Spotted Flycatcher** *Muscicapa striata* PM
- 1343 **Red-breasted Flycatcher** *Ficedula parva* pm/wv
- 1347 **Semi-collared Flycatcher** *Ficedula semitorquata* pm
- *1349 **Pied Flycatcher** *Ficedula hypoleuca* V
One male 31 March 1985 Saffa Park (J.A.D. Chapman); one male 6 April 1986 Das Island (L. Reaney); one male 8 April 1986 Saffa Park (J.A.D. Chapman).
- 1379 **Arabian Babbler** *Turdoides squamiceps* RB
- 1493 **Purple Sunbird** *Nectarinia asiatica* RB
- 1508 **Golden Oriole** *Oriolus oriolus* PM
- 1514 **Isabelline Shrike** *Lanius isabellinus* PM/WV
- 1515 **Red-backed Shrike** *Lanius collurio* PM
- *1516 **Bay-backed Shrike** *Lanius vittatus* V
One 10 April 1970 Sharjah (F.E. Warr); one last two weeks of November 1972 Digdaga (L. & S.J. Tyler); one 23 February 1979 Al Ain (Ramadan-Jaradi 1985), no details; one 24 November -1 December 1989 Khalidiyah spit, Abu Dhabi (J.M. Hollingworth).
- 1519 **Lesser Grey Shrike** *Lanius minor* pm
- 1520 **Great Grey Shrike** *Lanius excubitor* RB/PM/wv
- 1523 **Woodchat Shrike** *Lanius senator* PM
- 1524 **Masked Shrike** *Lanius nubicus* pm
- *1525 **Black Drongo** *Dicrurus macrocercus* V?/E?
Two 5 December 1986 to 17 January 1987 Saffa Park, Dubai (M. West/C. Richardson *et al*); two 16 November 1990 Digdaga (C. Richardson); one 1 January-14 February 1991 Jebel Ali (G.W. Ricks); one 22 February-1 March 1991 Jebel Ali hotel (J.M. Hollingworth/J. Hart).
- 1562 **House Crow** *Corvus splendens* RB
- 1571 **Brown-necked Raven** *Corvus ruficollis* RB
- 1582 **Starling** *Sturnus vulgaris* WV
Breeding suspected Ras al Khaimah cultivated areas.
- 1584 **Rose-coloured Starling** *Sturnus roseus* pm
- 1587 **Common Mynah** *Acridotheres tristis* RB/E
- 1588 **Bank Mynah** *Acridotheres ginginianus* rb/E
Breeding reported Abu Dhabi, Al Ain, Dubai and Ras al Khaimah.
- 1591 **House Sparrow** *Passer domesticus* RB
- *1592 **Spanish Sparrow** *Passer hispaniolensis* wv
Breeding suspected Ras al Khaimah cultivated areas.
- *1598 **Tree Sparrow** *Passer montanus* V
One 7 March 1984 Saffa Park (J.A.D. Chapman); one 9 November 1984 Saffa Park (J.A.D. Chapman); one 8 April 1986 and another 23 April 1986 Das Island (L. Reaney).
- *1601 **Pale Rock Sparrow** *Petronia brachydactyla* PM/cb
- *1602 **Yellow-throated Sparrow** *Petronia xanthocollis* MB/pm
- 1618 **Indian Silverbill** *Euodice malabarica* RB/E
- *1636 **Chaffinch** *Fringilla coelebs* V
One female 9 January-16 February 1987 Das Island (L. Reaney); one male 22 March 1987 Das Island (L. Reaney).
- *1638 **Brambling** *Fringilla montifringilla* V
One 9-24 November 1977 Abu Dhabi (D.M. Corfield/M.A. Hollingworth); one 13 October 1979 Masafi (Ramadan-Jaradi 1985), no details; up to three 22 November-4 December 1985 Das Island (L. Reaney); one 16 November & three 4 December 1986 Das Island (L. Reaney); two 29 January 1987 to end February 1987 Dubai sewage treatment plant (C. Richardson); one 29 January 1989 Bu Hasa (D. Robinson); up to two 26-28 November 1989 (L. Reaney); 25 on 7 December 1990 Wadi al Reum (D. Robinson).
- *1653 **Goldfinch** *Carduelis carduelis* V
Two 16 January 1987 Abu Dhabi (J.M. Hollingworth).
- 1654 **Siskin** *Carduelis spinus* wv
- *1660 **Linnet** *Carduelis cannabina* V
Two males, one female 23-25 November 1977 Abu Dhabi (D.M. Corfield/M.A. Hollingworth); three 13 February 1984 near Masafi (J.A.D. Chapman); one female 21 November 1987 Das Island (L. Reaney).
- *1676 **Trumpeter Finch** *Bucanetes githageneus* wv?/rb?
- *1679 **Common Rosefinch** *Carpodacus erythrinus* pm
- *1857 **Yellowhammer** *Emberiza citrinella* V
One male 17 March 1987 Das Island (L. Reaney)
- 1863 **House Bunting** *Emberiza striolata* RB
- *1865 **Cinereous Bunting** *Emberiza cineracea* pm
One 21 March 1978 Dubai (J. Armitage); one female 17 April 1978 Abu Dhabi (M.A. Hollingworth); one female 8-18 April 1986 Das Island (L. Reaney); one male & one female 19 May 1989 Qarnain Island (I. Foxall); one male 22 March 1990 Emirates golf course (C. Richardson/R.A. Richardson); one female 20 September 1990 fish farm (J.A.D. Chapman/M. Pitt/C. Richardson); one March 1991 Abu al Abyad (R. Morris).
- 1866 **Ortolan Bunting** *Emberiza hortulana* PM
- *1873 **Rustic Bunting** *Emberia rustica* V
One 9-15 December 1985 Das Island (L. Reaney); one winter female 28 October 1986 Das Island (L. Reaney); one 5 January 1988 Zabeel water treatment plant (C. Richardson); one 22 February 1989 Qarnain Island (I. Foxall); one female 6 December 1990 Asab (L. Reaney).
- *1874 **Little Bunting** *Emberiza pusilla* V
One male 28 October 1986 Das Island (L. Reaney); one 22-27 October & three 1 November 1987 Das Island (L. Reaney); one 26 November 1989 Sir Bani Yas Island (J.A.D. Chapman).
- *1876 **Yellow-breasted Bunting** *Emberia aureola* V
One 27 December 1980 Jebel Ashker, Ras al Khaimah (C.M. Saunders).
- *1877 **Reed Bunting** *Emberiza schoeniclus* V
Two 30 November 1978 Abu Dhabi (M.A. Hollingworth/R.O. King); one 23 March 1980 Dubai (Ramadan-Jaradi 1985), no details; one ringed mid(?) February 1982 Saffa Park (G.A. Miles).

*1881 Black-headed Bunting *Emberiza melanocephala* pm/E
1882 Corn Bunting *Miliaria calandra* ww

RECENTLY INTRODUCED BREEDING SPECIES

Egyptian Goose *Alopochen aegyptiacus*

Introduced and breeding Sir Bani Yas Island & young recorded Abu Dhabi 1989 & 1990.

Black Francolin *Francolinus francolinus*

Large numbers introduced to several areas in the Western Region, including Sir Bani Yas Island.

Alexandrine Parakeet *Psittacula eupatria*

Small breeding population in Dubai (and probably Abu Dhabi.)

Reports suggest it may be dispersive or a local migrant.

Red-whiskered Bulbul *Pycnonotus jocosus*

Nested Dubai garden, eggs and young May 1985.

Pied Mynah *Sturnus contra*

Breeding reported Dubai and Sharjah 1989, 1990, 1991.

Brahminy Mynah *Sturnus pagodarum*

Breeding activity noted Dubai 1988.

Rüppell's Weaver *Ploceus galbula*

Colony reported Jumeirah, Dubai — no details.

Masked Weaver *Ploceus intermedius*

Over 100 birds in sedentary colony (including nest-building) Al Jazeera Park, Sharjah from c. 1984.

Red Avadavat *Amandava amandava*

Reported in song, Dubai, and nesting Sharjah June 1988.

OBSERVERS

P. Antrobus; J. Armitage; J.S. Ash; N.E. Baker; J.K. Bannon;
W.R.P. Bourne; D. Brown; J.N.B. Brown; P. Carson;
J.A.D. Chapman; P.W.G. Chilman; D.M. Corfield; M.C. Crumie;
W.F. Curtis; S. Dexter; W. Dolleman; B. Etheridge; D. Evans;
J. Footitt; A. Forsten; I. Foxall; M.D. Gallagher; M. Green; R. Green;
R.G. Griffiths; M. Halonen; J. Hart; M. Harvey; P. Hellyer;
E. Hirschfeld; J.M. Hollingworth; M.A. Hollingworth; P.A.D. Hollom;
M.C. Jennings; G. Jones; R.O. King; J.M. Laphorne; E. List;
R. McNiff; G.A. Miles; C. Moores; R. Morris; S. Newton; G. Nicholls;
T. Nightingale; T. Numminen; J. Oldfield; G. Ramadan-Jaradi;
P.H. Rathbone; M. Pitt; J. Platt; R. Quested; L. Reaney;
C. Richardson; R.A. Richardson; G.W. Ricks; D. Robinson;
T.D. Rogers; C.M. Saunders; D.A. Scott; D. Shepherd;
W.A.C. Smith; J. Stewart-Smith; D. Suddaby; C. Thomas;
S. Turner; L. & S.J. Tyler; J. Uttley; H.v.d. Veer; M. Verhage;
F.E. Warr; W. Weitkowitz; J.D. Wellings; M. West; W. Wyper;
Emirates Natural History Group (ENHG); Dubai Natural History
Group (DNHG); Royal Navy Birdwatching Society (RNBWS).

Compiled August 1991.

Colin Richardson is Bird Recorder for the Northern Emirates
R.A. (Bob) Richardson is Bird Recorder for Abu Dhabi Emirate.
C/o. Emirates Natural History Group,
P.O. Box 2380, Abu Dhabi, U.A.E.

* * *

Crab Plovers on Jazirat Abu al Abyad

by J.N.B. Brown, M. Verhage & R.P. Morris

Crab Plovers have been recorded in numbers up to 550 from mid-August to March in the Khor al Beidah (Square VB28) in the northern part of the United Arab Emirates. It now seems probably that in April each year they move westwards to the island of Abu al Abyad to breed. Local fishermen have known about the site for many years, but the Emirates Natural History Group only discovered it in 1990. This paper records the observations of several Group members since the discovery.

Abu al Abyad is the largest island off the coast of Abu Dhabi Emirate, lying approximately 7 kms from the shore and 50 kms south west of Abu Dhabi Island (Square TB25). It is 33 kms from east to west and 20 kms from north to south. A causeway runs from the main highway over occasionally flooded sabkha to a small harbour at the south east end of the island. Here there is a ferry to travel the short distance across Khor Qantar to the island. Special permission is required to visit the island.

Along the southern and eastern coasts, there are several large stands of mature mangrove trees. Coming in from the north there is the Khor al Abyad, a natural, though partially dredged, mangrove lined channel. It is along the western side of this khor that the nesting site of the Crab Plovers (*Dromas ardeola*) is located.

Local Abu Dhabians, who have been visiting the island for more than twenty years, told us that the breeding area was much larger in the past, with probably many thousands of crab plovers present. The inhabitants knew when the birds would arrive and sailed from Abu Dhabi in a large sailing dhow, the journey taking six to eight hours. Using a small rowing boat and drifting with the tide they went into the Khor al Abyad to collect some eggs and a few young chicks to supplement their food supply. They used a long flexible pole to establish the direction and length of the burrow, and then dug down vertically to find the nest chamber.

Unfortunately, as the birds are only present during the breeding season, what was then the largest breeding mound was, some years ago, planted with trees during an afforestation programme.

On May 21st 1990, Maarten Verhage and Bish Brown made the first visit to the site with Ateej as our guide. The crab plovers were on a raised sandy ridge approximately 2 metres above the high tide mark on open ground close to the channel. The birds were in the process of excavating burrows in the mound, though many may have been completed by this time. Judging by the showers of sand flying into the air, the birds were using their feet as tools. The nest entrances were fairly closely spaced, and went down into the mound in a gentle slope. We estimated that there were approximately 700 birds around the nest site but there was a great deal of movement within the flock. There were a number of eggs lying on the surface of the mound, but they were not collected for fear of collapsing the nest burrows. Two addled eggs found away from the mound were collected. Both were chalky white and

— السقاساق البري.. هو من أنواع الطيور النادر
تواجدها في العالم. هذه المقالة تروي فقط
السلالات المعروفة بمنطقة الخليج العربي، في
جزيرة أبوأبيض.

measured 65mm long and 43mm across.

A second visit was made on June 22nd 1990. It was again very difficult to estimate numbers, as the birds were continually returning to the area with large black crabs (possibly *Metopograpsus messor*) and disappearing down nest burrows. It was obvious that many young had been hatched. The adults left immediately they had fed the young, many flying into the mangroves across the channel from the nest site. It was estimated that there were up to 200 burrows in the mound, but this figure may be a little high. It was not possible to judge whether all the nest burrows were still occupied. The entrances to some burrows seemed to have been excavated, but were intact a metre or so down. At least 20 eggs lay on the surface on this occasion. One egg was collected and found to contain a small dead partially developed chick still in fluid. It was emptied and retained. There were numerous animal footprints approaching the mound, including possibly red fox (though we were told that there are none on the island), Arabian hare, gazelle and rat.

We made the third and final visit on July 26th 1990, when 500 plus crab plovers were counted. We saw no more than 7 or 8 juveniles, with their grey backs and wings. They were quite large and tended to crouch low on the sand at the first sign of danger. They were then immediately surrounded by several adults to further camouflage their presence. All the other birds had more or less standard black and white plumage, though some birds were thought to be non-breeding birds.

Some adults were returning to the nests with crabs, but did not enter. They remained at the entrance and put their heads inside, as if calling the young to collect the food. They were not carrying food when they flew off.

Between May 5th and 9th 1991, Rob Morris stayed on the island and made the following notes. There were no birds present at the nesting mound on the 5th. No burrows were visible, and presumably they had been closed by wind-blown mobile sand. However, 38 adults were seen at various places on the island on that day. On the 7th, 40 adults were seen, on the 8th only 20 adults, but on the 9th May there were 216 around the coast and 60 at the colony. Some of the birds at the colony were flicking sand away with their bills and were looking into burrows. The whole flock was excited and very noisy. They were calling loudly and behaving very aggressively towards each other.

Rob made a further visit to the colony on May 21st, when there was a minimum count of 420 birds. The true

number may have been substantially higher, as at any one time many birds were in burrows, flying out over the mangroves or out of view on the far side of the nest mound.

Excavation of the burrows was continuing, but the majority appeared completed. The birds seemed to be in pairs around the burrows. Several pairs (6) were seen mating in the space of only 20 minutes.

Mating

The male started the mating behaviour by approaching the female front on. The male appeared to be slightly larger than the female, but this may have been an optical illusion. The birds called almost continuously at this point and rubbed bills quite frequently. The female then turned and walked quite slowly away from the male, which followed behind. The female walked in sweeping circles for up to a minute before crouching down. The male then mounted the female, balancing by using his wings and occasionally holding the back of the female's neck with his bill. The female called quietly throughout this period.

