News, Reviews and Bibliography

ENHG Conservation Fund grants

For several years, the Emirates Natural History Group has run a Conservation and Research Fund, which makes small grants for projects considered to be of value in terms of promoting the Group's objectives of studying various aspects of natural history and archaeology, with particular reference to the United Arab Emirates. The Fund is funded from membership subscriptions and from donations by the Group's Corporate Sponsors. Three such grants were made in 2008 and 2009.

During 2008, a grant of 500 pounds sterling was made towards the cost of a pilot study into late pre-Islamic / early Islamic 'torpedo jars', manufactured in Mesopotamia and exported widely to sites in the Arabian Gulf, including the United Arab Emirates, and further beyond, along the coasts of Oman, India, Sir Lanka, Yemen and East Africa. The 'torpedo jars' are thought originally to have been used for the storage and transport of wine, and are lined with bitumen.

The pilot study will involve petrographic analysis of thin sections taken from some fragments of 'torpedo jars' and will seek to determine where the jars were manufactured. It will also involve the carrying out of provenance analysis of the associated bitumen.

The objective is to identify patterns of production, consumption and maritime trade in the years preceding and following the coming of Islam.

The study is being undertaken under the direction of Dr. Robert Carter of Oxford Brookes University.

Subject to the results of the pilot study, Dr. Carter and his colleagues plan to seek further funding for a major study covering 'torpedo jars' from throughout the region, including the Emirates.

During 2009, a grant of US\$3000 was made to the Yemeni Leopard Recovery Programme. Yemen is believed to be one of only two countries, along with Oman, in Arabia where a viable population of leopards may still exist in the wild. The species has not been seen in Jordan since 1967 or in the UAE since 2001, and probably only survives in very small numbers in Saudi Arabia.

The project involves the training at the Jebel Samhan Nature Reserve in Dhofar, Oman of the YLRP coordinator and five Yemeni staff in specific leopard field research methodologies, with other objectives including a preliminary assessment of suitable areas in Yemen for further survey work and to demonstrate Yemen's continued interest in the development of the Al Hawf – Dhofar Transboundary Conservation Area (TBCA) in Eastern Yemen/Western Oman and advance the process of TBCA formation.

The second grant for 2009, for an amount of 500 pounds sterling, was made to an archaeological PhD student from France, Sabrina Righetti, to enable her to visit the National Museum of Ra's al-Khaimah to study its collection of Wadi Suq period (middle Bronze Age) pottery and stone vessels in the museum's collection. Her PhD is focussed on the Wadi Suq period in both the UAE and Oman, and will, for the first time, compare the

material from both countries. She is expected to take up her grant in late 2010.

This grant was made in association with the Society for Arabian Studies, to whom the original grant application was made.

As part of plans to increase the number of applications received, the ENHG has also entered into a partnership with the Orntihological Society of the Middle East, the Caucasus and Central Asia, OSME, to supplement its own grant programme.

Previous grants from the Conservation Fund have included support for archaeological work at Abu Dhabi International Airport, at Muwailah, in Sharjah, and at the Portuguese-period fort at Bidiya, in Fujairah.

Winners of ENHG Awards

Since the early 1990s, the Emirates Natural History Group has presented two annual awards, The Sheikh Mubarak bin Mohammed Prize for Natural History, named after the father of the Group Patron, Sheikh Nahyan bin Mubarak Al Nahyan, and the Bish Brown Award, named after J.N.B. 'Bish' Brown, the founder of the Group. The Sheikh Mubarak Prize is given to a person considered to have made a substantial contribution, through original research, publication or other achievement, to study and conservation of the UAE's archaeology, history or natural history. The 'Bish' Brown Award is presented to a person who is considered to have made a major contribution, through lectures, organisation of field trips or other means to the promotion of public awareness about the UAE's archaeology or natural history.

Winners of recent awards were as follows:

Sheikh Mubarak Prize

2007: Gary Feulner, for contributions to knowledge of the UAE's geology and natural history

2008: Dr. Mark Beech, for contributions to knowledge of the UAE's archaeology

'Bish' Brown Award

2007: Robert W. (Bob) Reimer, for digitising and making available on the Al Ain ENHG website (www.enhg.org) all back copies of *Tribulus* and for popularising the study of the UAE's dragonflies.

2008: Major Ali Al Suwaidi, founder of the Emirates Marine Environment Group.

The UAE's 'dhubs' - now a single species again

To sort out taxonomic confusion (or maybe to add to it!), Leptien's dhub *Uromastyx leptieni* has now been downgraded from full species status to a subspecies of *U. aegyptia* in a paper by Wilms *et. al.* (2009) UAE dhubs are therefore two sub-species, rather than being two separate species.

Uromastyx aegyptia microlepis is found in western Abu Dhabi, south and west of a line from approximately Abu Dhabi island to Al Wigan.

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U. aegyptia leptieni is the dhub in the north and east of the UAE. While it remains a regional Oman and UAE endemic form, it is now at subspecies rather than species level.

Wilms, T., Böhme, W., Wagner, P., Lutzmann, N. & Schmitz, A. (2009). 'On the phylogeny of the genus Uromastyx Merrem, 1820 (Reptilia: Squamata: Agamidae: Uromastycinae) – Resurrection of the genus Saara Gray, 1845.' **Bonner zoologische Beiträge, Bonn 56(1/2)**:55-99.

Drew Gardner

Soldier's Orchid (*Zeuxine strateumatica*) takes the high ground

On 3 March 2009, while looking for migrant birds in the grounds of the Mercure Hotel on Jebel Hafit, the author spotted a familiar-looking sight in the well-watered lower lawn: Soldier's Orchids. This species, which originates from Asia, was first noted in the UAE on the outskirts of Al Ain at Al Maqam in February 2006. (**Tribulus 16.1**:19). Although still to be found at the original location, this is the first report away from that site. The altitude at the Mercure Hotel is c1200m.

Up to 50 clumps of the orchid were seen in the lawn, in bloom, but by the next visit a couple of weeks later they had all disappeared. Obviously they were imported here, most likely unknowingly in soil or fertiliser.

Close-up they are quite striking short-lived miniature beauties, welcome in any lawn.

Dave Clark

Dead Bryde's whale

A dead whale, identified as *Balaenoptera edeni*, (Bryde's whale) was recovered by a combined team of Environment Agency- Abu Dhabi, EAD, and Critical National Infrastructure Authority, CNIA, personnel about four nautical miles west of the Umm Al Dalkh oil field on 16 April 2009.

The whale, which measured about 9 metres in length, was partially decomposed when found indicating that it may have been dead for at least 4 to 5 weeks. The fluke (or tail) was found to be lacerated, probably by a large boat propeller and may have been the cause of death.

Some taxonomists believe that there may be 3-4 distinctive forms of Bryde's whale populations. In the waters of the Arabian Gulf, Gulf of Oman and Northern Arabian Sea, two forms or subspecies - an offshore and a coastal form - are thought to exist. The coastal, inshore type is perhaps entirely resident.

Belonging to the family Balaenopteridae together with Humpback whale and Blue whale, the species, which is also commonly known as Tropical whale reflecting its preference for tropical waters and warm temperate waters was given its common name, Bryde's whale, in honor of Norwegian consul Johan Bryde, who built the first whaling factory in Durban, South Africa.

More killer whales in the Gulf



Photograph by Khaled Mohammed Saleh Al Rumaithi. (Courtesy: EAD)

Following on from the late December 2007 sighting of killer whales *Orcinus orca* near Ra's al-Khaimah (**Tribulus 17**: 103) a further sighting was made close to Abu Dhabi on 30th May 2008.

The sighting was made by a group of young Emiratis, one of whom, Khaled Al Rumaithi, reported it to the Environment Agency – Abu Dhabi, EAD, noting: "There were about seven whales swimming in two groups. One of the whales was almost 10 m in length and had its calf close by. We didn't feel any danger from them and they were a beautiful sight that we will never forget."

Although first recorded in the UAE only recently, this sighting and that in Ra's al-Khaimah suggest that there may be a family group may have taken up residence in the UAE's Gulf waters, or, at least, has become frequent visitors.