One male was observed mating 3 times with a female in the space of 4 minutes. The first two attempts appeared unsuccessful. The first time the male lost his balance after only a few seconds. On the second occasion having followed the female for just over a minute, he was disturbed from the female by a second male, which made a brief but unsuccessful attempt to copulate with the female. The original male chased the second male off in a very aggressive manner. On the third occasion the male appeared to mate successfully and was on the female for 10 seconds before slowly climbing off. The male then returned to the entrance of his burrow with the female following behind. The male called loudly several times from the entrance to his burrow.

The observation made on the second occasion when the intruding male tried to mate with the female suggests that males may be promiscuous, attempting to 'rape' other females outside the pair.

An Egyptian Goose (*Alopochen aegyptiacus*) was also present in the area of the colony. At one point the goose walked through the middle of the colony causing some disturbance. Birds walked quickly away from the goose, creating a path for it. The goose chased several crab plovers aggressively.

The colony as a whole was very noisy, reminiscent of a tern colony. Aggressive encounters between birds were very frequent and often quite fierce, although none of the birds appeared harmed. The aggressive behaviour occurred when birds approached another pair's nest burrow.

No food was seen at the colony and the fact that birds were still mating suggests that breeding had advanced no further than egg laying. The colony on May 21st 1991 appeared to occupy approximately half of the hillock, suggesting that breeding is not limited by lack of suitable nesting sites.

Rob Morris was unable to make further observations and it was not until June 20th 1991 that the colony was again visited by the 1990 observers. There was quite a lot of activity around the mound, but no young were recorded. Many birds were returning with food, including crabs and in one case a 15 cm fish. An initial count of

the birds present was rather low at 270. A second count later was close to 400. Large areas of the mound which had burrows last year seemed unoccupied now, and we concluded that there were fewer birds breeding. There did not appear to have been any disturbance or destruction of burrows around the nest site. There were up to 20 broken egg shells on the west side of the mound and it was assumed that these had been removed from the nests by the adults.

Rob Morris made more observations between July 6th and 8th 1991, when 550 to 600 birds were present. He noted that only one pair occupied each burrow with one young in each. On no occasion were two young seen in the same burrow.

The crab plovers were still feeding on the mudflats within or adjacent to the colony. Most of the adults were around the creek, but a few were 5 to 6 kms on either side of the colony. The latter may have been non-breeding birds. They all fed in typical crab plover fashion.

Birds were returning with small dark crabs and larger paler ones. No prey other than crabs was seen on this occasion. Some adults returning with food went straight down into a burrow to emerge 0.5 to 3 minutes later, minus the food. Many young came up out of the burrows to beg to a returning parent. They beg in typical fashion, head pointing up towards the adult, and bill opening and closing until fed. Some parents put the crab on the ground bottom side up, and pulled pieces from its inners and fed it to the young. Others regurgitated food onto the ground, and then fed it to the young. It was impossible to tell what this food was. Having been fed the young either returned below ground or remained in the burrow with their heads just poking out.

Many birds were aggressive towards others when they came near their burrows or tried to steal food. The offensive bird lowered its head and walked slowly forward with its neck extended towards the victim/intruder. The intruder either held its ground, jumped backwards with a short flight (retreat), or crouched down with its head lowered (submission). Birds that held their ground usually ended up in a 'fight' with bills becoming locked together. The intruder was invariably pushed backwards.

If returning birds lingered before feeding their young, they were often harassed by other adults trying to steal the food, (Cleptoparasitism). Usually, the robbers were unsuccessful. On one occasion three birds had a hold on quite a large crab, but the owner managed to retain its catch, minus a leg or two.

Tunnel excavation was continuing, to remove blown sand or repair minor collapses.

Over the next fifteen days or so the adults foraged further and further from the colony. Food brought to the young included the usual crabs, plus a few fish and the occasional bivalve mollusc. In the early morning and late afternoon many of the young spent their time on the mound, outside the burrows. Very few remained out during the heat of the day. Rob Morris's best early morning count during this period was a minimum of 580 adult birds and 100 juveniles.

By July 26th, many of the young crab plovers had grown tremendously, and looked as though they would soon

take flight. On a trip around the island we found adults visiting all the mangrove areas to collect food. It was not until July 28th that Rob Morris saw the first juvenile feeding away from the colony with some adults. By the 30th, large numbers of young were being fed by adults on the mud flats. They were begging for food from any nearby adults, but seemed to get food only from their own parents.

This single mound, probably not more than 100 metres in diameter, may be the only surviving breeding ground in the United Arab Emirates. It is possible that a small colony is being established on the very small island of Umm Amim (Square TA25), about 7 km south east of Merawah Island. The island is about 1km long by 1/2 km wide, depending upon the state of the tide, and breeding has not been confirmed.

Up to 550 crab plovers have been observed in the Khor al Beidah at various times between mid-August through to the end of March. It is possible that these are the

birds from the colony at Abu al Abyad.

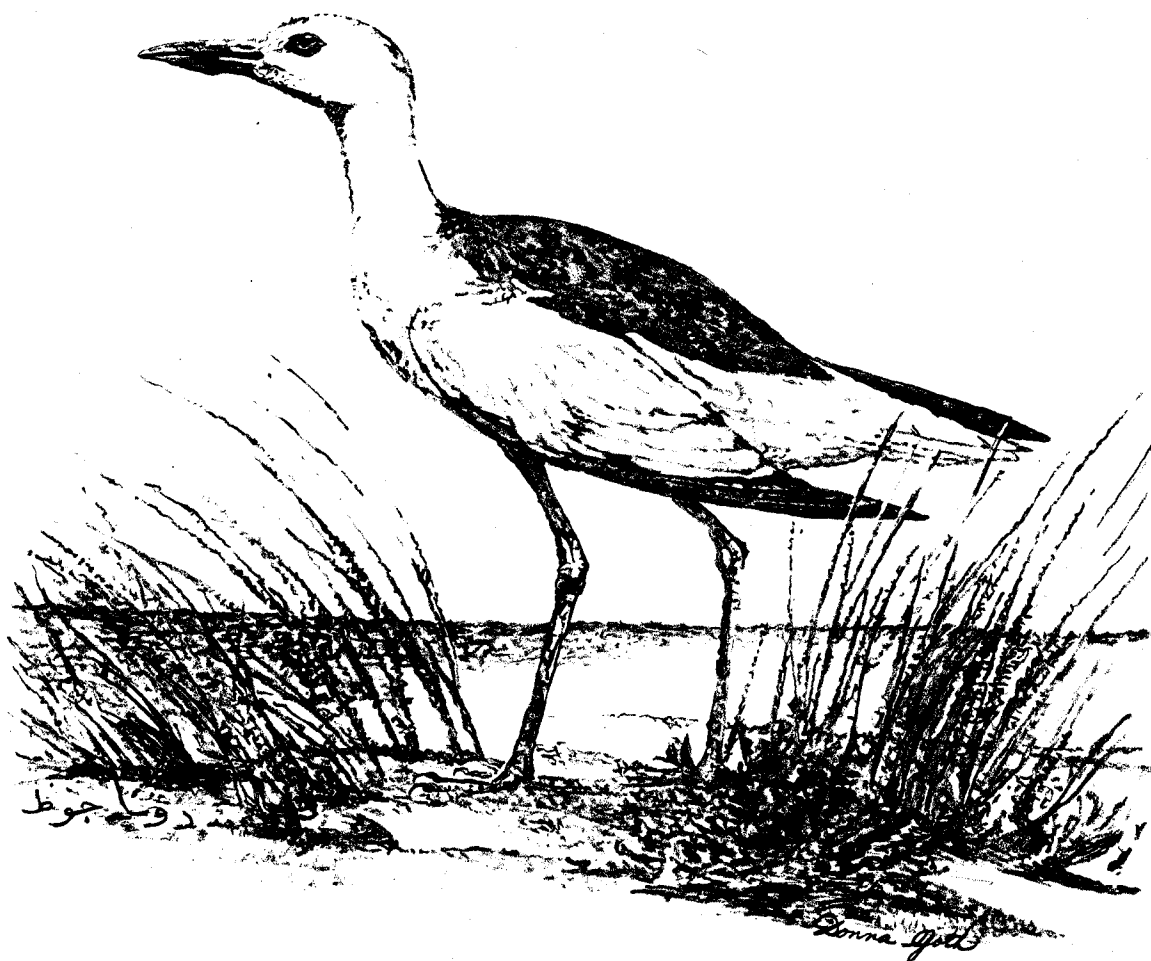
It remains a mystery as to why no one had heard of or found the colony before 1990. Difficulty of access, the distance from Abu Dhabi by sea and the hot weather conditions during the crab plover breeding season are probably the main reasons. The guardian of the island has assured us that everything will be done to protect the nesting colony.

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Crab Plover (*Dromas ardeola*), drawn by Donna Goth.

Weather in the UAE

by Nigel Bottomley

This article, by a senior member of the Abu Dhabi Airport Meteorological Office, provides an introduction to the UAE's weather.

- Section 1 - General Climatic seasons
- Section 2 - Wind
- Section 3 - Visibility
- Section 4 - Cloud and Sunshine
- Section 5 - Rainfall
- Section 6 - Temperature and Humidity

Section 1 - General Climatic Conditions

The UAE has a desert climate with mainly clear skies. The weather experienced during the course of the year can be divided into four seasons as follows:-

Winter (December to March)

This is the most unsettled time of the year when the majority of the annual rainfall can be expected. Both the amount and frequency of rainfall is unreliable and varies greatly from year to year. Some of the cloud and rain comes as a result of westerly disturbances moving east across the Middle East from the Mediterranean. Most of the rainfall actually originates over the Gulf area as a result of local convergence zones. In both cases the presence of an upper level trough to the west of the Gulf area is of vital importance. Strong northwesterly winds (Shamals) are a regular feature bringing colder air down from Iraq and Syria. Their onset is usually linked to the passage of an upper trough through the Gulf area. Sometimes the front will have no weather associated with it, but the more active fronts are likely to bring outbreaks of rain and possibly some thunderstorms.

Spring (April to May)

The frequency of westerly disturbances decreases as the Sub-Tropical climate zone begins to move northwards over the Mediterranean. Thunderstorms can still occur if an active cold front crosses the area but are more likely over the northern Gulf. Temperatures increase rapidly as the number of outbreaks of colder northwesterly air reaching the region decreases; it also becomes more hazy, especially around dawn.

Summer (June to September)

With the development of the Indian monsoon a trough of low pressure extends across Pakistan and into Iran. This results in a northwesterly flow developing over the Gulf area which persists for up to 6 weeks and is known as the "Summer 40 day Shamal." It brings hot and dusty conditions and sometimes the winds will be strong enough to pick up dust from the northern Gulf resulting in thick dust haze being brought to the UAE. By mid-July the trough of low pressure extends into the Gulf area and land and sea breezes become the dominant feature of the local weather. This pattern persists for the rest of the summer, resulting in extremely uncomfortable conditions, especially by September when the sea temperature is at its maximum. Thunderstorms often develop over the Hajar Mountains and there may be some light rainfall.

المقالة التالية عن الطقس في الإمارات العربية المتحدة. تم إعدادها بواسطة عضو بارز في مكتب الارصاد الجوي في أبوظبي.

Autumn (October to November)

This is the most settled time of the year with a weak pressure gradient over the Gulf. Land and sea breezes continue to dominate the local weather. Temperatures also fall markedly during this period and the cooler nights lead to a greater incidence of fog. By late November it is possible for the first Shamal to affect the area and isolated thunderstorms have been recorded. However, it is not usually until December before any unsettled weather reaches the region.

Section 2 - Wind

Land and Sea Breeze Circulation

The dominant wind pattern in the UAE is that of the diurnal land/sea breeze circulation. This affects the coastal plains on almost every day of the year with the only exceptions being due to the passage of a weather system through the Gulf area.

Land and sea breezes generally blow at right angles to the coastline. As the alignment of the UAE coast is roughly SW to NE this means the land breeze comes from a southeasterly direction and the sea breeze from a northwesterly direction.

The land breeze is typically around 4-7 knots and lasts up until late morning before the sea breeze sets in with a windspeed of around 9-13 knots. The sea breeze can penetrate up to 70-100km inland and usually affects the lowest 1-2,000ft of the atmosphere. In summer when the temperature contrast between the land and sea is greater, the sea breezes can be stronger and sudden in their onset.

Strong Surface Winds

Strong winds with mean speeds exceeding 20 knots over land areas are mainly experienced in association with a weather system, such as an active cold front or a squall line. Occasionally strong winds can also occur locally during the passage of a gust front (See below) in association with a thunderstorm or distant Cumulonimbus cell.

Strong southeasterly winds ahead of a cold front can reach 20-25 knots but usually don't last more than 6-12 hours. On the passage of a cold front the northwesterly winds can reach speeds of up to 40 knots over the sea but rarely reach 25 over land. The northwesterly winds typically persist for two days and gradually weaken throughout that time with the strongest winds occurring during the first 24 hours. Locally this wind is known as the Shamal, from the Arabic word meaning north.

Gust Fronts

The strongest winds experienced in the UAE occur in association with gust fronts and thunderstorms. In winter the winds can gust up to 60 knots when one of these fronts moves through the area. The usual direction of the wind will be between west and north. In the summer,

thunderstorm activity over the Hajar Mountains can lead to a gust front approaching from the east with gusts as high as 40-50 knots. These gusts are short lived and the wind soon decreases to around 20-25 knots. The whole feature lasts for less than half an hour.

Gust fronts are the most violent surface weather phenomena likely to be experienced in the UAE.

Section 3 – Visibility

Mist and Fog

Mist and fog can occur throughout the year but are more likely in the winter months and at the end of the summer. Fog occurs on average 20 days each year but this total can vary greatly from year to year. The most vulnerable areas for fog are the coastal plains.

The visibility is usually reduced to between 200 and 500 metres but can be as low as 50 metres on some occasions. The type of fog experienced here is radiation fog resulting from overnight cooling under clear skies with light winds to provide sufficient mixing in the lower levels. Fog generally forms between 2-4 am local time and clears soon after sunrise. Over the sea, fog banks have been known to persist for much of the day. Typical fog duration can be from as little as half an hour or up to 8 hours in the winter.

Dust Haze

This is a common phenomena in the summer months with general visibilities in the early morning between 6 and 8 kilometres. The general summer haziness lasts from June to October with visibilities not often getting above 10km.

Thick dust haze with visibility reducing to less than 1500 metres is sometimes brought down from Iraq and Saudi Arabia with the onset of a Shamal, especially during the summer. It can take several days before the visibility improves to 10km again. The same event can occur in winter but only if there has been no rain over the northern Gulf as this creates a crust on the sand and prevents the winds from picking it up.

Sandstorms

Sandstorm conditions are reported when the visibility falls to 1000 metres or less as a result of lifted sand. These conditions only occur on a few days each year, usually in the winter. They are associated with an approaching cold front with a strong southeasterly wind lifting the sand from the Empty Quarter and bringing it over the coastal strip. Strong northwesterly winds although coming off the sea can give sandstorm conditions over inland areas.

Gust fronts in the summer which move west from Cumulonimbus clouds on the mountains can bring sudden sandstorm conditions and are particularly difficult to forecast more than a few hours in advance.

Section 4 – Cloud and Sunshine

The skies over the UAE remain cloud-free for much of the year and this is reflected in the number of hours of sunshine experienced compared to the maximum possible. Mean daily sunshine totals vary from around 8 hours in the winter to 11 hours in the summer. The number of hours of daily sunshine possible varies from around 11 hours to 14 hours in the summer.

Low Level Cloud

For much of the year there is only small amounts of Cumulus and Stratocumulus cloud forming during the day time. The base of these clouds is around 3,000ft. Cloud amounts increase in the winter especially during a Shamal when the cold air flowing down from Iraq is warmed by the Gulf waters. This leads to increased cloud development as the air becomes unstable in the lower levels and light showers can occur.

Stratus cloud is associated with fog formation and dispersal with heights around 1000ft lowering to the surface in fog. It can also occur along the coast in the late summer evenings. Low cloud often forms during periods of heavy rainfall and sometimes "roll" clouds can be seen before the onset of a squall or thunderstorm.

Cumulonimbus cloud can be present during the passage of a cold front and their development can be rigorous if the conditions are favourable. In summer time Cumulonimbus clouds can develop over the Hajar Mountains in the afternoons. The base of these clouds is around 2,500ft in winter rising to 5,000ft in summer, with tops to 35,000ft in winter and more than 40,000ft in summer.

Medium Layer Clouds

Layers of Altocumulus and Altostratus clouds generally affect the UAE during an unsettled spell of weather and are the main source of rainfall during the winter months. Typically their bases are around 8-10,000ft with tops extending up to 20-22,000ft. These types of cloud can also be seen in the summer when the upper winds over the UAE become easterly, allowing cloud to drift over from the Indian Monsoon.

High Level Clouds

High level clouds such as Cirrus and Cirrostratus are really only seen in the winter and are associated with the upper level jet-stream which lies overhead the Middle East at this time of year. In summer, Cirrus plumes from Cumulonimbus cells over the mountains can be seen. They are found at heights ranging from 25,000ft to 40,000ft.

Section 5 – Rainfall

The majority of rain falls between December and May and is usually associated with the passage of an active weather system through the region. Normally the wettest months are February and March. As mentioned earlier the rainfall amounts vary considerably as shown by the figures in the climate table. The weather pattern over Europe during the winter plays an important part in the weather likely to be experienced in the Gulf. Cold winter spells, with large anticyclones over Europe prevent any weather systems from moving eastwards towards the Gulf. Unsettled mild spells over Europe with weather systems moving in from the Atlantic and quickly crossing Europe lead to active weather systems reaching the Gulf area.

Summer rainfall is possible in July and August when cloud from the Indian monsoon drifts over from the Arabian sea, but the amounts are small. Rainfall is more likely in the Al Ain area and over the mountains where afternoon thunderstorms are likely to develop. Occasionally these thunderstorms can affect the coastal plains, giving more substantial amounts of rain.

Thunderstorms

Winter

Thunderstorms are most likely to affect the UAE between December and April, and on average there are about 5 thunderstorm days each year. The following criteria are necessary for their development over the UAE:-

1. The atmosphere over the Gulf must be unstable. These conditions are usually found ahead of an upper level trough moving east from the Mediterranean.
2. Low level inflow of warm moist air, usually from the south or south east.
3. Surface convergence line or cold front moving through the area to provide the necessary trigger action to set off development.
4. Strong daytime surface heating can also provide the trigger by increasing surface temperatures to such an extent that the whole atmosphere becomes unstable.

Not all situations will produce thunderstorms and often only rain from medium level clouds is experienced during an unsettled spell of weather. Hail has been reported at some Gulf stations in association with some of the larger Cumulonimbus clouds but it can be several years before the event is repeated. There are some winters when no thunderstorms occur at all.

Summer

Thunderstorms can develop during the summer months but usually only over the Hajar Mountains. They are a side effect of the Indian monsoon as unstable air in the middle levels can be advected over the Gulf of Oman from India. The mountains provide the trigger mechanism by providing an elevated heat source during the daytime. Development will usually commence around midday with a rapid increase in size and tops can regularly exceed 40,000ft.

Rain is sometimes experienced over the mountains and surrounding areas, but only rarely on the coastal plain.

Gust fronts can affect coastal areas, but these will only occur on one or two days of the summer despite Cumulonimbus development on many days.

Section 6 – Temperature and Humidity

Temperature

The UAE experiences a wide range of temperature during the course of the year. The absolute minimum recorded at Abu Dhabi is 7°C (45°F) and the absolute maximum is 48°C (119°F). Mean maximum temperatures rise from 24°C in January to 40°C in July and August, while mean minimum temperatures increase from 14°C to 29°C. During the winter months temperatures fluctuate more markedly depending on the airmass affecting the region. Cool northwesterly Shamals are interspersed with periods of warmer southeasterly winds. During the summer months from May to September, daytime temperatures will often be above 38°C and during spells of low humidity they can soar to 45°C.

Humidity

The humidity is at a maximum in the early morning before decreasing as the land breeze sets in. Once the sea breeze becomes established in the afternoon the humidity will gradually climb again during the course of the evening. Because of the proximity of the sea, the coastal plains of the UAE suffer from some of the most uncomfortable conditions in the world as a result of the high sea temperatures and humidity. Sea temperatures rise to 35°C in summer and the afternoon sea breezes bring moist air inland on most days. The end of the summer is the worst when fog can occur with temperatures as high as 30°C (86°F).

Nigel Bottomley, Meteorological Office, Abu Dhabi International Airport, P.O. Box 2411, Abu Dhabi, U.A.E.

Information and Statistics courtesy of the Abu Dhabi Department of Civil Aviation.

ABU DHABI BATEEN AIRPORT (Period 1971 - 1990)

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
DRY BULB TEMP. (Deg. C)	MEAN	18.8	19.6	22.6	26.4	30.5	32.2	33.9	34.0	32.2	28.8	24.5	20.7	27.0
	MEAN MAX	23.6	24.7	28.5	32.9	37.6	38.8	40.5	40.4	39.0	35.0	30.1	25.6	33.1
	MEAN MIN	13.8	14.5	17.3	20.8	24.6	26.8	29.0	29.4	26.8	23.2	19.0	15.8	21.7
	EXT. MAX	31.7	34.4	39.8	44.5	46.2	47.3	48.0	46.1	44.6	41.6	36.7	31.3	48.0
	EXT. MIN.	7.9	7.5	10.2	13.3	16.0	21.7	22.7	25.6	20.4	15.4	12.3	9.6	7.5
WET BULB TEMP. (DEG. C)	MEAN	15.2	15.7	17.7	20.1	23.2	25.6	27.1	27.6	26.2	23.4	19.8	16.9	21.5
	MEAN MAX	17.3	17.8	19.9	22.4	25.5	27.7	29.4	29.8	28.6	25.6	22.1	19.0	23.8
	EXT. MAX	22.8	27.1	26.7	27.0	31.0	31.6	33.4	34.0	32.5	29.5	28.8	23.1	34.0
R.H. (%)	MEAN MAX	86	87	84	81	80	83	84	84	87	86	84	85	84
	MEAN	69	68	63	58	56	60	61	62	64	64	65	68	63
	MEAN MIN	48	44	39	32	27	34	33	36	32	36	42	47	37
	EXT. MIN.	17	11	9	5	8	3	6	9	7	8	6	16	3
PRESSURE (hPa)	MEAN QNH	1018.6	1016.7	1014.0	1010.5	1006.1	999.8	997.2	999.0	1005.2	1012.0	1016.2	1018.5	1009.5
	MEAN V.P.	14.7	15.2	16.7	19.0	23.2	28.0	31.1	32.3	29.7	24.9	19.8	16.5	22.6
SUN (hours)	MEAN	8.0	8.3	8.2	9.4	11.1	11.3	10.3	10.0	10.2	9.9	9.6	8.3	9.5
RAIN (mms)	MEAN	7.3	21.9	14.3	6.4	1.3	0.0	Trace	1.6	0.0	Trace	0.3	5.0	58.1
	MAXIMUM	35.6	156.5	86.5	36.8	26.3	0.0	Trace	29.7	0.0	Trace	3.2	29.5	156.5
	24HR-MAX	30.2	81.5	27.3	28.8	16.1	0.0	Trace	28.7	0.0	Trace	2.4	20.5	81.5
RAIN DAYS	INCL. TR	3.8	4.9	5.9	3.2	0.5	0.0	0.4	0.5	0.0	0.1	0.5	3.5	23.1
	>0.2mm	1.2	2.9	2.6	1.3	0.1	0.0	0.0	0.1	0.0	0.0	0.2	1.4	9.8
WIND (knots)	MEAN	7.5	8.5	9.0	7.9	7.9	8.2	7.8	7.8	7.2	6.3	6.2	6.8	7.6
	MEAN MAX	14.7	16.1	17.6	16.8	16.6	16.5	16.3	16.7	15.3	14.0	13.3	13.5	15.6
	EXT. MAX	34	37	42	35	53	33	30	38	27	27	30	34	53
	GUST	41	57	60	45	69	38	37	54	33	37	37	39	69
WEATHER DAYS	FOG	2.5	2.6	2.3	0.8	0.9	1.0	0.5	0.8	2.3	2.6	0.9	1.6	18.8
	HAZE<8KM	14.6	13.1	16.4	12.6	14.8	20.2	22.6	21.1	18.1	14.5	11.0	12.4	191.5
	S/STORM	0.3	0.2	1.1	0.6	0.3	0.3	0.2	0.3	0.1	0.1	0.3	0.0	3.6
	T/STORM	0.3	1.3	1.6	1.1	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.2	4.8

Source : Abu Dhabi Department of Civil Aviation

New finds at Julfar

by Peter Hellyer

The ancient port of Julfar in Ras al Khaimah was an important centre of trade from before the dawn of the Islamic era until the eighteenth century. This article reports on the excavations on the site in early 1991.

The third season of excavations on the site of an old mosque at the historic Islamic seaport of Julfar was carried out in early 1991, led by a British team headed by Dr. Geoffrey King, from the School of African and Asian Studies of London University. This article has been prepared with the assistance of Dr. King, who is, however, not responsible for any errors of fact or interpretation that it may contain.

Julfar, known to historians from frequent references in Arab literature to have existed from early Islamic times until around the late seventeenth century, was a major port and trading centre until it fell into decline during the period of the Portuguese presence in the Gulf in the seventeenth century. The historical record refers to a battle between the Portuguese and Julfar's inhabitants in 1621, during which a prominent mosque was used as a position by Portuguese cannon to shell the fort, and it is believed that the site being excavated by King is the mosque referred to in that report.

In three seasons of excavations, beginning in 1989, King's team, supported by Britain's Royal Asiatic Society, the British Academy, the Society of Antiquaries, and the Society for Arabian Studies in London, as well as the British Council, Emirates Airlines, IAL, (Ras al Khaimah), and Emirates Bank International, has uncovered several layers of building on the site, suggesting that the mosque was built and re-built several times over the centuries.

During the latest period, which is currently assumed to have ended after the seventeenth century battle with the Portuguese, the mosque, which had dimensions of 20 metres by 20 metres, appears to have been completely roofed over, with four rows of columns parallel to the 'qibla' wall holding up the roof.

Inside, there was a packed and plastered floor, still well preserved over much of the site, although in some areas holes had been dug, perhaps by local inhabitants in later years searching for building stone. A number of post-holes sunk into the floor suggest also, says King, that after the mosque had fallen into disrepair, temporary 'barasti'-type structures may have been erected on the site.

Beneath this late mosque, which had a semi-circular mihrab facing in the direction of Mecca, is another mosque, obviously dated earlier, with evidence of piers with a square base.

This season's work has shown that much of the structure of the mosque must have been levelled prior to the last phase of rebuilding, indicated by the pinkish level of plaster present on the mihrab and elsewhere, including the qibla wall, and partly because the white plaster floor of the last period of the mosque sealed the earlier set of piers, which must have been cut back to surface level before the floor was laid.

— هذه المقالة تلخص تفاصيل كشف أثري حديث بمنطقة جلفار في رأس الخيمة.

To the east of the mosque the archaeologists have uncovered the foundations of a rectangular stone building, which, according to King, "is the most remarkable new find of the 1991 season."

The building abuts the mosque wall, although its purpose at present remains unclear. The evidence emerging seems to suggest, however, that it is part of an earlier mosque.

The discovery of this mosque came only in the last week of the season.

According to King, the end-of-the-season discovery, which has completely changed previous ideas about the mosque, came as a result of part of the late period plaster floor in the interior of the mosque being removed, revealing the extension and outline of the earlier structure. More work will now be done on this mosque next season.

Yet another mosque lies beneath the top two, and of the same ground plan, except for a rectangular mihrab, which precedes the curved one that sits on top of it.

The site of the qibla wall and mihrabs of the successive mosques adjoins the edge of a shallow gully running through the elevated sand-bar on which Julfar lies, and between the mihrab and the gully, the archaeologists have discovered plaster and stones, in two distinct layers, which appear to represent the debris of collapsed qibla walls.

"Heavy rains and floods running down the gully may have undermined the qibla wall on two occasions, leading to its collapse and the subsequent rebuildings," King suggests.

Dr. King and his associate, Miss Beatrice de Cardi, the doyenne of foreign archaeologists in the UAE, are hesitant about speculating on the ages of the four phases of mosque construction, although, says King, "working back from the mid-seventeenth century, when we assume the mosque fell into disrepair, we can say that there is evidence of at least several hundred years of occupation."

Perhaps the most intriguing discovery, however, is the remains of a substantial mud-brick wall, nearly a metre thick, close to, but below, and earlier than, the rectangular mihrab of the early mosque. This wall, whose remains have been traced running out at a slight angle to the alignment of the qibla wall, is clearly of a building preceding the masonry on the site.

"In the absence of any clear understanding, so far, of the dating of the mosque itself," says King, "we cannot assess this lowest building, nor are we certain it is not itself also a mosque."

Other mud-brick walls of a similar style and at a similar depth have been found elsewhere on the Julfar site, but these, too, have not been dated.

King remains firm on refusing to speculate on the ages of the structures he has found until further analysis of the finds has been undertaken.

The dating of the newly discovered phases of the mosques, and of the underlying buildings, will depend to a considerable extent on analysis of the finds of potsherds and other items inside and around the structure.

"We are pleased that this year we have found a substantial amount of pottery, unlike our two previous seasons," says King. "Before this year, we thought we might have to depend on analysis of the pottery found by a French team working nearby, but this year we have plenty of our own with which to work."

A large proportion of the pottery, particularly from the later levels, is of the typical 'Julfar type,' reddish with striped red decorations, which can be found scattered over much of the surface of the whole of the Julfar site, as well as elsewhere in the area, including four unexcavated settlements found along an ancient shore-line nearby during a brief two hour survey.

Other sherds are obviously imports, from Iran and from further afield like China and Vietnam.

As yet, little is known of the evolution of the Julfar pottery, which was made in the mountains behind Ras al Khaimah. The pottery kilns remained in use until twenty or thirty years ago, and the style appears to have changed relatively little over the centuries, making dating extremely difficult.

Much of the Julfar site, which appears to have been abandoned at around the time that the modern town of Ras al Khaimah was established, perhaps in the late seventeenth century, was once almost cut off by the sea. The Al Mataf area, where the mosque stands, has a shallow khor in front of it, and then another sand bar on the sea. Behind it was once another arm of the sea, stretching in from the main khor, although this is now cut off by a causeway, built in recent years, that links Al Mataf to the southern Al Nudud part of the site, where British and other teams have excavated remains of dwellings.