Source: EAD press release

Agreement on UAE bird records

The Environment Agency – Abu Dhabi (EAD) and the Emirates Bird Records Committee (EBRC) have signed a Memorandum of Understanding that will give EAD access to nearly a quarter of a million reports of wild birds seen in the United Arab Emirates since the late 1960s.

The MoU, which was signed by EAD Secretary General Majid Al Mansouri, Simon Aspinall, Chairman of the EBRC, and Tommy Pedersen, Secretary of the EBRC, provides for the entire EBRC database of records to be integrated into the EAD environmental database, covering both Abu Dhabi and the other Emirates.

The EBRC, founded over 15 years ago, collects data from both visiting and resident birdwatchers throughout the country, and also researches historical data going back to before the formation of the UAE federation in 1971. It also assesses reports of rare birds seen in the country, in accordance with prevailing international standards, and maintains the UAE's Bird Species List, now standing at over 440 species.

Under the agreement, EAD'S records of wild birds will be integrated into the EBRC database, providing EAD with one of the most extensive national databases of wild bird records in the Arabian Peninsula.

"The Agency has a policy of building effective partnerships with all those bodies that share its vision for the conservation and protection of the UAE's environment and wildlife," says Al Mansouri. "The EBRC and its members and contributors have worked over many years to collect and maintain this important database, which will provide us with valuable information to assess the changing patterns of wild bird populations throughout the country.

Al Mansouri noted that EBRC members and supporters have also provided valuable help to EAD in the monitoring of wild birds as part of the National Avian Flu monitoring campaign.

EBRC Chairman Simon Aspinall said, "We have wanted for many years to have our database housed effectively for the long-term by an appropriate Government agency. EAD is the ideal partner for the EBRC, and I am delighted that we have now been able to conclude this agreement."

Sources: EAD press release, EBRC

Plans to extend Al Yasat reserve

The Environment Agency – Abu Dhabi, EAD, is planning to expand the area of the Al Yasat Marine Protected Area. The preserve, currently measuring 428 square kilometres, is focused on the Yasat archipelago, a group of four islands in western Abu Dhabi, and their surrounding waters. Endangered marine turtles live, breed and forage in the area, as do dugongs, also endangered, with around 20 per cent of the UAE's 3,000 strong dugong population using the area.

The law, if enacted in full, will expand the area to nearly 3,000 sq. km., including seven more islands and several smaller islets. Several of the islands have been subject to changed land use and increased human activities that have affected the nesting of turtles as well as breeding by endangered bird species, including the Socotra cormorant and the sooty falcon.

The EAD plan to set aside two core areas in the expanded reserve, with access restricted except for EAD staff and other scientists. Other zones may allow traditional fishing or other recreational activities.

Source: The National

http://www.thenational.ae/apps/pbcs.dll/article?AID=/20090326/NATIONAL/679204911

http://www.thenational.ae/apps/pbcs.dll/article?AID=/20090721 /NATIONAL/707209848

Flamingos breed near Musaffah

A major new breeding colony of Greater Flamingos *Phoenicopterus roseus* was found just west of Musaffah in spring 2009 by staff of the Environment Agency – Abu Dhabi, EAD. The colony, which included two parts, one on a sand-bank and the other on the nearby shoreline, is within the Bu Syayif Marine Protected Area, managed by EAD and was found during a routine monitoring programme of the coastal zone.

224 active nests were counted on the sand-bank, with

the total nest count for the colony being 1,954, many of which had already been used by the time the discovery was made, although the majority appeared to have been abandoned after storm high tides. More than 800 chicks were counted, as well as a total of over 18,000 adult birds, a record count for the UAE. Flamingo numbers at the colony remained high during the summer, with over 10,000 being counted, according to an EAD press release.

The colony is the largest ever recorded in the Arabian Gulf. Apart from a 1922 record of breeding in Kuwait, the only other records of greater flamingo breeding in the Gulf are from the Emirate of Abu Dhabi, with breeding having taken place twice, in 1993 and 1998/1999, at the Al Wathba Wetland Reserve, inland from Musaffah, and once at a privately-owned man-made lake near Shahama, in 2007, where breeding may also have taken place in previous years. There have also been reports of successful nesting in 2006 at Qarn al-Aysh, on the coast between Abu Dhabi and Jebel Dhanna.

Sources:

EAD Press Release, Aspinall, S. (in press). Breeding Birds of the United Arab Emirates. EAD, Abu Dhabi

Caracals shot



Photograph by Dr. Richard Hornby.

Despite the existence of legislation on wildlife protection, the continued hunting of the threatened caracal (*Caracal caracal*) in the mountains of the northern emirates was proven in February 2009 by the discovery near Tawiyeen, on the border between Fujairah and Ra's al-Khaimah, of a tree with the bodies of nine dead animals hanging from it. The discovery was made by former ENHG Chairman Dr. Richard Hornby. Some of the animals may have been killed up to two years previously, judging by the state of the bodies, with others as recently as January 2009. A further report of two caracal carcases being seen near the village of Silhi, was noted in an early 2009 issue of *The Gazelle*, newsletter of the Dubai Natural History Group (Vol. 24, no.2, February 2009).

While the discovery is an indication that caracals still survive in the UAE mountains, it also shows that local residents are still breaking the law, presumably to protect their livestock.

"People think there is no value in these animals," according to Dr Saif al Ghais, executive director of the Environment Protection and Development Authority of Ra's al-Khaimah. "They do not understand biodiversity ... They must feel these animals are their asset."

Source: The National

http://www.thenational.ae/apps/pbcs.dll/article?AID=/200 90318/NATIONAL/855511822

Wadi Wurrayah protected

Wadi Wurrayah, in Fujairah, was accorded formal protection as a wildlife reserve in a decree issued by the Ruler of Fujairah, HH Sheikh Hamad bin Mohammed Al Sharqi, in early 2009.

The move follows a detailed, three year, study of the Wadi by the Emirates Wildlife Society – WWF (EWS-WWF) and the environmental team of Fujairah Municipality.

Covering an area of 169 sq.km. between the towns of Masafi, Khor Fakkan and Bidiyah, Wadi Wurrayah is home to more than 100 species of mammals, birds, reptiles and amphibians as well as more than 300 species of plants. Key mammal species include the caracal (*Caracal caracal*) and the Arabian tahr (*Arabitragus jayakari*), both endangered, while it is believed possible that Arabian leopard (*Panthera pardus nimr*) may also survive in the vicinity, although this is unproven. It also has the UAE's only year-round waterfall.

A management plan prepared by EWS-WWF has been submitted to the Fujairah Municipality while extensive consultations are being held with local residents, who are to be represented on a management board for the reserve. The plan also calls for local residents to be employed as rangers. The long-term objective is to ensure that international standards established by WWF as well as by the International Union for Conservation of Nature, IUCN, and the United Nations Scientific and Cultural Organisation, UNESCO, are implemented. While all hunting will be illegal, traditional activities such as the collection of honey and medicinal plants will be permitted.

The EWS-WWF work in Wadi Wurrayah was primarily funded by HSBC Middle East.

Sources: EWS-WWF press release

http://uae.panda.org/news/?163161/Arabian-Tahr-gets-royal-protection

The National

http://www.thenational.ae/apps/pbcs.dll/article?AID=/200 90428/PAGETHREE/704279804

UAE, UK take lead in new raptor protection agreement

In late October 2008, the Environment Agency – Abu Dhabi, EAD, and Britain's Department of Food, Rural Affairs and Agriculture, DEFRA,, along with the Convention on Migratory Species, CMS, part of the UN Environment Programme, organised a major international conference in Abu Dhabi to finalise a new agreement to conserve and protect migratory birds of prey in Africa, Europe and Asia. 77 species are involved, including eagles, falcons, harriers, kites and buzzards.

The meeting followed one in 2007 at Loch Lomond in Scotland, also jointly sponsored by EAD, DEFRA and the CMS.

In 2005, an independent study commissioned by DEFRA found that more than fifty percent of the species likely to be covered by the agreement were threatened either at the global or regional level, with some showing signs of rapid or long-term population decline. Many of the threats to the survival of these species are well-known, such as habitat loss and illegal hunting and shooting, but there are other factors, too, which the planned agreement will address, such as the impact of climate change. Migratory birds of prey include some of the most threatened species worldwide and their populations are excellent indicators of the state of the wider environment.