Around part of the inland-facing area of the main Julfar sand bar, a German archaeological team has found remains of a thick wall, with the bases of what may have been defensive towers, suggesting that at least this part of the town may once have been a walled city.

The silting up of the inner khor, perhaps as a result of tidal action or perhaps because of silt being washed down from the nearby mountains after rainfall, would have made the Al Mataf area much more difficult to defend. Since the abandoning of the site appears to have coincided roughly with a period of intense, if intermittent, conflict between the local inhabitants and the Portuguese, the move of the population to the more easily defended site at Ras al Khaimah could have been prompted by the drying out of the inner khor, and perhaps the silting of the harbour.

The dating of this process, and of the other changes along the neighbouring coastline, will be one of the focuses of attention during the next season of work on the site.

Dr. King and his colleagues are well pleased with the results of their 1991 season of excavations and are pleased, too, that they chose to come out to Ras al Khaimah despite the fears earlier in the year that the crisis further up the Gulf would affect the Emirates.

Besides their work last season, there have also been excavations by a Japanese team, led by Professor Sasaki, of Kanazawa University, focussing on an area of settlement on the edge of Al Mataf, where remains of houses and streets were found built on top of the original natural surface of the sand bar.

Other teams that have been working on the site, although not this year, include a French team under the leadership of Dr. Claire Hardy-Guilbert, working on a series of occupation levels not far from the mosque, and a German team led by Dr. Michael Jansen, of the Rhine-Westphalia Technical High School in Aachen.

Together the four teams represent a significant example of international collaboration to uncover the past history of Julfar, and of the UAE as a whole.

All the teams, notes Dr. King, have been delighted with the continued support given to their work by the Government of Ras al Khaimah, and, in particular, by Major General Sheikh Sultan bin Saqr al Qassimi, a Deputy Ruler of the Emirate and its Director of Antiquities.

"Sheikh Sultan has taken great interest in our work," says King, "and has visited the site on numerous occasions, to study the evidence of our excavations. The encouragement we have received from him, and from (Supreme Council Member and Ruler of Ras al Khaimah) His Highness Sheikh Saqr, has made our work much easier."

"The historical record shows that Julfar is a site of very great importance for the Islamic period in the history of the United Arab Emirates, with evidence of perhaps approaching a thousand years of occupation. There is much work that we and our colleagues from other countries have still to do before we can claim to have an understanding of Julfar's history, but this year's season of excavations has added substantially to our knowledge of the mosque that must have been one of the most important buildings of the old city," says King.

The author is Chairman and Archaeology Recorder of the ENHG.

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* * *



Two views of the mosque at Julfar, showing the internal layout and the Mihrab and Qibla wall. See Page 19. (P. Hellyer)





A falaj in the Aboule oasis. See Page 22. (R.A. Western)



Zygophyllum simplex, a widespread annual of the open plains around Mahdah. See Page 22. (R.A. Western)



Woodchat shrike, (*Lanius senator*), a passage migrant to the Emirates. (J.A.D. Chapman)



Crab Plovers, (*Dromas ardeola*) at Abu al Abyad. See Page 13. (J.N.B. Brown)



Gordon's wildcat, (*Felis sylvestris gordonii*), in a Dubai garden. See Page 21. (M. Jongbloed).



Oleander Hawk Moth, (*Daphnis nerii*). See Page 29. (J.N.B. Brown)

Gordon's Wildcat Breeding Programme

by Marijcke Jongbloed

The Gordon's wildcat is now rare in the wild in the Emirates. A captive breeding programme has been started in Dubai, now linked to other programmes world-wide.

Felis sylvestris gordonii or Gordon's wildcat is a nocturnal, secretive animal, inhabiting the mountains and alluvial plains of the UAE and Oman. Its existence in the wild is threatened by the development of these countries and by cross-breeding with domestic cats.

It is very difficult to assess how many of these lovely cats are surviving in the wild today, since positive sightings are few and far between. Because of its behaviour, only the most persistent tracker would find it, or it might be chanced upon by an overnight camper. Its colouration is so much like the domestic tabby that the latter is often mistaken for a wildcat, while it can also happen that a chance meeting with a Gordon's wildcat is dismissed as unremarkable. This may also be the reason that no roadkills are ever reported. Unless one is very familiar with the wildcat's appearance, it would be difficult to differentiate between it and a domestic cat, especially in a roadkill.

The characteristics of a Gordon's wildcat are as follows:

- same size as an ordinary domestic cat, but more slender and long-legged.
- colouration grey with vague darker grey markings on the back and sides. The underside is ginger coloured, as are the backside of the ears.
- black stripe midway on the inside of the front legs.
- distal end of tail black-ringed, ending in a black tip.
- white "spectacles" around the eyes.
- black skin underneath fur and black soles of feet.
- very shy behaviour, extremely vicious when cornered.

This last characteristic makes it easy to handle telephone calls like the ones I get regularly: "I have a Gordon's wildcat with kittens. She sort of befriended me and is now lying in the bedroom" or "We saw this Gordon's wildcat in a wadi and it just sat there meowing" — that is not wildcat behaviour.

The only ones that became tame to me were 3 litter-mates that I raised by bottle from the age of three weeks. Others that I handled daily from the age of 6 weeks **never** became tame, and those that have lived in cages in my garden for 3 years or more are still shy, though not ferocious any more if left in peace.

In 1985 a female Gordon's wildcat was caught in Al Aweer near Dubai by Christian Gross. This cat was mated with an ancient male that resided in Dubai Zoo, which resulted in two litters, of which only one survived. Then the old male died. One pair of youngsters was given back to Dubai Zoo, where they have had several litters, but only three surviving young. The wild-caught female and her son produced 4 litters in Dubai. Two pairs were sent to (East) Berlin where they had several

— الهر البري أو السنور.. أصبح الآن نادر الوجود في الإمارات. بدأ الآن برنامج التكاثر المأسور في دبي وهو الآن مرتبط ببرامج أخرى على نطاق العالم.

litters of which no young survived, possibly due to unsuitable accommodation (the mothers will attack and destroy their young at the slightest disturbance).

One pair went to Wuppertal Zoo, Germany, which specializes in the breeding of small cats. They had 2 litters, with 4 kittens surviving to date.

Another pair went to a private breeder in California, where 2 litters were produced with only the last litter of 2 surviving.

The wild-caught female and her son eventually went to the San Diego Zoo, where they immediately produced another litter, which must have been conceived during their trip to the USA!! Of this litter a female cat went to Wuppertal to be paired with an extra male from Dubai — this pair is as yet too young to reproduce. The wild-caught female survived a serious kidney and liver disease, and continued miraculously to produce another 2 litters to date. Of these offspring, 1 male and 2 female were recently sent to a private breeder in Florida, where the first litter was born on 7th July 1991. Two surplus males were donated to Sultan Qaboos' Breeding Centre at Beit al Baraki in Oman, where a young female from Wuppertal may join them in the near future. The remaining pair of young cats from Wuppertal will probably be sent to another German zoo.

From the above, it is apparent that it is not all that easy to increase the number of wildcats in captivity (30 surviving cats out of a total of 54 births in 6 years). Before long, inbreeding may become a problem. A chromosome study is being done comparing Gordon's wildcat with *Felis sylvestris tristrami* (the wildcat from northern Saudi Arabia and adjoining areas), to see whether they are separate sub-species, or could be bred together. In the meantime, some attempts have been made to find another wildcat of a different genetic line, but so far they have been unsuccessful.

No positive sightings have been made in the UAE since 1985, with only two "possibles" in Wadi Bih in 1987 and Jebel Huwayyah in 1989. In Oman, 2 positive sightings were reported in the Wahiba Sands in 1990. Stories of hunters claiming to have shot Gordon's cats in the sandy desert between Dubai and Madam have not been confirmed. Should such regrettable incidents take place, it is important that the carcass be retained for positive identification and subsequent preservation.

For the time being, anyway, the continued existence of the Gordon's wildcat seems to be guaranteed, be it only in zoos With the recently reported outbreak of rabies in the areas where wildcats are likely to be found, its existence in the wild seems more threatened than ever.

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Plant Survey near Mahdah, Oman

by R.A. Western

The following paper summarises details of plants collected in two areas near the Omani village of Mahdah, in the Hajar Mountains near Al Ain, during the course of a survey in April 1989 by the author and another Group member.

Two areas just to the NE of Mahdah, near Buraimi in Oman, were surveyed by the author and J.N.B. 'Bish' Brown on April 28th 1989.

Area A Grid reference 24°27'N; 56°05'E.

The first small area was the edge of a boulder/gravel plain some 5 km ENE of Mahdah, adjoining a small hill itself and surrounded by hills. The sampling/collecting area of approximately 10,000 m² comprised a small section of open plain, a shallow dry wadi system with sandy banks and the eastern slope of a small hill about 50m high.

Area B Grid reference 24°29'N, 56°07'E.

The sampling area was part of the valley of Wadi Aboule, including Aboule Oasis, some 9km ENE of Mahdah, and hence just 3 km from Area A. Small allotments of wheat and barley had been harvested and were full of annual weeds. The wadi itself had a maximum width of 4m, but was very shallow apart from occasional pools, and was full of toads and small fish, and was lined with cultivated trees, gradually becoming a dense grove of palms about 1 km higher up the valley. There are the remains of an old fort and a few abandoned huts at the lower end of the oasis, which is surrounded by typically open, fairly bare, rocky mountains, part of the Hajar range. There were a few tiny fields of onions and young pepper and aubergine plants near the denser part of the grove.

The following records are more complete for Area A, where a collection was made, than for Area B, which was much larger for sampling thoroughly in the time available.

Family	Site	Species and Comments
Acanthaceae	A	Blepharis ciliaris - in flower. Smaller plants to 15 cm in height and 20 cm across.
	B	Several huge specimens in flower, the largest some 80 cm high by 1.5m across, just upstream and to the N of the old fort.
Adiantaceae		Adiantum capillus-veneris .
	A	Non-existent. No surface water.
	B	Luxuriant growth lining 'afraj' and narrow mud channels leading off to tiny oasis gardens, mostly in permanent shade. Specimen fronds to 30 cm, including stalk.
Aizoaceae		Aizoon canariense
	A	Several small plants in flower

— الصفحة التالية تلخص نتائج حملة جمع النباتات «لمذح» وهي جزء من سلطنة عمان، قرب مدينة العين في ابريل ١٩٨٩ م.

among rock debris on lower slopes. Prostrate, max. diameter 10 cm.

- B Recorded only as weed in old fields. Specimens small and not clumped together.

Amaranthaceae

Aerva javanica

- A Two separate plants on wadi edge among *Jaubertia aucheri* scrub. In flower, max. height to 75 cm. Straggly.

Amaranthus graecizans (or *A. hybridus*?)

- A Not recorded.
B Several thin, short specimens as weeds in old, harvested fields on approach to oasis. Max. 20 cm in height.

Apocynaceae

Nerium mascatense

- A Non-existent.
B Prolific through the length of the oasis fringing stream. In full flower. Plants to 2.5m high, excellent condition.

Rhazya stricta

- A A few small specimens in flower and early fruit on open plain close to wadi edges.
B Not recorded.

Asclepiadaceae

Calotropis procera

- A Not recorded (though a large clump of healthy young trees was noticed on the outskirts of Mahdah in a silty depression opposite Mahdah fort).
B A few individual straggly plants on open ground around the old fort. Max. height 1.5m.

Pentstemon spiralis

- A Not recorded.
B Several *Acacia* and fallen/hacked down palms were strangled by thick growth of this creeper. In

- flower with very dense dark green foliage and leaves to 3 cm.
- Pergularia tomentosa**
- A Very few specimens, all badly-overgrazed by goats.
- B Not recorded.
- Boraginaceae **Arnebia hispidissima**
- A A few very small plants in flower. Max. height 6 cm. All annuals.
- B Not recorded.
- Heliotropium calcareum**
- A Common on slopes, in flower. Height to 35 cm. Leaves small and sparse.
- B A few in old fields to 20 cm, greener and with larger leaves than at A.
- Trichodesma africanum**
- A Fairly common on slopes. Individuals to 30 cm, bushy, with late flowers/fruit.
- B Not recorded.
- Capparaceae **Cleome amblyocarpa**
- A Fairly common on lower slopes in flower, to 30 cm.
- B Not recorded.
- Caryophyllaceae **Cometes surattensis**
- A Very common over whole of sampling area except in wadi. Small plants in flower and/or fruit, some already golden.
- B Not recorded.
- Gymnocarpus decandrum**
- A Occasional on slopes among boulder debris. Small, stunted specimens to max. 35 cm, in flower. Some specimens with butterfly larvae in 'basket' cocoons.
- B Not recorded.
- Gypsophila bellidifolia**
- A Several small plants on flat, pebbly ground between wadi and rocky slope. To 15 cm, in flower.
- B Not recorded.
- Paronychia arabica**
- A Unusual but a few individuals dotted among Gypsophila. Very small, to 2 cm, prostrate.
- B Not recorded.
- Sclerocephalus arabicus**
- A Fairly common on lower slopes and gravelly plain, to 6 cm.
- B Not recorded.
- Silene villosa**
- A Not recorded.
- B A few plants to 10 cm in flower in old fields.
- Chenopodiaceae **Chenopodium album**
- A Not recorded.
- B As weed in old fields (ex barley/wheat). Young specimens, to 12 cm only and possibly mixed with *C. murale*.
- Combretaceae **Terminalia catappa**
- A Not recorded.
- B Cultivated Indian Almond in oasis, with mature trees to 15m., in young fruit.
- Compositae **Echinops sp.**
- A Suspected young plants with basal rosette of leaves only. No central stem yet.
- B Not recorded.
- Filago desertorum**
- A Fairly common especially at junction of plain and slope, among pebbles and gravel. To 5 cm.
- B Not recorded.
- Flaveria trinerva**
- A Not recorded.
- B As weed in and around harvested fields, in flower, to 15 cm only.
- Launaea nudicaulis**
- A Common in flower on lower slopes, with individual stems to 20 cm.
- B A few long-stemmed specimens along banks of 'aflaj', in mud. In flower.
- Pulicaria glutinosa**
- A Common at foot of slopes and spreading onto plain, decreasing in size. Bushes compact, not spreading, to 30 cm in height, in late flower.
- B Not recorded in oasis itself, but suspected in surrounding hills.