Over 20 countries, including the UAE and Britain, were among initial signatories to the agreement. A secretariat for the new MoU is to be housed at EAD offices in Abu Dhabi.

Sources: EAD press release, news reports.

Golden jackal in Qatar

A report in the Newsletter No.1 for 2008-2009 of the Qatar Natural History Group (October 2008) noted the re-discovery of Golden jackal *Canis aureus*, also known as common jackal, in Qatar. The last reported sighting had been in the 1950s (Gillespie 2008).

The sighting was made in April 2008 by Bo Madsen, director of a team of Danish archaeologists working at the Ra's Abrouq peninsula, who said that "he got a good view of the animal and was quite certain it was a jackal and not a 'wild' dog. A Sudanese attendant living at the Ra's Abrouq oasis also reported that he had seen jackals on three previous occasions. A survey of the whole peninsula by the Danes found no further animals but did identify "burrows in the limestone jebel which were too large to be those of foxes."

The species has a wide range, stretching from East Africa and North Africa to south-eastern Europe, the Middle East, Iran, the Indian sub-continent, Myanmar and Thailand, and is present in Saudi Arabia, including the Eastern province, north of Qatar.

The Qatar animal is presumed to have been of the Arabian sub-species, Arabian Golden Jackal (*Canis aureus hadramauticus* Noack, 1896). There are three other sub-species recognised from the region, Syrian Golden Jackal (*Canis aureus syriacus* Hemprich and Ehrenberg, 1833), Egyptian Golden Jackal (*Canis aureus lupaster* Hemprich and Ehrenberg, 1833) and Palestine Golden Jackal (*Canis aureus palaestina* Khalaf, 2008)

There are no records from the UAE, although one was claimed to have been caught "in the Abu Dhabi/Qatar border area" (presumably well to the west of the UAE's current land borders (Gross 1987), and it is not known ever to have been present in the Emirates.

However, the ratel or honey badger *Mellivora* capensis was only first formally recorded in the UAE in 2005, near Ruwais, and there remains the possibility that this large, but shy, canid may be present in the far west of the UAE.

References:

Gillespie, F. (2008). 'Extinct' mammal still survives in Qatar. Qatar Natural History Group Newsletter No. 1 (2008-2009 season). pp. 9-10.

Gross, C. (1987). Mammals of the Southern Gulf. Motivate Publishing, Dubai.

http://www.canids.org/species/Canis_aureus.htm

Peter Hellyer

Obituaries

J.A.D. (Adrian) Chapman

Adrian Chapman, one of the founders of birdwatching in the Emirates, died in Manila, Philippines, on 14th September 2009. He was 67.

A seaman for 16 years before joining Lloyds Register of Shipping as a surveyor (Ship's Inspector), Adrian first came to live in the UAE in 1981, when posted to its Dubai office. He already knew the country's offshore waters well, having joined and left ships offshore between 1968 and 1974. He quickly linked up with the small number of other birdwatchers in Dubai, including Mike West, Gerry Ricks and Colin Richardson, and in 1985 became, with them, one of the founders of the Dubai Natural History Group. Adrian was the first keeper of regular birding records in Dubai, but gave up the task in 1986, due to pressure of work, his place being taken by Colin Richardson.

From Dubai, Adrian moved in November 1988 to Abu Dhabi, where he stayed until 1992. He was then posted by Lloyds to Hong Kong for two years, and then to Gdansk in Poland until October 1997 when he returned to work again in the UAE, based until Dubai, until he retired in May 2000.

Throughout his period in the UAE, Adrian's extensive experience proved to be of enormous value. Colin, later UAE Bird Recorder and one of the founders of the Emirates Bird Records Committee, recalls "Adrian was great company, and very understanding, especially during my inexperienced early birding years.

He guided me through several identification minefields, such as separating ducks in non-breeding plumage and identifying warblers on call and by shape."

His job permitted him to gain access to the harbour-master's boat at Dubai's Port Rashid, allowing trips with birdwatching colleagues that often involved a few scrapes with authority, including one occasion when they approached a bit too closely to an American navy ship in the dry dock. He was also able to visit far-flung areas like the oil terminal at Jebel Dhanna, in Western Abu Dhabi, and some of the offshore oil-terminal islands, these visits always producing useful new records for the expanding national database.

A 'no nonsense' Yorkshireman, Adrian was always confident in his identification skills, this leading on occasion to lively discussions with those assessing his records. His Pied Flycatcher, seen in Dubai's Safa Park in March 1985, was the first record for the UAE, as well as for Arabia, and was questioned by experts in the United Kingdom, but Adrian would have none of it. A Pied Flycatcher it was, and it was eventually accepted as such.

Two other species, a Wedge-tailed Shearwater, seen in 1986 off Khor Fakkan and a Pechora Pipit, seen with his friend and colleague Dave Robinson in 1988 west of Abu Dhabi, no longer appear on the UAE list, since his descriptions have subsequently been deemed to be insufficient to rule out other species, but, like most good birders, Adrian was prepared to accept the Committee's decision. He simply noted, in an e-mail in 2006 to the Emirates Bird Records Committee about the shearwater: "My description may not have been brilliant but I was certain of this record. No-one seems to have considered that I was a seaman for 16 years before I joined Lloyds Register ... and have a wealth of seabird watching experience." No-one else has yet seen either species in the Emirates.

A review of the 440+ species on the UAE's database, however, still turns up his name at frequent intervals. Besides Pied Flycatcher, he was, for example, the first person to see Hen Harrier, Golden Eagle, Black-winged Pratincole, Icterine Warbler and Tree Sparrow. The Temminck's Lark he saw in Jumeirah beach in 1982 remains, 28 years later, the only record of the species in the country. He was the first UAE birdwatcher to reach, in 1990, a total of 300 species on his country list. His last addition, bringing him to 333, was a Lesser White-fronted Goose seen in Al Ain in 2007, on one of his regular trips back to the country to visit his two daughters, who have taken up employment in Dubai and Abu Dhabi.

Adrian was a disciplined note-taker, providing a monthly list of records for many years which are now of great historic and scientific value. In 1988, he collaborated with Colin Richardson on a paper entitled Bird Migration Patterns through Dubai 1984 - 1988. Published in the journal *Sandgrouse* it was compiled from data collected from over 500 visits to Safa Park and Khor Dubai and broke new ground for bird study in the Emirates. In 1991, he wrote two short papers for *Tribulus* on the birds of Dalma and other offshore islands.

This was followed in 1992 by the best-selling *Birds of the Southern Gulf*, co-authored with Dave Robinson (and later entitled *Birds of Southern Arabia* – the publisher

changed the title in the hope of attracting a wider audience!).

Shortly before he retired, Adrian was diagnosed with advanced kidney cancer, but bravely fought through the operations and treatment that followed, then retiring to the Philippines with his second wife, Edie. There he continued to watch birds, proving to be a magnificent host for those of his birding friends from the Emirates who made the long journey to see him before the onset of his last illness.

Great company and an inspired and patient teacher for all those who sought his help, Adrian Chapman helped to lay the groundwork for today's knowledge of the birds of the Emirates.

Peter Hellyer and Colin Richardson

Alexander 'Sandy' Fowler

(The following note is taken from the December 2009 issue of 'The Gazelle', monthly newsletter of the Dubai Natural History Group).

Dr. Alexander P. "Sandy" Fowler died in Dubai in late November, from complications associated with the treatment of an aggressive lung tumour. Sandy and his wife Beryl Comar discovered and joined the DNHG soon after they came to Dubai some 20 years ago. Both served on the DNHG Committee during the 1990s, when Sandy was Treasurer.

Although he was always modest and self-effacing, we quickly learned that Sandy would never say no to a request to help out. For many years he also served as the DNHG's Seashell Recorder and he earned the ENHG's 'Bish' Brown Award in 2005 for his *Rough Sheller's Guide to the UAE*. He donated attractive and diverse collections of UAE seashells to both ERWDA (now EAD) and the Jumairah English Speaking School, our former lecture venue.

Sandy's activities took him beachcombing at many UAE localities, and also into the desert at Sweihan, Liwa and in the Western Region, still quite remote in the 1990s.

Sandy retired from his medical practice in late 2004 and celebrated by climbing Mount Kinabalu (on Borneo) and Mount Kilimanjaro (a trip he shared with us at Members Night in 2005) before settling down to somewhat more sedate touring and trekking in, inter alia, Mexico, Spain and Cyprus. Sandy and Beryl were trekking in the mountains in Spain as recently as this summer and it is difficult not to feel that his death was one of those that came too soon.

Gary Feulner

Michael Kyrle-Pope

Rear-Admiral Michael Kyrle-Pope, formerly Senior (British) Naval Officer – Persian Gulf, (1962-1965) and general manager, Middle East Navigation Aids Service, MENAS (1971-1977), died on 14 September 2008. He was born on 1 October 1916. While his jobs in the Gulf and his extensive career in the British Royal Navy from 1934-1969, including several unsuccessful attempts to

escape while a World War Two prisoner-of-war in Italy, are of little relevance to *Tribulus*, Kyrle-Pope deserves mention here because of his contributions to the study of birds in the Arabian Gulf.

His tasks as the general manager of MENAS, which managed buoys and beacons for shipping in the Gulf, included the erection of Decca radio-fixing chains, one of which was located on the UAE island of Qarnein. An avid birdwatcher, Kyrle-Pope was one of the first to recognise the importance of the UAE's offshore islands for nesting seabirds, and, as noted in his Obituary in 'The Times' of London, "his name could be found footnoted twenty years later in such scholarly papers as a study of the conservation of the white-cheeked tern and bridled tern populations of Qarnein island, north of Abu Dhabi (now an important World Wide Fund for Nature site."

Sadly, his field records and notebooks have not so far been traced – they would provide valuable data on the bird population of Abu Dhabi's islands prior to recent development.

Source: Obituary in 'The Times'

http://www.timesonline.co.uk/tol/comment/obituaries/article4811555.ece?token=null&offset=12&page=2

Peter Hellyer

Book Reviews

Building on Desert Tides. Ronald Hawker. WIT Press, Southampton, UK & Billerica, MA, USA. 2008. ISBN: 978-1-84564-135-1. www.witpress.com 236 pp.

For the visitor to the modern Arabian Gulf and the casual observer alike, it is far too easy to dismiss the region as devoid of a notable history before the discovery of oil. In the contemporary population centres like Abu Dhabi, Dubai, Doha, and Riyadh, buildings and artefacts from even the first half of the twentieth century are scarce, and design references to regional traditions are startlingly rare. The natural assumption is that there is no tradition to speak of — but, like most natural assumptions, this one is egregiously wrong. Indeed, in the last decade, after the massive physical and commercial development of the modern Gulf states, numerous scholars have begun to uncover and display the richness of the archaeological, sociological, artistic, and humanistic traditions indigenous to the Arabian Gulf. While these diverse academic disciplines approach the subject from different angles and with different techniques, all reach the same conclusion: the Gulf has always been a vital participant in the major trends of history and has evolved its own unique and sophisticated traditions.

Ronald Hawker's ambitious new book, *Building on Desert Tides* (WIT Press, 2008), mostly succeeds in explaining this history by clearly demonstrating the evidence upon which his argument is based, and by elucidating the contexts that have driven the development of traditional architecture — and the domestic crafts associated with buildings — in the

Arabian Gulf. His argument rests comfortably upon a brief but satisfying historical survey of the region from the Bronze Age to the Twentieth Century. Upon this foundation, Hawker charts the combined influences of trade, tribal politics, and geography on the patterns of indigenous architecture and craftwork in the Gulf. This alone is an interesting study, particularly as it is charmingly illustrated with hundreds of more-or-less relevant photographs and diagrams, and peppered with personal as well as archival anecdotes. But Hawker goes beyond historical summary to posit a larger narrative: that native constructions in the Gulf are integral to the larger story of Near Eastern architectural history, and that the trajectory of Gulf history is a tidy arc from the prehistoric to the present. This is an intriguing proposal, but it may risk conflating the relative diversity within the regional traditions, and it feels slightly too teleological, as if the Gulf has always deserved the respect, influence, and finely-parsed national identities it presently has. Nonetheless, the book carefully and convincingly describes and interprets the region's architecture anthropologically, archeologically, and sociologically. What emerges is the conclusion that the Arabian Gulf has always been — as it is today - part of a broad, tradebased exchange of people, ideas, techniques, and influences.

The real strength of *Building on Desert Tides* derives from its careful scholarship and its balance between broad generalisations and precise examples. Hawker's compendious knowledge of the region and its history makes for fascinating reading: on nearly every page there are both references to established scholarly works on the region and original insights. Consistently, Hawker's broad inclusiveness is apparent and he rigorously avoids the common fracture between Arabian and Persian/Iranian cultural history. Instead, his examples are drawn liberally from both sides of the Gulf and convincingly display the similarities and shared influences. Furthermore, both vernacular and highbrow architectures peaceably coexist within his argumentative framework, and examples from everyday life and ordinary folk are given the same accord as colonial, religious, and political histories. In so doing, the book is able to celebrate popular culture alongside more monumental cultural production.

The title of the volume deftly suggests one of the volume's major themes: historically, the peoples of the region were equally defined by the desert sands and the waters (tides) of the Gulf. Dates in the interior and pearls on the coast were fundamental products that spurred an integration of land and sea trading routes. The Gulf's strategic geographic location both facilitated trade and allowed access by an array of foreign influences, from Europeans to Ottomans, from Persians to South Asians. In many ways, this long history of outside intervention and influence encouraged a wide array of small architectural and artistic variations. Yet Hawker is careful not to discount the most fundamental element of Gulf identity: inclusion in the Islamic tradition. He notes that "[w]hile stylistic variety existed, there was a limited set of building types and the Gulf can be characterised generally by one of the great features of Islamic design: unity and variation." (p. 101) Again, the multiple registers

in which Hawker examines his artefacts make great sense and do offer a fresh way of interpreting the art and architecture of the region.

Another highly successful element of the book is Hawker's ability to write for specialists and non-specialists simultaneously. He strikes a fine balance between erudite academic shorthand and carefully explained concepts in accessible prose. Indeed, Hawker provides his readers with a primer to the language of architecture and then applies the concepts to an fulsome array of historical examples up and down (and across) the Arabian Gulf. Through careful organisation and patient explication, Hawker advances his argument steadily, persuasively, and in a way that encourages application to the current realities of the region.

Instead of positing a single engine to drive the history of the Gulf, Hawker seeks to tell a more complete and complex tale: trade, politics, and geography shaped the socio-cultural environment, which in turn was expressed in architecture and its related crafts. Of course all three of these factors intersect variously, but by untangling them and pursuing each line independently, Hawker is able to reveal some original and powerfully convincing trends. At the root of his argument is an intuitively obvious idea that nonetheless bears repeating: human production — be it buildings, boats, crafts, or gardens in the region always needed to account for climate and for the severely limited range of material available. Thus palm fronds, mud bricks, and local stone were utilised to respond to the unforgiving climate, the scarcity of fresh water, and the nomadic traditions of the region. As he states in Chapter Three, "The specific language of space, mass, decoration and function followed these rhythms of trade and tribe. The buildings thus demonstrate the Gulf's critical role in bridging the peoples and traditions of the interior Arabian Peninsula and its ports, the mountains, deserts and coastlines of Oman, and the nearby shores of Persia, Pakistan and India." (p. 75). Then as now, the Gulf was a site of diversity, but also of strong, independent traditions.

For anyone wishing an accessible and sound source of history about the region, this book is invaluable. As the region continues to wrestle with how to balance its traditions with modern globalism, Hawker's work implicitly suggests that new artistic production and architectural development might acknowledge the past and perhaps even celebrate the very real, beautiful, and efficient traditions that have emerged over the past two millennia. Contemporary nation-states of the Arabian Gulf are quick to stake their claims of individuated identities, but a careful reading of Building on Desert Tides suggests that there is much history that is deeply shared in the Arabian Gulf; could this not be developed into a new manifestation of regional style that carries the traditions forward by anchoring the contemporary in the richness of history?

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Marine Environment and Resources of Abu Dhabi. Edited by Thabit Zahran Al Abdessalaam, with contributions by Thabit Zahran Al Abdessalaam, Himansu Das, Edwin Grandcourt and Anbiah Rajan. 2007. Environment Agency - Abu Dhabi. 255 pages. ISBN 978 1 86063 240 2. Price: UAE dirhams 150.