- Sonchus oleraceus**
 A Not recorded.
 B As weed around old fields and occasional along wadi sides below old fort.
- Vicoa pentanema**
 A Not recorded.
 B Small plants in and around old fields, to 15 cm only, in flower.
- Convolvulaceae **Convolvulus acanthocladus**
 A Common on slopes and summit of rocky hill. Plants to 30 cm high by 40 cm across, in flower. Normally associated with higher elevations in the Rus al Jebel, and this represents the most southerly recording in the UAE and neighbouring parts of Oman to date.
 B Not recorded.
- Convolvulus prostratus?**
 A A few overgrazed specimens to 20 cm dotted over slopes and adjoining plain, in flower.
 B Not recorded.
- Convolvulus virgatus**
 A Several densely-branched specimens at foot of slope and between slope and wadi. In flower to 50 cm. With identical butterfly larvae as on **Gymnocarpus decandrum**.
- Cruciferae **Diplotaxis harra**
 A Not recorded
 B A few in old fields, among variety of post-harvest weeds. To 15 cm, in flower.
- Farsetia linearis?**
 A Several small specimens in flower on slopes. To 25 cm.
 B Not recorded.
- Morettia parviflora**
 A Common throughout sampling zone, mostly young plants in bud or early flower.
 B Not recorded.
- Physorrhynchus chamaerapistrum**
 A A very few grazed, stunted specimens to 50 cm in flower. Occas. young plants with base leaves only.
- Savignya parviflora**
 A A few scattered plants in flower to 20 cm.
 B Not recorded.
- Cucurbitaceae **Citrullus colocynthis**
 A One plant in flower and fruit
 B Not recorded.
- Cucumis prophetarum**
 A One plant in flower and fruit close to **Citrullus** above. Fruit still green.
 B One plant in oasis fringe. Ripe fruit.
- Cyperaceae **Cyperus rotundus**
 A Non-existent
 B One clump beside stream immediately below fort.
- Ephedraceae **Ephedra foliata**
 A Not recorded
 B At least two large shrubs growing into **Acacia** trees, but not as common as **Pentatropis spiralis**.
- Euphorbiaceae **Andrachne telephioides**
 A A few very small plants among rock scree on slope, in flower.
 B Not recorded.
- Chrozophora oblongifolia**
 A Not recorded.
 B A few shrubs in lower wadi below fort.
- Euphorbia larica**
 A Fairly common but smallish bushes on upper slopes.
 B Not recorded in oasis itself, but seen on surrounding hills.
- Euphorbia granulata**
 A Common in small, prostrate patches throughout sampling area.
 B Common in abandoned fields.
- Gentianaceae **Centaureum pulchellum**
 A Non-existent.
 B Prolific in shaded areas of thoasis

particularly in damp patches such as small fields beneath palms. Abundant flowers. Apparently both large and small-flowered forms.

Geraniaceae

Monsonia nivea

- A Individuals fairly common on edge of plain in flower.
- B Not recorded.

Oxalis corniculata

- A Non-existent
- B Common in association with **C. pulchellum** in shaded, damp patches in oasis, in flower.

Gramineae

No specific recordings of grass spp. were made at either location, but the following were definitely present:

- A *Cymbopogon parkeri* (rocky slopes)
Panicum turgidum (open plain)
Stipagrostis plumosa (all areas)
Tragus racemosus (common)
- B *Aeluropus lagopoides* (beside pool, upper end of oasis)
Chloris virgata (fields)
Cynodon dactylon (fields)

Juncaceae

Juncus socotranus

- A Non-existent
- B Around pool in upper oasis, and at various points along stream bank.

Labiatae

Lavandula subnuda

- A Not recorded.
- B Along wall beside well-shaded parts of stream, in flower.

Salvia macilenta

- A Fairly common, small plants in flower to 20 cm, dotted on plain between wadi and base of slope.
- B Not recorded.

Leguminosae

Acacia tortilis

- A Several small trees on plain, especially along shallow wadi systems, to 4 m.
- B Occasional trees on fringe of oasis and higher up valley.

Argyrolobium roseum

- A Common throughout sampling area but very small specimens, in flower.

- B Not recorded.

Pseudolotus makranikus

- A Previously unrecorded sp., prostrate with thick, hairy pinnate leaves and purple and yellow flowers.
- B Not recorded.

Cassia italica

- A Two specimens, small, in flower.
- B One or two healthy specimens in flower and immature, green fruit close to wadi.

Crotalaria aegyptiaca

- A Two stunted specimens in flower. On open plain close to Acacias.
- B Not recorded.

Melilotus indicus

- A Not recorded.
- B Prevalent in old fields as weed, in flower, to 20 cm. Also mixed with occasional white-flowered form **M. alba**.

Taverniera glabra

- A One stunted specimen in flower close to **Crotalaria aegyptiaca**.
- B Not recorded

Tephrosia apollinea

- A Not recorded.
- B Clumps on oasis fringe and along adjacent rocky side wadis.

Trigonella hamosa

- A Not recorded.
- B As weed in flower in old fields.

Malvaceae

Hibiscus cf. micranthus

- A Possible young species at foot of slope, to 15cm, in flower.
- B A few plants in open spaces surrounded by cultivated trees (*Ficus* & *Punica* spp.) To 50 cm with white flowers.

Moraceae

Ficus carica

- A Not recorded.
- B Several large cultivated trees in oasis. Young fruit; notably palmate leaves.

Ficus salicifolia

- A Not recorded.

	B	Many trees to 12m in densest part of oasis, in flower.			Pteropyrum scoparium	A	Fairly common shrub to 60 cm on edge of plain. Odd bushes further onto plain, but smaller. In flower.	
		Ficus sp.				B	Not recorded	
	A	Not recorded						
	B	Possible F. palmata . At least three trees, much larger than F. carica , with very large non-palmate leaves, in young fruit.			Rumex vesicarius	A	Common to 10 cm among rocks on slope. Max. height 15 cm.	
		Morus nigra				B	Unusual in weed-infested fields, to 20 cm	
	A	Non-existent			Portulacaceae	Portulaca oleracea	A	Not recorded
	B	Mulberry trees in oasis in fruit. Mature.				B	Weed in moist, damp areas. in flower.	
Nyctaginaceae		Boerhavia elegans				Anagallis arvensis	A	Not recorded
	A	Fairly common on open plain, in full flower. Specimens to 40 cm.			Primulaceae	B	Odd specimens, thin and straggly to 25 mm long, beside old walls in oasis.	
	B	Not recorded.						
Orchidaceae		Epipactis ventrifolia				Punica granatum	A	Non existent
	A	Non-existent			Punicaceae	B	Cultivated Pomegranate fringing cultivated area below old fort. In flower.	
	B	Several clumps of flowering specimens at different points along stream, usually among J. socotranus , occasionally on open mud banks of 'aflaj' but under shade of trees. Top 75 cm.						
Palmae		Phoenix dactylifera			Resedaceae	Ochradenus arabicus	A	One shrub in flower and fruit. At foot of slope, small, stunted.
	A	Not recorded, though present in newly-created garden plantation less than 1 km to the N.				B	Not recorded.	
	B	Major component of oasis, with mature trees to 18m, in flower, and apparently recently pollinated.				Reseda aucheri	A	Common, in flower, to 25 cm
Plantaginaceae		Plantago boissieri				B	Not recorded.	
	A	Not recorded.				Zizyphus spina-christi	A	Not recorded.
	B	As weed in old fields. Very long flowering spikes noticeable.			Rhamnaceae	B	A few mature trees on oasis fringes. Fruit mature and dropping but apparently ignored by local community, except by children who were seen knocking down fresh fruits with sticks.	
Plumbaginaceae		Dyerophytum indicum						
	A	Not recorded.				Jaubertia aucheri	A	Common shrub in flower in association with Pteropyrum scoparium on edge of plain.
	B	A few large specimens on fringes of oasis, in full flower. Very healthy.				B	Not recorded.	
Polygalaceae		Polygala erioptera			Rubiaceae			
	A	Fairly common in flower throughout sampling area, with 1-3 stems.				Haplophyllum tuberculatum	A	Not recorded.
	B	Not recorded.				B	Common in extensive patches in old fields. In flower, to 25 cm.	
Polygonaceae		Emex spinosus			Rutaceae			
	A	Not recorded						
	B	Weed in fields, to 20 cm but straggling, in bud.						

- Rutaceae** **Haplophyllum tuberculatum**
 A Not recorded.
 B Common in extensive patches in old fields. In flower, to 25 cm. Odour very strong.
- Sapindaceae** **Dodonaea angustifolia**
 A Not recorded.
 B Fairly common in more open parts of oasis. In flower, to 2 m.
- Scrophulariaceae** **Anticharis glutinosa**
 A Uncommon among scree.
 B Not recorded.
- Bacopa monnieri**
 A Not existent.
 B Prolific in damp, shady areas in oasis. In flower.
- Schweinfurthia papilionacea**
 A A few small plants in flower.
 B Not recorded.
- Solanaceae** **Lycium shawii**
 A Single shrubs in association with **A. tortilis** trees. No flower or fruit.
 B As for A, but in flower and fruit. Healthy specimens with dense foliage. To 1.25 m.
- Solanum nigrum**
 A Not recorded.
 B Weed in fields and fringing oasis trees, to 15 cm, in flower.
- Tiliaceae** **Corchorus depressus**
 A Common, prostrate, stunted. In flower plus young fruit.
 B Not recorded.
- Corchorus trilocularis**
 A Not recorded.
 B Common in old fields, in flower, to 20cm.
- Umbelliferae** **Ammi majus**
 A Not recorded.
 B Common in patches in old fields, among a host of annual weeds. In flower, to 30 cm.
- Ducrosia anethifolia?**
 A One or two only on upper slopes. White umbels, to 20cm.
 B Not recorded.
- Urticaceae** **Forsskaolea tenacissima**
 A A few thin, small plants on upper slopes, to 20 cm.
 B Common on rocks wherever valley sides close in wadi.
- Verbenaceae** **Phyla nodiflora**
 A Not existent.
 B Common in large prostrate patches at higher levels stream banks, always in damp soil and mostly in shade. In flower.
- Violaceae** **Viola cinerea**
 A Common but very small specimens, mostly among rocks on slope. In flower and fruit.
 B Not recorded.
- Zygophyllaceae** **Fagonia bruguieri**
 A Common as semi-prostrate plants on open plain and at foot of slope. In flower.
 B Not recorded.
- Fagonia indica**
 A Fairly common on slope and adjoining rocky edge of plain. To 50 cm with healthy new growth, in flower and early fruit.
 B Not recorded.
- Seetzenia lanata**
 A Common on slopes in flower and fruit. Prostrate and small but healthy foliage.
 B Not recorded.
- Tribulus omanense?**
 A Common throughout sampling zone, in flower and fruit (large, non-spiny). Prostrate.
 B Occasional in old fields among annuals.
- Zygophyllum Simplex**
 A Fairly common on plain and at base of slope. Small, in flower.
 B. Common weed in fields, in flower. Max. height 12 cm.

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NOTES AND QUERIES

A new Tribulus

The first issue of "TRIBULUS" contained a leading article on the status of the species *Tribulus* (family ZYGOPHYLLACEAE) within the UAE. Going over my slides and references again, I have recently come across a photograph of what is clearly the fruit of *Tribulus terrestris* var. *robustus*, which was not included in the checklist of the original article. The fruit appears almost fleshy green with pairs of noticeably thick greenish-white prickles rather than spines (normally associated with *terrestris*). The body of the fruit capsule has a thin indumentum of short, stiff hairs, but not dense enough to mask the overall shape of the fruit. Otherwise this variety is indistinguishable from other *T. terrestris* as a general group. This specimen

was collected beside a tributary of the Wadi Ham in Fujairah, about 2 km downstream from the village of Bithna, in early April 1989. The specimen was in hard-packed sand on the dry wadi bank. This variety should now be added to the UAE checklist.



Fruit of Tribulus terrestris var. *robustus* x 2

R.A. WESTERN
Plant Recorder

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A new snake for the UAE

1658 *Coluber ventromaculatus* Hardwicke's Rat Snake

During a visit to Sir Bani Yas in August 1989, I was shown a number of identical dead snakes that had been killed on the island. I could not immediately identify them, but managed to obtain one of the least damaged specimens for study. I came to the conclusion that it could be a species not previously known from the Emirates. At that point I received a visit from Dr. Franz Tiedemann, Curator of Reptiles at the Vienna Museum in Austria. He also was sure that it was a new recording for the Emirates. He took the specimen back to Vienna with him and positively identified it as *Coluber ventromaculatus*. He is now completing his manuscript for publication in a scientific journal.

Finding this species on Sir Bani Yas raises the question of how and when it arrived on the island? It is only in recent years that there has been development on the island, so they were probably there before development started. The species has not to date been recorded on the mainland around Jebel Dhanna or in Qatar, so it seems unlikely that it was transported from these places. The island was used for various purposes in the past, including gunnery practice by ships at sea. Maybe, one day, we will find a reference to the snakes of Sir Bani Yas in the log of a ship in the days of yore.

Danger to Humans. A harmless, non-venomous snake, which is beneficial to man. In view of its normal diet of rats and mice, it should be protected and not killed on sight.

Distribution. Pakistan, Iran, Iraq, Kuwait, Eastern Saudi Arabia, Bahrain and the United Arab Emirates. This is the first record for the United Arab Emirates.

Habitat. In the UAE it has only been found on Sir Bani Yas Island in cultivated areas and around buildings. In other areas it generally inhabits date-palm groves and farm buildings.

Identification. A long and very slender snake. The head was dark and covered with large scales. A wavy line of darker brown ran across the forehead and down through the eye. The pupil of the eye was round and black with an orange ring around it.

The body was light grey with prominent black blotches dorsally at the head and decreasing to a faint black line towards the tail. Some irregular black markings along the sides. Underside was greyish white.

Food. A true rat snake, which probably feeds entirely on jerboas, rats, mice and lizards.

Reproduction. The female lays eggs. (Oviparous). Number of eggs and where laid is not known.

Activity. They normally hunt during daylight hours (diurnal). In hot weather they hunt as the sun rises and sets (crepuscular) or may remain below ground (aestivate). Moves very fast in a straight sideways undulating motion.

Measurements of specimen.

Total Length: 871mm. Maximum Length: 1080mm.

Tail: 223mm. Body (widest point): 15mm.

Head (widest): 13mm; (length): 22mm.

References.

Gallagher, M.D., 1990. Snakes of the Arabian Gulf and Oman.

Gasperetti, J, 1988. Snakes of Saudi Arabia. Fauna of Saudi Arabia, 9: 169-450.

BISH BROWN
Reptile Recorder

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The Tip of an Iceberg?

The tidal mudflats, inlets, salt marshes, mangroves and open sea inlets between Ras Ghanadha (54°-42'E, 24°-51'N) and Ruwais (52°-40'E, 24°-09'N) within a nominal coastal distance of 230km along the southern shores of the Arabian Gulf encompassing the city of Abu Dhabi extend to an area of approximately 3250 square kilometres. Within this area are approximately one hundred inshore low-lying islands and promontories amounting to about 20% of the total area and at some phases of the tides not all of this expanse of salt flats is covered each day.

I have never visited any place on the shoreline within this area and found no birds. Many of the areas which it is possible to visit are favourite haunts of wintering and non-breeding summer wading birds and flocks of thousands can be seen around Abu Dhabi island and on the western side of Dhabbiya (54°-10'E, 24°-13'N). Most of the area described is off limits to the occasional visitor either for military security reasons, private policing because of the proximity of royal summer houses or simply because there is no easy means of access.

From my own observations the species involved are:- Great Cormorant, Socotra Cormorant, Little Bittern, Night Heron, Little Green Heron, Squacco Heron, Cattle Egret, Western Reef Heron, Little Egret, Great White Egret, Grey Heron, Purple Heron, Spoonbill, Greater Flamingo, Oystercatcher, Black-winged Stilt, Avocet, Crab Plover, Collared Pratincole, Ringed Plover, Kentish

Plover, Lesser Sand Plover, Greater Sand Plover, Lesser Golden Plover, Sanderling, Little Stint, Temminck's Stint, Curlew Sandpiper, Dunlin, Broad-billed Sandpiper, Ruff, Snipe, Black-tailed Godwit, Bar-tailed Godwit, Whimbrel, Curlew, Redshank, Marsh Sandpiper, Greenshank, Green Sandpiper, Wood Sandpiper, Terek Sandpiper, Common Sandpiper, Turnstone, Red-necked Phalarope.