As it says on the inner front dust jacket of this publication... "The sea has always had a special place in the lives of the people of Abu Dhabi and the United Arab Emirates, yet there have been few publications about the marine environment of the area". This book provides a description of the marine environment of the Emirate of Abu Dhabi, bringing together the latest research findings and information about the marine resources and environment of the Emirate. Following the introduction, there is a description of the geography, geology, climate and oceanography, and phytoplankton of the Emirate's waters. The next section describes the coastal and marine habitats covering intertidal habitats, coastal wetlands and marine flora. The section on marine invertebrates covers sponges. iellyfishes echinoderms, molluscs and corals and coral reefs, while the part on marine vertebrates describes marine reptiles and mammals (mainly dugongs) and fish and fisheries. The final part discusses the ongoing efforts for the conservation and management of the coastal and marine environment.

This publication provides one of the first comprehensive compilations of the major aspects of the marine environment of the Emirate of Abu Dhabi, and was compiled by the staff of the Marine Research Centre of the Environment Agency – Abu Dhabi, EAD. It mostly represents the product of research and studies undertaken by staff at the Agency over the course of the past seven years.

In his foreword, Sheikh Hamdan bin Zayed Al Nahyan, Chairman of EAD, stresses that the importance of the marine environment cannot and should not be underestimated. The passing of new federal laws to protect the marine environment and fisheries highlights the importance attached to this valuable natural resource.

This book makes a valuable contribution towards increasing the general public's awareness and knowledge of their local marine environment. It is only currently available directly from EAD, which is a pity. Such books need to be made more widely available throughout the UAE to inform the general public. Perhaps, also, EAD could make electronic versions of some of its publications available online.

On a more academic note, I would make the following comments.

No mention is made of the archaeological and historical evidence for the presence of *Rhizophora*-type mangroves within the Gulf. Research by a Swedish archaeobotanist, Dr Margareta Tengberg, has confirmed their presence at a number of locations throughout the Gulf. Its presence in the past may have been as a result of the fact that water temperatures and salinity levels were not so high as they are today, enabling it to survive. The sole surviving mangrove species, *Avicennia marina*, is highly tolerant to high temperatures and salinity.

Today's marine environment may therefore not have precisely the same conditions as during the past.

Chapter 7 was for me the most disappointing chapter in the book. Marine molluscs are only given a total of 8 pages, which does not allow justice to be done to this important category of marine organisms. Only a total of 14 species (7 gastropods and 7 bivalves) are discussed in the chapter, whereas earlier a total of 15 species (9 gastropods and 6 bivalves) are mentioned in Table 5.2 as being common fauna found in mangrove habitats off Abu Dhabi. The most comprehensive so far published book on marine molluscs in the region 'Seashells of Eastern Arabia' by Donald T. Bosch, S. Peter Dance, Robert G. Moolenbeek and P. Graham Oliver (1995, Motivate Publishing: Dubai) document 1,273 species in Eastern Arabia, of which many occur within the Gulf.

The 14 types of marine mollusc which are discussed in the chapter were "... collected randomly from the shoreline off Abu Dhabi". It is a pity that no systematic survey was carried out at different sampling points throughout the Emirate. It is just not true to say that published information on the topic is non-existent. I know of at least five publications on Gulf molluscs, published between 1973 and 1989, besides the large Bosch et al. 1995 volume already mentioned, along with the results of the intertidal survey done by ENHG member Richard Hornby (**Tribulus 7:2**, 1997; pp. 12-17).

There is no mention in the section on 'Man and Molluscs' of the fact that marine molluscs have provided an invaluable food source for Man since earliest prehistoric times, as shown by the shell middens, waste piles of shells, found along the coastline of Abu Dhabi.

On the island of Abu al-Abyadh, for example, a shell midden almost 4km in length was discovered. Pearl oysters provided food as well as the valuable pearls within them.

Although the shell chapter mentions that many people "... derive great enjoyment from shell collecting" and that "...in some instances, the aesthetic and recreational values of marine molluscs also translates into huge economic value" no warning is given of the dire consequences of the shell collecting market. From the marine conservation point of view all efforts should be made to discourage the sale of such material which is leading directly to the destruction of coral reefs and other habitats. People should only collect dead and not living shells, otherwise they may seriously harm the survival and habitat of some species.

The chapter on corals and coral reefs provides an excellent summary of our current state of knowledge, although it is a pity that no more detailed mapping of the distribution of coral types specifically for Abu Dhabi was included from the recent coral reef mapping project undertaken by EAD, with support from Dolphin Energy, which has been separately published. There is also no mention of artificial reefs and their benefits and/or disadvantages.

The chapters on sea turtles and dugong provide valuable new data on their distribution and biology within Abu Dhabi Emirate and points out the dangers from future coastal development and its likely impact on these species. These animals were both exploited by the early prehistoric populations inhabiting the coast and islands

of Abu Dhabi as long ago as 7,500 years ago, as shown by the presence of their bones within the excavations carried out by the author at Site MR11 on Marawah Island.

The excellent fish and fisheries chapter provides really for the first time a detailed overview of the status of the Abu Dhabi fisheries. It makes depressing reading to hear that the Arabian Gulf waters of the UAE have shown major declines in fish abundance with current biomass estimates at around 19% of the 1978 levels. The research presented also demonstrates how many of the common fish species are being heavily over-exploited, fish being caught which are small and haven't yet reached sexual maturity. In the case of the orange-spotted grouper (*Epinephelus coioides*), known locally as 'hamoor', this is being fished at six times the sustainable level!

The book concludes with a chapter by the main editor concerning coastal and marine conservation. This summarises the main threats to the coastal region which include tourism and industrial development. It is suggested that the way forward is Integrated Coastal Zone Management (ICZM). This is a multi-disciplinary process that combines levels of government, science and management and sectoral and public interests in preparing and implementing programmes for the conservation and sustainable development of coastal and marine resources and habitats.

Minor gripes are as follows: Tables with species names should generally be arranged in taxonomic and not alphabetical order (see e.g. Table 4.1). Some of the photographs have incorrect captions, e.g. Figure 2.5... "An example of a volcanic salt dome island off Abu Dhabi." It is not strictly speaking correct to call this a volcanic island. Salt domes simply push up to the surface material originating from deep under the earth.

Although the book has an extensive bibliography it is littered with errors such as incomplete and missing references. Thus Bramwell 1987 and Satyamurty 1956 are quoted in the text but do not appear in the bibliography. No page numbers are given in some of the references, e.g. Shepherd-Popescu 2003. There are also a number of irritating typographical errors.

Overall the book is an excellent contribution and will provide many readers with an excellent introduction to marine issues in Abu Dhabi emirate.

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Terrestrial Environment of Abu Dhabi Emirate. Edited by Richard Perry. 2007. ISBN 978-9948-408-33-8. 464 pp. Published by Environment Agency – Abu Dhabi. Price: UAE dirhams 250.

Any work which covers the terrestrial environment of Abu Dhabi must be compared to what has gone before. In particular, *The Emirates - A Natural History* (Hellyer & Aspinall [eds.] 2005), which although wider in scope (covering both the marine and terrestrial environments) and also wider in geographical area (covering the entire UAE, not just Abu Dhabi Emirate) is a serious body of work and any subsequent publications must add to our

knowledge of the natural environment and be compared to this scholarly body of work.

So, how does this present work match up? First impressions are very good. This is a large coffee-table type publication, with a stunning cover design, depicting both habitats and examples of the fauna and flora found in them. The back cover contains a brief summary of each of the book's chapters. These range from an introductory chapter, which sets the terrestrial scene, to specialised chapters on geology; soils; climate; water; flora; birds; reptiles; mammals and arthropods to be found in the terrestrial environment of Abu Dhabi Emirate. Each chapter is authored by a subject specialist and the overall publication is edited by Dr. Richard J. Perry. However, each of these very short summaries are written in a far from objective manner! Any informed reader, (rather than a casual one), will find this as irritating as I did.

The layout is large format. On a superficial level, this at first is quite attractive, but as the reader progresses from page to page and chapter by chapter, one realises that the book design is not as good as it should be. I found the text to be slightly too large and the choice of font does not compare well with previous publications. There are also large areas of white space present on each page, around the edges, as well as the top and bottom of many pages. The photographs used in this volume are on the whole very good: indeed, some are stunning. I particularly enjoyed photographs depicting certain types of typical behaviour and animals in their natural habitats. The quality of photographs in the bird and reptile chapters was especially high.

Each chapter opens with a virtual double page spread photograph of the subject being discussed. Most are very pleasing indeed, but a few reveal the imperfections of the photograph, when enlarged to such a scale. Some lack captions, leaving the reader to wonder which species is shown.

Modern publishing technology has been used in this work, but not always to the best effect. I found some of the montages to be clumsy. For example, the full page picture found on page 231 (full page photographs do not have page numbers on them) depicts two bird species found in mountain habitats. Both pictures are quite good, but have been greatly over-enlarged and the scale of the two species, as depicted here, is very misleading. The layout of this and other pictures could also have been improved.

Not all the chapters conform to a set standard. I refer in particular to the chapter on mammals, which for the most part, is set out in a Field Guide-like manner. Although informative, it seems out of place in a work of this sort. Photographers are briefly acknowledged at the beginning, but there is no acknowledgement for individual photographs found in the book. Some of the photographs are also taken of animals in captivity, or in a nearly captive state. Most publications clearly state when a photograph is of a captive animal.

The Environmental Agency - Abu Dhabi, EAD, the publisher, which also commissioned the work, looms large, and, although not explicitly stated, there is a strong implication that the book is the entire work of the Agency's staff. This is far from the case. The editor

himself receives little acknowledgement of his efforts.

Other irritations, perhaps minor in themselves, but with a substantial cumulative effect, include the following: the layout of the figures, tables and pictures, could have been greatly improved; placing of some appendices at the end of individual chapters is an unusual choice; some pages lack numbering.

What of the individual chapters themselves? They vary enormously in standard, from the excellent chapters on flora, reptiles and arthropods to the far less satisfactory chapter on UAE's birds. Figure 6.3 on page 221 depicting flyways of migratory birds through the UAE is not based upon any scientific foundation and bears little relationship to the true migratory paths that these bird species undertake twice each year. Figure 6.4 on page 225 shows the landforms and bird habitats in the UAE. It does not help that this map has been shrunk to fit the page, ensuring that meaningful detail is, at best, hard to ascertain from the map. The colours used for the map legend could have been improved upon and do not in all cases match what is shown on the map.

There are also inaccuracies in the text. For example, the Great Reed Warbler is a scarce passage migrant and is not commonly seen round the reed beds found in the Al Wathba Wetland Reserve. The species mentioned here should be the Clamorous Reed Warbler, a closelyrelated but totally different species. The Black-crowned Finch Lark (now renamed Black-crowned Sparrow-Lark) does not nest on sabkha. There is no distinct sub-species of Clamorous Reed Warbler found in Khor Kalba -Sykes's (Booted) Warbler is the warbler in question. The Peregrine Falcon does not possibly breed in the mountains (though the Barbary Falcon does). Spanish Sparrow is not under normal circumstances a bird of acacia plains. The whole paragraph at the top of page 236 is inaccurate and should be removed. White-capped Buntings do not occur in the mountains of the UAE (I only wish they did)! Statements made on the checklist of birds at the end of this chapter are in some instances inaccurate or misleading and occasionally contradict what is written in the main body of the text. And more. These inaccuracies should not occur in a work of this kind.

This is a useful book, some of the chapters being very good indeed, but the body of work as a whole leaves one feeling disappointed. Moreover, where chapters depend heavily on earlier work undertaken by different authors, this should be more clearly stated.

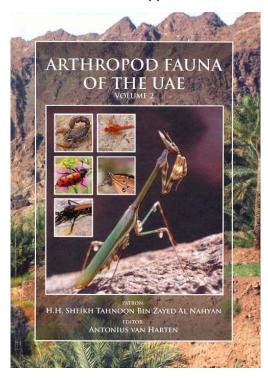
So, does this volume add to our knowledge of the terrestrial environment of Abu Dhabi? In some cases it certainly does. The chapter on arthropods is based upon recent field work and study and goes well beyond what has been previously published on the subject. It is a pity that not all chapters are of this quality. Should you buy this book? It depends entirely on what you want from it. It is certainly not the definitive work on the subject and the quality of the work is very uneven. For serious students, *The Emirates: A Natural History* is a far more scholarly publication and gives a more complete picture both of the environment and of the entire country. Works such as this one, which are narrower in scope and coverage, should be more detailed than what has gone before, but this is true of only a few of the chapters. This

is a pity, but also an opportunity for others to contribute to the fascinating environment which we live.

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Arthropod fauna of the UAE – Volume 2. Edited by A. Van Harten. 2009. Dar Al Ummah Printing, Publishing, Distribution and Advertising, Abu Dhabi. ISBN 978-9948-15-090-9. 786 pp.



The UAE Insect Project was set up in 2004 following a remarkable and far-sighted initiative of H.H. Sheikh Tahnoun bin Zayed Al Nahyan as an endeavour to study and record the total arthropod biodiversity of the United Arab Emirates. Dr. A. Van Harten was appointed to run the project and to collect specimens from around the country, sort and send them out to an impressive team of specialist experts from around the world to carry out scientific work on the collected material and finally to coordinate and edit the published results. Prior to the setting up of the Project, almost the only significant entomological work undertaken in the UAE was made by enthusiastic amateurs, many of whom were members of, or associated with, one of the three chapters of the ENHG. These individuals all held responsible and demanding full-time professional occupations and were able only to devote a little of their spare time to the country's entomological biodiversity. A majority of their studies were made in an era before the full blooming of information technology and, when published, information relevant to Arabian arthropods was very scarce indeed. Nevertheless, they achieved a lot and were able to set the study of UAE insects on track. Lamentably, their contributions do not always receive the recognition that they deserve.

From the onset, the UAE Insect Project encompassed a number of goals, two of the most obvious being the establishment of a reference collection of UAE

arthropods to be housed and curated in-country (the UAE Insect Collection) and the publication of the scientific results of the Project. Both such objectives are already being realised successfully, especially the publication of the accounts of the different insects and other arthropods found in the UAE. These findings have now generated the first two hard-bound volumes of a series intended to cover all of the scientific results of the Project.

Following closely on the heels of the first volume published in 2008, Arthropod Fauna of the UAE -Volume 2 is of a similar size and format. It also mirrors the type of content seen in the earlier volume by providing an introduction and a series of contributions of varying length devoted either to whole orders, superfamilies or to families of arthropods. The introduction is concise since much of the material dealing with general collecting techniques and with the specific localities at which arthropods were captured is dealt with at length in the earlier volume. Nevertheless, the introduction does include a tabulated list of the orders and classes of arthropods so far collected in the UAE and an indication of those that have been published to date as well as a gazetteer of collecting localities and acknowledgements to all of the many contributors to the book. Sadly, two of the world-renowned specialists collaborating with the UAE Insect Project, the neuropterist Professor Herbert Hoelzel and the arachnidologist Dr. Michael Saaristo, passed away in 2008 before their studies were completed. Fittingly, the publication of *Arthropod Fauna of the UAE - Volume* 2 is dedicated to their memory.

The main part of this work is given over to accounts of two different orders within the Arachnida, a contribution on the Collembola (class Entognatha) and no less than 38 articles on different groups of insects. Some of the contributions are only modest in size and cover just a few or even a single species, such as the account of the fly family Oestridae. Others are extensive and cover such larger and important insect groups as the ground beetles (family Carabidae) and the owlet moths (superfamily Noctuoidea). In terms of numbers, a total of 390 species are added to the list of species known to occur in the UAE, of which 83 species and two sub-species are new to science.

Whatever the size of each individual contribution, careful attention has been made to give accurate collection records for every specimen of each species most cases to provide appropriate illustrations. These include detailed line drawings, paintings and, of course, black and white and coloured photographs/photomicrographs of individual structures and of habitus. In general, the quality of the images is first class, better even than that achieved in the first volume. Some, like the tinted drawings used to illustrate structures of midges (family Chironomidae) are simply superb. Whilst some contributions contain keys to enable identification of individual UAE species, this is not so for all taxa and, therefore, the illustrations are particularly important adjuncts to identification.