Also occurring are:- Great Black-headed Gull, Black-headed Gull, Slender-billed Gull, Common Gull, Lesser Black-backed Gull, Herring Gull, Gull-billed Tern, Caspian Tern, Swift (Crested) Tern, Lesser Crested Tern, Sandwich Tern, White Cheeked Tern, Bridled Tern, Little Tern, Saunder's Little Tern.

Other birds that we know of occurring in the sheltered lagoons include Grebes and Ducks and in the mangrove areas, Black Kite, Marsh Harrier, Pallid Harrier, Osprey and Spotted Eagle may be found.

In short, this area is very much under explored and under recorded. We could greatly benefit from a systematic survey of this whole area which is undoubtedly a significant wetland habitat of great importance to large numbers of breeding and migratory birds, a perspective which we are only beginning to grasp.

ADRIAN CHAPMAN

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Oleander Hawkmoth — (*Daphnis nerii*)

The Oleander Hawkmoth is common in the United Arab Emirates, wherever its larval food plant the Oleander, *Nerium muscatense* is found. The local bush grows in wadis, but other species have been introduced as ornamental shrubs in the cities and towns. All have very poisonous leaves and are avoided by most animals.

The moth has a wingspan of up to 11 cms with beautiful markings of green, pink and a variety of browns. It flies only at night in search of nectar or in the case of the females to lay eggs. Quite often it is seen during daytime resting on walls or tree trunks.

A single egg is deposited on the underside of a oleander leaf near the top of the bush. Rarely does an individual female deposit more than one egg on each bush, but other females may lay their eggs on the same bush. The egg is yellow and less than 2 mm in diameter.

A few days later, a small larva (caterpillar) emerges and, after eating the remains of the eggshell, proceeds to devour the young leaves of the bush. It grows rapidly to a length of 8 cms or more, changing colour from pale yellow with a black tail-horn to green with a yellow tail-horn. It also develops a large "blue eye" on each

side of the body, just behind the head. If threatened, it puffs up its body and the large eyes are sufficient to frighten off most predators. The poison absorbed from the leaves of the oleander also makes it unpalatable. As the caterpillar nears pupation time, it darkens to a rich brown and black colour and drops off the bush to the ground. It may walk many metres in search of a suitable place amongst the fallen oleander leaves to build a shelter. The shelter is made by sewing together dead leaves with a sticky thread.

Pupation may last for a period as short as two weeks or long enough for the species to survive the hottest part of the summer. When about to emerge, the shell of the pupa splits at the head and using a strong jet of pink fluid, the moth literally 'blasts' the shell off. The wings at this point are very soft and crumpled, so the moth climbs up a branch and using internal fluids stretches them out to dry. Once the wings are dry, the moth is ready to fly off and find a mate to start the cycle all over again.

BISH BROWN

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Archaeological Survey Planned

While much work has been done over the past twenty five years by archaeologists on the mainland of the United Arab Emirates, little attention has thus far been paid to the offshore islands, virtually all of which lie within the Emirate of Abu Dhabi. Some work was done, (by Dr. Walid Yasin al Tikriti of the Al Ain Department of Tourism and Antiquities), several years ago on the coastal site of Ras Ghanadha, but this site was always readily accessible at low tide from the mainland until a channel was dredged in recent years.

On the initiative of our Patron, Sheikh Nahyan bin Mubarak al Nahyan, and with the kind approval and support of His Highness President Sheikh Zayed, however, the first ever archaeological survey of two of

the UAE's main offshore islands, Sir Bani Yas and Dalma, is to take place early in 1992.

The focus of the survey, led by Dr. Geoffrey King of London University, and supported by the Society for Arabian Studies, will be on the Islamic period. An initial collection of pottery by an ENHG team that visited Sir Bani Yas in May 1991, however, produced some pottery that may be from the First Millenium BC, while historical records from the early Islamic era refer to the existence of a Nestorian bishopric on Dalma prior to the coming of Islam.

The survey will be followed by excavations, if considered appropriate.

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Sir Bani Yas Survey

A number of visits were made to Sir Bani Yas Island by Group members during the early summer of 1991, with the objective of undertaking preliminary work for an interim report on the history, natural history and archaeology of the island.

The report has been commissioned by the office of Major General Sheikh Mohammed bin Zayed al Nahyan, and work has been done on the following topics: Flora, Mammals, Birds, Insects, Reptiles, Archaeology, History and the Coastal Environment. With the assistance of Ghassan al Ghusseini, the representative of His Highness President Sheikh Zayed bin Sultan al Nahyan on the island, a start was also made on the collection of material relating to the extensive afforestation

programme being undertaken on Sheikh Zayed's orders, as well as on the introduced flora, birds and animals.

Assistance was also provided by the Abu Dhabi Company for Onshore Oil Operations, ADCO, who dispatched a staff geologist (and Group member) to the island for the first-ever proper geological study of Sir Bani Yas.

Further work being planned includes visits to study the autumn bird migration, an examination of Miocene rock outcrops by Peter Whybrow of the British Museum (Natural History) and an archaeological survey by Dr. Geoffrey King of London University.

The text of the Group's report will be published in a future issue of TRIBULUS.

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Fossil Exhibition

An exhibition of Miocene fossils from the Western Region of Abu Dhabi is to be inaugurated at the British Museum (Natural History) in London in December 1991.

(A report on the fossils can be found in TRIBULUS Vol. 1.1, April 1991, Pages 4-9).

The exhibition, entitled 'Hot Fossils,' has been sponsored by BP Exploration, the Abu Dhabi National Oil Company, ADNOC, and the Abu Dhabi Company for Onshore Oil Operations, ADCO. An accompanying vid-

eo film, with commentary by Sir Richard Attenborough, has been sponsored by the Emirates University, thanks to the generosity of University Chancellor (and ENHG Patron) Sheikh Nahyan bin Mubarak al Nahyan.

"Hot Fossils" is to be on show in London for around a year, after which it is intended that it should be transferred to the Museum at Al Ain in the U.A.E.

PETER HELLYER

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RECORDERS' REPORTS FOR JANUARY-JUNE 1991

Archaeology and Palaeontology

Thanks to the war in the northern Gulf earlier in the year, there was a substantial reduction in the amount of activity by foreign teams investigating the archaeology and palaeontology of the Emirates.

The only team to work a full season on the archaeological front in the period from January to March was the British team led by Dr. Geoffrey King of London University, at the site of Julfar in Ras al Khaimah. A report on his findings can be found elsewhere in this issue of TRIBULUS. There was also a short dig undertaken by archaeologists from Japan, again on the Julfar site.

On the palaeontological front, Peter Whybrow, of the British Museum (Natural History) continued his ADCO-sponsored work examining the Miocene outcrops in the Western Region of Abu Dhabi Emirate, collecting a substantial number of new fossils, and also finding time to give us a talk on January 21st.

Again on the palaeontological side, Dr. Andrew Smith, of the BM(NH), carried out a preliminary survey, sponsored by ADCO, of the late Cretaceous fossil outcrops, (of the Simsima Formation), to be found in the mountains between Al Ain and Dhaid, including Jebel Huwayyah, (Fossil Valley), Jebel Rawdah, Jebel Buhays and Jebel Faiyah.

The focus of his work was on fossil echinoids, (sea urchins), and he received considerable assistance from several Group members, including Bish Brown and Carolyn Lehmann, Jose de Matos and Dr. Terry Adams,

(our former Vice Chairman who was then General Manager of ADCO).

He will be continuing the work in early 1992, and we hope to publish his preliminary report, as well as additional material prepared by Carolyn Lehmann, in a future issue of TRIBULUS.

As far as the Group itself is concerned, there were two events worth noting.

In April, Dr. Terry Adams led a weekend outing to Al Ain, focussing on Fossil Valley, which attracted the greatest turn-out yet for a Group weekend — nearly 150 people.

In May, a number of Group members visited the island of Sir Bani Yas to carry out a multi-disciplinary, albeit very quick, survey of the natural history and archaeology of the island. A collection of surface pottery was made by Carolyn Lehmann, (now in the Al Ain Museum), most of which was fairly recent, but some of which may be from the First Millenium BC. A number of possible graves and Miocene rock outcrops were also identified, which will be studied later.

In the autumn and winter of 1991, Geoffrey King will resume work at Ras al Khaimah, and Peter Whybrow in Abu Dhabi's Western Region, (including Sir Bani Yas). Professor Ernie Haerinck of Ghent University in Belgium is also expected to resume work at Ad Door in Umm al Qaiwain and in Ajman.

PETER HELLIER
Archaeology Recorder

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Birds

In January individual observers contributed some shorebird records to the Asian Wetland Bureau during the two-week count period in the middle of the month. The number of waders wintering in the southern Arabian Gulf is unknown but quite possibly significant in international terms. Counts were done at Khor al Beidah, (Umm al Qaiwain), Khor Dubai and Dhabbiyah but the vast shallow tidal flats, islands and mangroves west of Abu Dhabi island were not surveyed. Understandably so, as access is difficult by both road and sea. It is hoped that some aerial survey work of the area will be done later in 1991 in order to identify particular areas to visit on the ground during the 1992 AWB survey.

Oil slicks arising from the Gulf War did not cause widespread mortality and the damage, in the short term at least, appears to have been confined to the northern Gulf. Judging from television pictures the worst affected species were Black-necked Grebes and Socotra Cormorants. In our area **Socotra Cormorants**, frustratingly difficult to count, are a common resident breeder. A brave effort to assess the numbers coming to roost at Fatair Island off Ruwais was made in late March — 100,000 birds! Easier to count were the flocks of

Greater Flamingos which were present at a number of sites. Most birds departed in spring to their breeding lakes in Iran and the Soviet Union but some, probably younger birds, will stay through the summer. Largest numbers were reported at Khor Dubai, 1500-2000, with smaller numbers at Al Ghar Lake, Ramtha Tip, and other coastal locations.

A flock of 25 **White Storks** spent the winter in the fields of Ras al Khaimah at Digdagga being last seen on 5 April. Most UAE records refer to here and similar habitat on the east coast. Further south at Ramtha Tip in Sharjah, two birds from 1990 remained there until the second week of February — **Black Kite** and **Pied Kingfisher**. Single **Barbary Falcons** at Dhabbiyah and Jebel Hafit in the winter months and then two birds together at Diftah on 4 April add to the total number of sightings but do little to resolve the mystery of the species' status in the country.

Abu Dhabi maintained its local monopoly on **Honey Buzzard** records with two individuals present in the Bateen area, one of which was still present, oddly, until June. Amongst the common winter visitors were a smattering of single **Black-throated Thrushes** from most emirates, usually at coastal locations but also at

Asab. Less common again, although probably under-recorded, were up to 16 **Bimaculated Larks** at Al Wathba camel track in early February.

Spring migration was visible in January, well under way during February and lasted until mid May. Early transients like **Pacific Golden Plovers** could be seen in Saffa Park from the middle of February and were also recorded from Das Island, Kalba and around Abu Dhabi. Rare **Dotterel** were seen at Al Wathba on 14/15 February, well south of their known wintering areas in the Euphrates Valley and northern Saudi Arabia.

Eversmann's Redstart was the first major rarity of the spring, found on Das Island on 20 February, followed by a **Namaqua Dove** at Asab which stayed for the first three weeks of April. In mid April there was a large fall of passerine migrants associated with strong northerly winds and an interesting selection of rarities were found amongst the large numbers of warblers and shrikes. On the 14th were found an **Olive-backed Pipit** at Bu Hasa and an **Icterine Warbler** in Bateen Wood. At Digdaga another **Namaqua Dove** was found on the 19th and it cannot be too long before this species, expanding its range out of south-western Arabia, settles to breed in UAE. On the 23rd at Sharjah a **Finsch's Wheatear** was quite possibly part of the same movement.

The breeding 'season' is taken, for the purposes of this review, to be from March to July but in reality there are birds breeding in the country all year round. Socotra Cormorants breed on offshore islands between September and February whilst Ospreys are rearing young in January. Palm Doves appear not to pause for breath and the highly specialised Sooty Falcon times its nesting to coincide with the appearance of migrant birds.

Of the species that conform to a spring and summer breeding season there were many observations made of which the following is a selection. **Yellow-throated Sparrows** replaced the wintering **Plain Leaf Warblers** in the jebels of the northern Emirates in March when they began singing. In early April **Long-billed Pipits** were heard and seen near Masafi in suitable habitat and two **Eagle Owls** were present at Qarn Nazwa where they have bred before. **Black-winged Stilts** were again successful at Ramtha Tip and Al Ghar Lake where 100+ young were raised. On Abu al Abyad Island the **Crab Plover** colony appeared at first (May) to be smaller than the 700 birds estimated in 1990. The recent arrival, however, of Rob Morris and Mike Oatham to carry out Houbara studies on the island and at Ras Ghanada will enable us to accurately monitor the colony's well-being. **Rufous Bush Chats** certainly bred again in Bateen Wood (where **Olivaceous Warblers** are well established) but also at Digdaga. The vast cultivations of Ras al Khaimah centred on Digdaga supported good numbers of **Little Green Bee-eaters**, **Hoopoes**, and **Indian Rollers** whilst both **European Roller** and **European Bee-eater** were present in numbers large enough to suggest they must be breeding. In the early spring **Rose-coloured Starlings** had been recorded there on a number of dates but did not breed unlike **Eurasian Starling** which did, proof being a juvenile found there with adults on 28 June. Also seen more than once were **Spanish Sparrows**, again at Digdaga, and well into the summer. Not previously recorded breeding

in the country, it appears from these summer records (also noted at Mina Zayed in Abu Dhabi) that it may well do so in the future.

Offshore nesting **White-Cheeked** and **Saunders's Little Terns** were found on many small (sometimes man-made) islands but also **Bridled** and **Lesser Crested Terns** further away from Abu Dhabi. A visit to Ghasha and Kirkum islands near Sir Bani Yas Island in July revealed sizeable numbers of **White-cheeks** (1500 pairs and **Bridled Terns** (2500 pairs). On Qarnain Island many species were breeding by late April including large numbers of **Sooty Gulls** and about 50 pairs of **Red-Billed Tropicbirds**.

In May a group of bird-watchers joined other special-interest members of the ENHG to survey the wildlife of Sir Bani Yas Island. for His Highness the President Sheikh Zayed and an interim list of bird species recorded then, and on previous visits by bird-watchers, has been compiled. Further visits will allow this early list to be checked, modified, and generally fleshed out to enable a publication to be made. The May visit revealed some migrants, notably **Corncrake** and **Wood Warbler** and a couple of prospecting **Sooty Falcons**.

June generally was a quiet month for birds locally with only the breeding species active. Spring migration ended in May and the earliest return migrants aren't expected until July. Nevertheless the month succeeded in springing a couple of major surprises. On Abu al Abyad two wild **Common Cranes** joined a pinioned but otherwise free-roaming bird on the island and were still present at the end of July. And at Ramtha Tip what was thought initially to be a **Little Gull** turned out to be a **Sabine's Gull**, the first Arabian record of this pelagic species. Speculating on its origins, it seems likely that the bird belongs to the Arctic Canadian population and instead of returning north up the Atlantic Ocean from its wintering grounds off Namibia, moved north up the Indian Ocean and into the cul-de-sac of the Arabian Gulf. Incredible as it may seem, there are similar occurrences of **Sabine's Gull** off Eilat at the north end of the Red Sea.