The different groups that are dealt with in detail include mites from the family Cunaxidae, pseudoscorpions (Pseudoscorpionides), springtails (Collembola), booklice (Psocoptera), earwigs

(Dermaptera), beetles (Coleoptera) belonging to some 17 different families, including such important ones as the ground beetles (Carabidae), hide and carpet beetles (Dermestidae), blister beetles (Meloidae) and weevils (Curculionoidea). Several families (Hymenoptera) are covered as well as the paramountly important bee superfamily (Apoidea). This is followed by nine families of moths (Lepidoptera), including the species-rich owlet moths or Noctuidae (now considered to include the once separate families of tiger and tussock moths) and finally, but by no means least, some 12 families of true flies or Diptera. In some cases, the contributions in the present book are continuations of work already reported in the first volume and this is clearly indicated in their titles, as for example for the earth-measurer moths Geometridae.

As for the first volume, the detailed, accurate and wellillustrated taxonomical accounts found in the present volume make it a must-have book, not just for the professional entomologist, but also for many others including ecologists, naturalists, pest-control officers, environmentalists etc., both within the UAE and throughout Arabia and the Middle East. Nevertheless, this volume is not without its faults, some of which have already been raised with regard to the first volume (Howarth, 2007). Firstly there are a few small mistakes that come to light. For example, on pages 566 and 567, the same photograph is shown with captions for two different moths Utetheisa lotrix lepida (Rambur) and U. amhara (Jordan). Since the two species in question are so similar, it is hard for the non-specialist to be sure as to which moth is actually depicted. This is a shame, but it by no means undermines a simply wonderful and beautifully illustrated account of the noctuoid moths of the UAE. Another mistake, this time on page 187, deals with the chemical nature of the secretion of the beetles belonging to the family Meloidae and which gives rise to their common name of "oil" or "blister" beetles. It is quite wrong to call the chemical agent in question, cantharidin, an alkaloid; for alkaloids are nitrogen-containing plant chemicals not made by beetles or other animals. Cantharidin is actually a toxic sesquiterpenoid and does deserve accurate attention, as it is of fundamental biological importance for meloid beetles, their reproduction and their defence against predators. Cantharidin has also played a variety of dubious roles in human medicine.

These and other minor faults aside, however, there are several broader concerns, which in this reviewer's opinion detract a little not just from the practical usefulness of the volume, but which also raise questions about the completeness of the coverage implicit in the book's title and perhaps even about the style in which the work has been edited, particularly in relation to previous studies on the entomofauna of the UAE.

Firstly, it is customary practise in a work of this sort to list the synonyms for each species immediately below the currently recognised species name. This is lacking although it would make the book easier to use. This is particularly important where there have recently been wholesale changes in nomenclature affecting Arabian species. In the mylabrine oil beetles of the family Meloidae, there has long been confusion at the generic

level surrounding many species found in Arabia. Some that were dealt with under the generic name *Mylabris* by Kasab (1983) and Schneider (1991) are now assigned to other genera such as *Croscherichia* and *Hycleus*. In the latter case the feminine generic name *Mylabris* has been replaced by a masculine one, thus also precipitating changes in the ending of the specific name. All of this is difficult to follow without the inclusion of a formal synonomy. There are other similar cases both within the Meloidae and in several of the other insect families.

The second concern has to do with the inclusivity of a work, the title of which implies that it covers all species of each arthropod group known from the UAE. Clearly there is no consistency here. For the noctuoid moths, Fibiger and Legrain treat all recorded species from the UAE, including some like *Hypena obsitalis* that were neither collected by Van Harten nor seen by themselves. On the other hand, Batelka and Geisthardt mention records of 26 species of Meloidae from the UAE as published by Bologna and Turco (2007), but in the current book, they deal only with the 21 species collected by Van Harten and themselves. Well-known UAE species such as Rhampholyssodes pitcheri Kaszab, 1983 are ignored. Similar omissions occur within the ground beetles, where, for example, species such as the tiger beetles Hypaetha copulata emiratensis and Salpingofera helferi, known to belong to the UAE fauna, are missed out. This, in turn, raises further questions. If recently published records by well-known scientists can be ignored, then this is likely to be the case also for other sources of information that are pertinent to the entomofauna of the UAE. These include collections in well-known museums in London, Muscat, Oxford and Manchester, amongst others known to have important eastern Arabian material, as well as collections that are still in private hands and also the published records of the first amateur individuals to take an interest in the insects and arthropods of the

Another question might then be to ask exactly what is meant by the UAE. Is it just the small number of localities listed in the gazetteer that represents mainly Dubai, Sharjah and the Northern Emirates? Or does it not also include the extensive sandy deserts that make up so much, not just of Abu Dhabi, but also of the whole UAE? In the light of these limitations on often not using outside records and not covering all of the UAE territory, it might be more informative to give this book (and others in the series) the subtitle "Insects and Other Arthropods Collected by the UAE Insect Project 2004 – 2009".

There is inaccuracy and inconsistency too in the attribution of the label "First record for the UAE." I read through Volume 1 silently and merely noted that many locally-published first records both of Coleoptera, Lepidoptera and other orders had been usurped by contributions in the new work without explanation or justification. This time with Volume 2, I have tried, not always successfully, to steer clear of that path. I did see one such – lack of recognition of one of my own first UAE records, that of the moth *Autographa gamma* (Gillett, 1998). Presumably this was an oversight since my record of *Ctenoplusia limbirena* in the same publication was recognised. Other locally published records that are firsts for the UAE have, however, quietly been ignored and

attributed to others as for the tiger beetles *Megacephala* (*Grammognatha*) *euphratica* and *Lophyro histrio* (Gillett, 1995, not Weisner, 1996). In many other cases, valid records are quietly submerged by referring not to any original work, but instead to Van Harten (2005), a publication which is merely a checklist of published records of species recorded for the UAE by others, together with the original references.

In summary, *Arthropod Fauna of the UAE – Volume 2* contains some truly excellent contributions and overall, it will make a very useful addition to the literature on Arabian arthropods and is well worth getting. Nevertheless, it does suffer from a number of shortcomings including, in some cases, inadequate recognition of previous work, lack of a synonomy for each species, failure often to have studied UAE specimens in museums and other collections and an explanation as to why the geographical coverage does not include the whole national territory of the UAE, although the title would suggest that it does so.

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Arabian Wildlife. Arabia's Wildlife Centre – Sharjah. Osama S. Abdulla. 2008. Environmental and Protected Areas Authority, Sharjah, UAE. 158 pp.

This handsome hardback coffee-table volume illustrates the work of the Arabian Wildlife Centre, the Breeding Centre for Endangered Arabian Wildlife, and the Desert Park, all situated in Sharjah. It is produced by the Sharjah Environmental and Protected Areas Authority, and is in both Arabic and English. The 158

page volume, which is undated and has no ISBN number, is abundantly illustrated with photographs. These photos are not credited, but appear to be mainly taken in captivity within the Sharjah facilities.

The production of a book highlighting Arabia's wildlife, much of which is disappearing rapidly, is to be applauded. This is particularly true where the book includes Arabic text, and hence is a valuable information tool and resource for a wider audience, including local schools. This review is of the English text only. The book covers mammals, reptiles, amphibians, freshwater fish and a variety of invertebrates. Surprisingly, the only bird mentioned is the now extinct (in Arabia) ostrich. In species accounts, there is some mention of data collected at the Sharjah facilities, such as clutch and litter sizes, which is valuable information.

The introduction discusses the role of the excellent Sharjah facilities, including "a comprehensive source of environmental information for the publishers and researchers alike" and "providing support, information and expertise on this field". For a book to play a part in these roles, the information needs to be accurate and up to date. Unfortunately this is where this volume falls down. The text is riddled with errors, photographs are attributed incorrectly, the distribution maps are frequently wrong and do not discriminate between former range and present range, and poor editing has resulted in the retention of many typographical errors. These greatly detract from the value of the book. There is no room in this review to mention all these errors but some of the more important are indicated below.