The future of ornithology in UAE brightened considerably this year with the setting up of the National Avian Research Centre under whose auspices the Houbara study will fall. This study is now under way and by the end of the year the other programmes of the Centre will have commenced. Details of those programmes will, we hope, appear in the ENHG bulletins shortly and show how the interested amateur may help in furthering the work of the Centre and, in doing so, adding to our knowledge and understanding of birds in UAE.

Many thanks to all the bird-watchers who have contributed records. Please remember that they are all entered on the Group's database even if they have not been published in this summary or in the monthly Newsletter reports.

BOB RICHARDSON
Bird Recorder

Mammals

Hedgehogs

The four hedgehog records received were all of the same species and were the result of road mishaps. The **Ethiopian Hedgehog** (*Paraechinus aethiopicus*) is the commonest species in the Emirates and the records give us a better indication of their distribution. On 23rd January, one at the junction of Shahama Street, Abu Dhabi and the Dubai Road (Square UB25). On 21st March, one near Al Remah Resthouse on the Al Ain Road (VA25). One 10 kms south of Dhaid towards Meleiha on 6th April (VB27). One near Khatt, Ras al Khaimah (WA28) on 23rd June.

Bats

Bats are almost impossible to identify when they are on the wing at dusk. Two or three unidentified, medium sized bats were seen near Ghayl in Ras al Khaimah (WA27) on 3rd April. There is a colony of **Muscat Mouse-tailed Bats** (*Rhinopoma muscatellum*) in the Aboule area of Oman (WA25). They were seen on 15th March. One very dessicated **Egyptian Fruit Bat** (*Rousettus aegyptiacus*) was found impaled on a barbed wire fence near Khatt, Ras al Khaimah (WA28).

Carnivores

There were very few records of the **Common Red Fox** (*Vulpes vulpes*) in this period, but all were live sightings. On 16th April, Cindy Soffe saw one lying outside its lair at Falaj al Mu'alla, Umm al Qaiwain (VB27). The following day she saw two half-grown cubs playing at Shimal, Ras al Khaimah (WA28).

On 6th March, the Arabic newspaper "Al Ittihad" ran a short story with a picture of an unidentified animal captured near Rams in Ras al Khaimah (WA28). It was said to be one of four in that area. Although it was difficult to make a positive identification, the animal looked to be an **Indian Grey Mongoose** (*Herpestes edwardsi*). Members of the Dubai Group tried to locate the animal, but without success.

Ungulates

Three **Arabian Gazelles** (*Gazella gazella arabica*) were observed in the "southern loop" hinterland of Jebel Ali (VA26) on 3rd May. Two were sighted in a large gravel plain around 11.00 hrs. and were in full flight. The third was seen three hours later in the same general area but masked by dunes and scattered trees. It sought cover in high dunes and was only visible for a few seconds. None of the animals had visible horns. Unidentified Gazelles were seen roaming on Rafiq and Qushayshah islands, west of Abu Dhabi (UA25).

Hares

Live **Hares** (*Lepus capensis*) were seen on the islands of Rafiq and Qushayshah on 21st January. They were also present on Sir Bani Yas (SB25), Abu al Abyad

(TB25) and many other islands. Dead animals were reported 3 kms along the Sweihan road (UB25) on 25th January, and a juvenile in the same area on 24th April.

Rodents

On April 5th, the partially flattened, but recently killed remains of a **Spiny-mouse** (*Acomys dimidiatus*), were found along the road to Ghayl from the Manama to Ras al Khaimah road junction (WA27). This is the Group's first record, though it was found at Jebel Faiyah (VB27) by Michael Gallagher twenty years ago.

Cheesman's gerbils (*Gerbillus cheesmani*) are nocturnal animals and two were seen late on the night of the 6th April crossing the road near Al Habab, Dubai (VB27). There were no identifiable road casualties in this period, which may mean that there is a smaller population this year.

Sea Mammals

Indopacific **Humpback Dolphins** (*Sousa chinensis*) have been seen regularly with 5 near Futaisi Island on 10th January. There was **Dugong** (*Dugong dugon*) meat in the Abu Dhabi fish souq on 21st January and on 7th March. We have had no reports of the family of Dugongs that spent many years in the Futaisi channel, until one was killed.

On the 15th March, a 9 metre baleen whale was towed into the Bateen harbour and loaded onto a boat trailer. Although identification was difficult, it was decided that it was probably a **Sei Whale** (*Balaenoptera borealis*). It was one of five seen off the coast, the other four swam away when approached. It was later towed back out to sea by the fishermen, when we declined to preserve it. On 18th March, a second baleen whale 12 metres long was found in a very decomposed state on a low island towards Futaisi (UA25). Most of the head and back bones were collected and have been cleaned, for possible inclusion in the Group's natural history display in the Old Fort. From the shape of the jaw bones we concluded it was a **Fin Whale** (*Balaenoptera physalus*). It is unusual to get two whales washed ashore dead within a few days of each other, especially two different species. The first whale got away and nothing remains, but the second one has left its bones, which an expert will certainly be able to identify. Parts of an old whale skeleton were found on Sir Bani Yas island in April and another clean skeleton on Abu al Abyad in June.

We would like to thank the following people for their contributions:- Cindy and Mick Soffe, Marycke Jongbloed, Claus Mueller, Adrian Chapman, Charles Laubach, John Gregory, Susan Chapman, Asif Rana, Maarten Verhage, Rob Western, Rob Morris and Al Ittihad Press.

BISH BROWN

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Plants

1991 will not go down as the year when the first endemic was found in the UAE, as this looks more and more unlikely with each passing year. What has become clear is that the basic palaeo-botanic influence on this part of Arabia is Sudanian — i.e. plant families for the most part originated in sub-tropical Africa. There is the odd species that seems to have crept in from the north (the Mediterranean/Turkish/Iranian belt) but by and large the ancient southern Arabian link with East Africa is plain to see in the present distribution of families. James P. Mandaville has been working on the Sudanian/Saharo-Arabian borderline in Arabia, and in his latest book "Flora of Eastern Saudi Arabia" (1990) he defies it more closely than ever. It used to be thought that the UAE was an overlap area, but now the country has been placed firmly in the Sudanian camp, based mainly on the distribution and associates of Acacias. *A. tortilis*, *A. raddiana* and *A. ehrenbergiana* are all typical UAE Acacias and all of Sudanian origin. Saharo-Arabian deserts, as exemplified by northern Saudi Arabia and Kuwait, are also noted for their prolific variety of annuals, sometimes creating vast sheets of colour across the normally barren landscape. This does not occur in the UAE, where annuals are patchy in most years, and never as abundant as further north.

The main areas surveyed during the first half of the year were the Masafi mountains and East Coast hills early in April, and Sir Bani Yas Island at the beginning of May. On the mainland, most annuals were late this year, perhaps a result of an unusually cool winter and extra haze from Kuwaiti oil fires. However, the blue pimpernel *Anagallis arvensis*, *Callipeltis cucularia*, *Erodium laciniatum*, *Senecio* sp. and *Zoegea purpurea* were all in evidence, though never dominant locally. *Caralluma* plants were only just putting on new growth but there was no sign of the *Gastroctyle hispida* plants recorded in the hills in 1990. There is no doubt that random grazing by goats is having a severe effect on the vegetation of the central mountain region.

A brief reconnaissance of a hill just north of Khor Fakkan, overlooking the East Coast, was carried out on 5th April, 1991. The base area of scree and boulders was dominated by *Acacia tortilis* and sparser clumps of *Ziziphus spina-christi* trees in fruit. The tiny lily *Asphodelus tenuifolius* was still in flower here, much later than in the central mountains. About 100-150 feet above the base area *Tephrosia apollinea* was dominant, with *Fagonia indica*, *Aerva javanica*,

Lavandula subnuda and *Echinops* sp. all being common. Higher still there was the odd *Acacia* and *Ziziphus* but the dominant species on the upper half of the hill (approx. 300-600 feet) were *Euphorbia larica* and *Pulicaria glutinosa*. Close to the summit were the only *Moringa peregrina* trees recorded, a species which is common at higher elevations in the Ruus al Jibal. In an abandoned army sangar right on the summit, *Forsskaolea tenacissima* had successfully colonised a relatively sheltered niche.

As part of an E.N.H.G. expedition to Sir Bani Yas Island in May, the Recorder made a survey of the natural vegetation over a three day period. Despite the vast scale of earth-moving and landscaping in recent years, the island does retain vestiges of an indigenous vegetation. Species of 21 different plant families were collected and forwarded to Edinburgh for formal identification. The Chenopodiaceae and Gramineae families were well-represented, as expected in such an arid, saline environment. Less expected was the profusion of *Oligomeris linifolia* of the family Resedaceae, which was common in most plantations. The Island is being turned more and more into a huge Zoo complex, including acres of exotic fruit orchards and plantations of exotic tree and shrub species. Some attempt is being made to include local species, such as *Atriplex leucoclada* and *Prosopis cinerea*, but much of the original vegetation has disappeared completely under the twin impact of massive landscaping and the introduction of thousands of gazelle and antelope. It is only in the man-made, fenced-off plantations that the indigenous vegetation is permitted to survive as useful 'weeds.'

During the first half of 1991, just one new species record was made for the Group, but an interesting one at that. A single crucifer on Das Island turned out to be a new record for Arabia, though it is quite common in the Indian sub-continent and further east. This was *Rorippa palustris* (L.) Besser., which was in flower and fruit beneath a dripping A/C unit continuously from March through September. Presumably the seed arrived in a consignment of fertilizer, but it is hoped that enough seed has been set by this one plant to enable the species to survive and perhaps expand its range on the island.

ROB WESTERN
Plant Recorder

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Reptiles

Snakes

We can now confirm that the snake collected on Sir Bani Yas Island in 1989 was **Hardincke's Rat Snake** (*Coluber ventromaculus*). (see Notes and Queries). This species has not previously been recorded in the United Arab Emirates, as far as we know. Other live snakes seen were a **Variable Sand Snake** (*Psammophis schokari*) just west of Jebel Dhanna (Square SB25) on the 8th of February, an **Arabian Rear-fang** (*Malpolon moilensis*) on the Madam Plain (Square VB26) on the 6th April, 3 **Sand Boas** (*Eryx jayakari*) and 2 *C. ventromaculatus* on Sir Bani Yas (Square SB25) on the 14th of June. Numerous dead road casualties were identified and recorded from several different areas.

Only one **Arabian Gulf Sea Snake** (*Hydrophis lapemoides*) was reported washed up on the Ladies Beach in Abu Dhabi (Square UA25). It had been killed and is currently retained in our freezer. Dr. Kenneth Zimmerman has collected a number of live *H. lapemoides* and **Yellow-bellied Sea Snakes** (*Pelamis platurus*) off the coast of Umm al Qaiwain (Square VA28 & VB28) to conduct investigations into the toxicity of sea snake venoms. This is particularly important in the Arabian Gulf area, because very little work has been done on what are reputed to be the most poisonous snakes known. One of his captive *P. platurus* females gave birth to two young at the end of March.

Lizards

On the 3rd of February, two small, round, hard-shelled eggs were found in a crevice in the trunk of a date-palm. They were obviously lizard eggs, but appeared to be too large to be the eggs of the **Dwarf Rock Gecko** (*Pristurus rupestris*), frequently seen climbing the trees. They may have been the eggs of the **Yellow-bellied House Gecko** (*Hemidactylus flaviviridis*), which also resides in the Old Fort garden. The eggs did not hatch, so a positive identification was not made. Several **Turkish Geckoes** (*Hemidactylus turcicus*) were found around the accommodation blocks and an **Ocellated Skink** (*Chalcides ocellatus*) in a garden on Sir Bani Yas

island in early April. **Desert Monitor** (*Varanus griseus*) road casualties marked two points on our distribution map at Mileiha, in Sharjah and the Sailing Club in Dubai. Apart from these, most of the commoner lizards were seen at one time or another.

Turtles

On 8th February there was turtle meat being sold in the Abu Dhabi fish souq. On the same day, five **Green Turtles** (*Chelonia mydas*) were seen being slaughtered on the beach at Sadiyat island. There was a live sub-adult female **Hawksbill Turtle** (*Eretmochelys imbricata*) in Abu Dhabi fish souq on 12th May.

It was explained to the salesman that it was illegal to kill it, and he handed it over for release. It was taken outside the breakwater and was last seen swimming out to sea. Recovering them is not usually so easy.

Toads

Long strings of eggs of the **Arabian Toad** (*Bufo arabicus*) were found in the water at Wadi Aboule, Oman on 15th March. There were also tadpoles and numerous small toads, indicating a wide breeding period. We have not yet found frogs in the United Arab Emirates or surrounding areas. Frogs' eggs are normally laid in clumps or masses of a jelly-like substance. Towards the hot season many toads retreat into the mud or crevices around the water's edge, so fewer will be seen. Toads are found in most wadis, where there is a steady supply of water.

I would like to thank the following persons for their records and specimens. David Francis, Amal Deboussi, Asif Rana, Cindy and Mick Soffe, Carol Gosling, Carolyn Lehmann, Maarten Verhage, Rob Western, R. Misson (GASCO), ADCO Fields Staff and Dr. Najji and workers on Sir Bani Yas.

BISH BROWN
Reptile Recorder

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Programme of Meetings – January to June 1991

- 7th Jan – Part 3 of Mobil film on Natural History of the Arabian Peninsula.
- 21st Jan – AGM. Short meeting followed by 'How Bones Become Fossils' by Dr Peter Whybrow.
- 4th Feb – 'Journey Around the Emirates' by Ian Hamer.
- 18th Feb – 'Response to a Major Oil Spill' by Capt. C. Green.
- 4th Mar – 'Bees and Beekeeping in the United Arab Emirates' by Omar Salim Bamadhaf.
- 18th Mar – 'Now and Then, UAE and Oman' by Edward Henderson.

- 1st Apr – 'Global Issues and the Environment' by Dr. Terry Adams.
- 15th Apr – No meeting – Eid holiday.
- 25th Apr – 'Reefs, Ancient & Modern, a different look at Fossil Valley,' by Dr. Terry Adams (in Al Ain).
- 6th May – 'The Ground Water Resources of the United Arab Emirates' by Don Jorgenson.
- 20th May – 'An Overview of the History of the United Arab Emirates' by Dr. Mohammed Morsy Abdulla.
- 3rd Jun – 'Off-road in the Emirates' by Dariush Zandi.
- 17th Jun – 'Geology in the United Arab Emirates' by Sahib al Habshi.

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UAE Hunting Law

The Government of the United Arab Emirates and the individual emirates making up the UAE have introduced a number of laws and decrees since the state was established in 1971 to regulate and control hunting of animals and birds.

The key document, the text of which follows, is Federal Law No. 9 for 1983, which is reproduced here as a matter of record.

(Federal Decree-Law No. 9 for 1983) Regulating the Hunting of Birds and Animals

We, Zayed bin Sultan al Nahyan, President of the United Arab Emirates, Pursuant to the provisional Constitution, Federal Law No. 1 for 1972 concerning the competence of Ministers and Functions of Ministries and its amending laws, and in accordance with submissions made by the Minister of Interior and the Minister of Agriculture and Fisheries.

Hereby decree as follows:

Article 1

Hunting, gathering or destruction of the eggs of wild and sea birds of various kinds including doves, orioles and small birds, with the exception of cormorants, are hereby banned in the UAE.

Article 2

It is not permitted to hunt the following animals:

1. Deer of various kinds
2. Wild cows
3. Hares
4. Mastigures (spiny-tailed lizards)

Article 3

- A- Any one who violates the provisions of this Decree-Law shall be punishable with imprisonment for a period not exceeding six months and a fine ranging between a minimum of one thousand dirhams and a maximum of five thousand dirhams. In the event of recurrence, punishment shall be doubled.
- B- In all cases hunting gear, means of transport and any other tools or means used in committing the offence shall be confiscated.
- C- An accomplice shall be equally punishable with the same punishment as the principal doer, and shall further be punishable for attempting to commit any of the offences described herein by the same punishment prescribed for such offence.

Article 4

Any provisions inconsistent with the provisions of this Decree-Law hereby shall be revoked.

Article 5

This Decree-Law shall be published in the Official Gazette and shall become operative one month after its publication.

Zayed Bin Sultan Al Nahyan
President of the United Arab Emirates
Issued at the Presidential Palace, Abu Dhabi,
on 19th December, 1983.
Published in the UAE Official Gazette
No. 133, Year 13, December, 1983.

مرسوم بقانون اتحادي رقم (٩) لسنة ١٩٨٣ في شأن تنظيم صيد الطيور والحيوانات

نحن زايد بن سلطان آل نهيان، رئيس دولة الامارات العربية المتحدة.

بعد الاطلاع على الدستور المؤقت، وعلى القانون الاتحادي رقم (١) لسنة ١٩٧٢م، بشأن اختصاصات الوزارات وصلاحيات الوزراء، والقوانين المعدلة له، وبناء على ما عرضه وزير الداخلية والزراعة والثروة السمكية، وموافقة مجلس الوزراء، أصدرنا المرسوم بقانون الآتي:

المادة (١)

يحظر داخل الدولة صيد الطيور البرية والبحرية بمختلف أنواعها ومنها الحمام والصفار والعصافير، كما يحظر جمع بيضها أو اتلافه، ويستثنى من ذلك طائر اللوه.

المادة (٢)

- لا يجوز صيد الحيوانات الآتية:
- ١ - الظباء بجميع أنواعها.
 - ٢ - بقرة الوحش.
 - ٣ - الأرناب.
 - ٤ - الضب.

المادة (٣)

- أ - يعاقب كل من يخالف أحكام هذا المرسوم بقانون بالحبس مدة لا تزيد على ستة أشهر وبغرامة لا تقل عن ألف درهم ولا تزيد على خمسة آلاف درهم وتضاعف العقوبة في حالة العود.
- ب - وفي جميع الأحوال يحكم بمصادرة وسائل الصيد والركوب وأي أدوات أو وسائل أخرى استعملت في ارتكاب الجريمة.
- ج - ويعاقب الشريك بذات العقوبات المقررة للفاعل الأصلي كما يعاقب على الشروع في ارتكاب أية جريمة من الجرائم المنصوص عليها في هذا المرسوم بقانون بذات العقوبة المقررة للجريمة ذاتها.

المادة (٤)

يلغى كل نص يخالف أحكام هذا المرسوم بقانون.

المادة (٥)

ينشر هذا المرسوم بقانون في الجريدة الرسمية ويعمل به بعد مضي شهر من تاريخ نشره.

زايد بن سلطان آل نهيان
رئيس دولة الامارات العربية المتحدة

مذكّرة

خطط مسح الآثار

قام علماء الآثار بأعمال ضخمة في هذا المجال خلال الخمسة وعشرون عاماً الماضية، حيث شملت «عمليات» البحث والتنقيب مناطق عدة من دولة الامارات العربية المتحدة.

وتلقت جزر الدولة والتي يقع معظمها في إمارة أبوظبي القليل من الاهتمام بهذا الخصوص حيث قام الدكتور وليد ياسين التكريتي من دائرة السياحة والآثار في العين وقبل عدة سنوات ببعض أعمال التنقيب في منطقة رأس قنطرة الساحلية.

واقتصرت امكانية الوصول إلى هذا الموقع في البداية على أوقات أدنى درجات الجزر عند انحسار مياه البحر، وتبدل الحال وأصبح الوصول إلى الموقع سهلاً وفي أي وقت وذلك بعد الانتهاء من حفر القناة المؤدية إلى الموقع قبل سنوات قليلة. وبناء على مبادرة من راعي الجمعية، الشيخ نهيان بن مبارك آل نهيان وبموافقة ودعم صاحب السمو الشيخ زايد بن سلطان آل نهيان سيتم ولأول مرة القيام بمسح أثري لأكبر جزيرتين في دولة الامارات وهما صير بنى ياس ودلماء، وذلك مطلع العام القادم.

وسيتم تركيز عمليات المسح والتنقيب والتي سوف تجري بقيادة د. جيوفري كنج من جامعة لندن وبدعم من جمعية الدراسات العربية على الفترة الإسلامية وكانت بعثة من جمعية الامارات للتاريخ الطبيعي قد قامت بزيارة صير بنى ياس في مايو من العام الماضي حيث تمكنت البعثة من جمع بعض القطع الفخارية يرجح إنها تعود إلى القرن الأول قبل الميلاد بينما تشير الوثائق التاريخية عن العصر الإسلامي الأول إلى وجود آثار نستورية كنسية في دلماء قبل مجيء الإسلام.

مسوحات صير بنى ياس

قام أعضاء الجمعية بزيارة صير بنى ياس عدة مرات في مطلع صيف عام ١٩٩١م، وذلك بغرض اعداد تقرير أولي عن التاريخ، والتاريخ الطبيعي وآثار الجزيرة.

وتم اعداد التقرير بتفويض من مكتب اللواء الشيخ محمد بن زايد آل نهيان، واشتملت أعمال المسح على الحياة النباتية والثدييات والطيور والحشرات والزواحف والآثار والتاريخ والبيئة الساحلية وبمعاونة

ودعم من سعادة غسان الغصين ممثل صاحب السمو رئيس الدولة في الجزيرة، بدأ العمل في جمع المواد والمعلومات المتعلقة ببرنامج التشجير في الجزيرة تنفيذاً لتوجيهات صاحب السمو الشيخ زايد إلى جانب المعلومات المتعلقة بالنباتات والطيور والثدييات.

كما قامت شركة ادكو، بجهد مشكور في المساعدة في عمليات المسح حيث أوفدت الشركة أحد الجيولوجيين التابعين لها وهو عضو أيضاً بالجمعية، وذلك للقيام ولأول مرة بإعداد دراسة جيولوجية عن الجزيرة.

هناك خطط أيضاً لزيارة الجزيرة ودراسة هجرة الطيور في فصل الخريف ودراسة صخور الميولثين والتي سوف يقوم بها بيتر وايبرو من المتحف البريطاني (التاريخ الطبيعي) إلى جانب مسح أثري سيقوم بإجرائه الدكتور / جيوفري كنج من جامعة لندن. وسيتم نشر نص تقرير الجمعية في إحدى الأعداد القادمة لمجلة «تريببولس».

معرض الحفريات

سيقام معرض لحفريات الميولثين من المنطقة الغربية بإمارة أبوظبي بالمتحف البريطاني «التاريخ الطبيعي» بلندن وذلك في ديسمبر ١٩٩١م. (يوجد تقرير عن الحفريات في مجلة «تريببولس» العدد ١٠١ - أبريل ١٩٩١م - صفحة ٤ - ٩).

المعرض الذي سيقام تحت شعار «حفريات المناطق الحارة» برعاية كل من:

— بريتيش بتروليوم للإستكشافات.

— شركة بترول أبوظبي الوطنية «أدنوك».

— شركة أبوظبي للعمليات البرية «ادكو»

وسيقوم سير ريتشارد اتنبورف بالتعليق على فيلم فيديو بدعم من جامعة الامارات، والشكر للرئيس الأعلى لجامعة الامارات وراعي جمعية الامارات للتاريخ الطبيعي الشيخ نهيان بن مبارك آل نهيان.

وستعرض هذه الحفريات قرابة العام في لندن، ومن المقرر أن تنقل بعد ذلك إلى متحف العين بالامارات العربية المتحدة.

بيتر هيلير

المسجد العثماني في مدينة البدية

بقلم: الدكتور فالح حنظل

التي يقع فيها المسجد أن عمره لا يتعدى الثلاثمائة سنة تقريباً، واستخدم في بناء المسجد مواد بناء محلية، فقد بني من الحجارة الكبيرة والصغيرة، المسماه (اليازلت) واستعمل في بعضها الطين المحروق (الصاروج).

يقع المسجد في باحة مفتوحة من سور مبني من الحجارة الصلدة ربط بينها بالطين العادي والتبن، لا يتجاوز ارتفاعه المتر ونصف المتر وهو على شكل مستطيل، أما بناء المسجد فعلى شكل مربع ضلعه (١٥) ياردة وله باب واحد وأربع قباب مبنية بشكل جميل، وكل قبة مكونة أصلاً من ثلاث قباب مركبة الواحدة فوق الأخرى، فهناك قاعدة القبة الكبيرة وعليها قبة أصغر ثم ثالثة أكثر صغراً وذات رأس دقيق وهذه القباب متجاورة لا تبعد الواحدة عن الأخرى كثيراً.

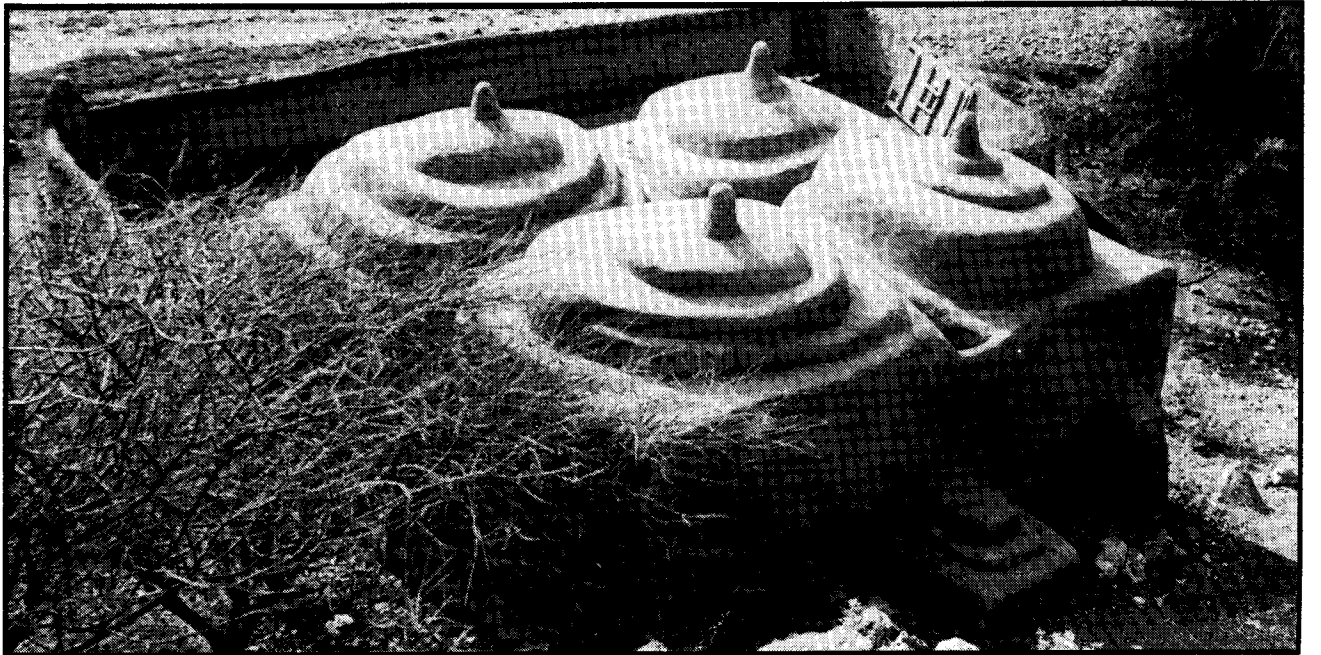
وفي داخل المسجد يقوم سقفه على قاعدة مكونة من عمود كبير يتوسط البناء وتستند إلى قمة هذا العمود أنس وقواعد السقف الذي يحمل القباب بنظام هندسي بديع ودقيق.

محراب المسجد مكون من فسحة بطول ياردتين وعرض ياردة واحدة، أما المنبر فمكون من سلم به ثلاث درجات إلى أعلى، وحيطان المسجد يوجد عليها بعض آثار النقوش والزخرفة وفي أعلى جدرانها الداخلية وقد سقط بعضها بسبب أعمال الصيانة الغير علمية ودقيقة ويشبه بعض هذه الزخارف أسنان المنشار. وتوجد بها رفوف وفتحات يدخل بها النور، وفي أعلى الجبل الصغير الذي يقع المسجد في حافظة يوجد برجيل يربط بينهما سور لم يبق منه إلا الأساس فقط ومن المتوقع أنهما لقلعة شيدت لحماية المنطقة من هجوم الأعداء.

على الطريق الساحلي بين مدينتي دبا وخورفكان المطلتين على البحر العربي وبالقرب من تل حجري. جبل صغير. يقع المسجد الذي يسميه الناس باسم (المسجد العثماني) أو مسجد البدية نسبة إلى مدينة البدية التي يقع فيها المسجد، ويتوسط قراها المحيطة وهي (الفهي، الجبيل، حقل، طوى بن سعادة، الحارة، الطلاع) وهذه القرى كانت ومازالت مأهولة بالسكان الذين كانوا يستعملون المسجد لعهد قريب (يصلون به الجمعة) وهذه المدينة هي إحدى مدن إمارة الفجيرة في دولة الإمارات العربية المتحدة، ويعتبر هذا المسجد أقدم مسجد في الدولة. ويختلف عن بقية المساجد القديمة في المنطقة كونه مقبب بربع قباب غير متساوية يحملهم عمود في الوسط وهو العمود الرئيسي فيما توجد أعمدة جانبية صغيرة أخرى، ولا توجد به مذنة. فهو بذلك ذو شكل غريب ونظراً لأن اسمه (المسجد العثماني) ظن الناس أن عمارته عثمانية (تركية) ولكن الذي بناه رجل من الخليج، ولم يبنيه العثمانيون، لأنه حسب اتصالاتنا ببعض الجهات في منطقة الخليج اتضح لنا أن هنالك له مماثل تشبهه في عمارته، منها الجامع القديم في الدوحة، إلا أن لذلك المسجد منارة وهذا ليس له منارة، ومسجد آخر في سلطنة عمان وهو كبير الحجم وقد أعاد العمانيون ترميمه.

وحسب اعتقادنا بأن هذين الدليلين فيهما الكفاية كي يثبت أن عمارة المسجد عثمانية تركية. إذن ما هو عمر المسجد وما هو تاريخه ومن أي شيء بُني؟

لم نستطع كجهة مسئولة عن هذا المكان أن نحدد عمر هذا المسجد إلا أن الشائع عند عامة الناس وبالذات أهل المدينة



* مسجد قديم في البدية *

تريپلوس



جمعية الإمارات للتاريخ الطبيعي

أكتوبر ١٩٩١ م

العدد: (١,٢)