The map of the ecological regions (p. 10) has no text in the key, and so cannot be used. The base map for the species distributions has Yemen and Oman indicated as cities, and Salalah is incorrectly sited well down the Yemen coast. The two photographs illustrating Brandt's hedgehogs (p. 35) are incorrectly identified, and are of Ethiopian hedgehogs. The photo illustrating the ocellated skink Chalcides ocellatus (p. 101) is apparently of a Mabuya species. The photo illustrating the 'Largeheaded ground gecko' Stenodactylus doriae (p. 103) is of the eastern sand gecko Stenodactylus leptocosymbotes, whose 'burrows do not extend several metres under the sand'. The photo illustrating a 'house gecko' Hemidactylus turcicus (p. 104) is of the Rough-tailed bowfoot gecko Cyrtpodion scabrum.

The Nile Rat Arvicanthis niloticus (p. 41) is also known from Dhofar. The rock hyrax is not found in north western Oman (p. 67). The discovery of the Oman sawscaled viper Echis omanensis Babocsay 2004 is not mentioned and hence the northern Oman and UAE populations are still described erroneously as Echis coloratus (p. 75). The 'blue-headed agama' Pseudotrapelus sinaitus is named as Agama pseudotrapelus sinaitus and Pseudotrapelus siniata (sic), both incorrect and the distribution map is duplicated (p. 90-91). Leptien's dhub (*Uromastyx aegyptia leptieni*) is not included, and the northern Oman and UAE populations are therefore not attributed to subspecific status (p. 96-97). The Yellow-bellied house gecko (Hemidactylus flaviviridis) is exclusively a house gecko in Arabia and certainly not found in rocky desert, cliffs and caves (p. 98). The distribution map of Pristurus

rupestris is incorrect and there is no evidence that males try to bite the tails of other males to prevent them from signalling (p. 99). Similarly the map of Pristurus carteri (p. 105) is completely wrong, indicating the species is restricted to Yemen. This species is widespread in desert areas of Oman and has recently been discovered in the UAE. The Fan-footed gecko (Ptyodactylus hasselquistii) (p. 106) does not have tiny hooks on its toe pads, but has adhesive scansors with microscopic setae, as do other climbing geckos. The 'Steppe agama' (p. 112) illustrated is Trapelus flavimaculatus and the distribution map is badly inaccurate. The name Trapelus jayakari has long been added to the synonymy. The map of the distribution of the Arabian toad (p. 117) is wrong. This species is not found in southern Oman. Garra barreimae is misspelt as 'Carra' (p. 122) and both common and scientific names given for Garra dunsirei (p.128) are wrong. The species was named after the collector, Andy Dunsire and so should be 'Dunsire's cave fish' rather than 'Dunser's' and its specific epithet is not 'dunser'.

There are three families of scorpions in Arabia, not two (p. 133). The third is the Diplocentridae which includes *Nebo hierichonticus*, the species used to illustrate the page! The information that black widow spiders are not native Arabian species (p. 136) is incorrect, as there are several native species, and they may be found deep in the mountains away from human habitation.

It is unfortunate that the book has retained so many unnecessary errors. Most of these could have been caught before publication if the manuscript had been reviewed by scientists and natural historians with the relevant expertise. Such expertise is available locally in the UAE. Although the book is still an attractive and interesting volume, and will be of considerable use in spreading the conservation message, the quality of the information it contains limits its use for researchers, natural historians and conservation professionals.

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The Native Plants of Oman: An Introduction with Notes for Gardeners. C. Winbow. 2008. Environment Society of Oman, Muscat. 127 pp. ISBN 978-9948-03-775-0

The author's enthusiasm and passion for these plants and their cultivation is palpable throughout this sturdy, extensively illustrated guide. What sets it apart from a typical wildflower book is information on cultivating native species.

The introduction is a plea for conserving and cultivating native plants, drawing upon the author's gardening experience in Oman and other arid regions of the world. Following this — actually a continuation — is very practical, hands-on horticultural advice on how to grow these plants in Oman. I imagine much of this data has not previously been presented, at least not his observations for lesser known plants. In the acknowledgements, Winbow writes "... the present book contains many observations and a little guesswork on semi-arid gardening, grafted onto botanical fact from

sometimes scanty sources."

It is the "botanical fact" that will concern some botanists. For example, *Ephedra foliata* is noted as one of three monocotyledonous plants in the book (it is a gymnosperm, not a flowering plant). *Aerva javanica* hardly has "male and female flowers on separate species", rather it is a dioecious species. Other examples could be noted. There are also some errors in nomenclature and use of author names. While distracting and irritating, in my opinion these errors do not distract from the overall utility of the work.

The main part of the book is divided into two sections, plants from Dhofar and those from northern and coastal Oman for good reason — the environments are entirely different as Dhofar is strongly influenced by tropical monsoons and includes numerous plants with African origins. The other parts of Oman are more arid.

The length and detail of entries varies but for each there are ample images. I found these useful in identifying some of the species I encountered in the Hajar Mountains of northern Oman. The author has included much interesting information on these plants, largely from personally experience. Each entry has the scientific name (consistent use of scientific names of families would increase the reference value), the transliterated Arabic name(s), distribution, and a wonderful potpourri of information including uses, legend, and cultivation — although, curiously, several plants are included with no information on how to grow them.

No doubt it is a sign of the times that various web sites are included for many of the species descriptions as well as horticultural and conservation aspects. I have not checked out most of these but I am concerned about the reliability of the information that is often posted on such sites. Several are dependable and these sites can certainly lead the interested reader to further information.

I wish books like this were marketed outside their country of publication as it has a great deal of information, lore, and enjoyment for anyone who is interested in the flora of the Arabian peninsula. Productions like this can do much to avoid over-collecting of plants for gardens, many of which are already in danger from habitat destruction and over-grazing.

Lytton Musselman

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Guide to Common Marine Phytoplankton in Abu Dhabi Waters. A. Rajan and T.Z. Al Abesssalaam. 2008. Environment Agency – Abu Dhabi, EAD. ISBN 1-100122-18910. 127 pp. Price: UAE Dirhams 100

For most people, the only time they are likely to notice phytoplankton in the waters of the UAE is when there is an algal bloom or 'red tide' off the shoreline. As EAD's Managing Director notes in his Foreword, though, 'these microscopic plants are probably the most important group of organisms on Earth', being responsible not only

for generating much of the oxygen we breathe, and fixing carbon dioxide from the atmosphere, but being important components of most marine food chains. They are also important indicators of the health of the marine environment, and much else besides.

Rajan and Al Abdessalaam, both of EAD, provide here a preliminary list of species, describing 65 diatom species and 35 dinoflagellate species identified from the waters of Abu Dhabi. There are, perhaps, many more species from these groups, not just inside the Arabian Gulf but along the UAE's East Coast as well, and the book does not deal with cyanobacteria, or blue-green algae, another important group. Many species of phytoplankton have not yet been formally described.

Research, though, has to start somewhere, and the real importance of this book is that it is the first publication to deal with the phytoplankton not just of the Emirates, but of the entire region. The microscopic size of the organisms means that many of the photographs leave something to be desired, though the intricacy and beauty of their varied structures is easily apparent. An introductory section explaining what phytoplankton are. and what they do, adds value, though in language that the layman will struggle to understand. This is, then, very much a book for the specialist but one which, nevertheless, it is good to see. EAD deserve credit for first funding the research and then, secondly, the publication. It's not going to sell many copies, but will be an invaluable work of reference for those involved in the field.

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Pre-Islamic Archaeology of Kuwait, Northeastern Arabia, Bahrain, Qatar, United Arab Emirates and Oman: A Bibliography. Second Supplement (1996-2006). K.G. Stevens and E. Haerinck. 2008. ISBN 978-90-429-2005-7. Peeters, Bondgenotenlaan 153, B-3000 Leuven, Belgium. www.peeters-leuven.be email: order@peeters-leuven.be 84 pp. Price 30 Euros.

The third in an important series of bibliographies from the University of Ghent on the pre-Islamic archaeology of the Arabian side of the Gulf.. A total of 2,255 books and papers are in the list, and many of the paper cited, we are pleased to note, are from previous issues of *Tribulus*. The list is divided into periods, and then by country/region, rather than by country/region alone, and there is also a useful index of paper and book authors at the back. The resulting listing is easy to peruse. Compilation of such bibliographies is, at best, a chore, but this really is an invaluable piece of work, essential for all serious students of Gulf archaeology. The compilers deserve heartfelt thanks from anyone involved in the field.

Peter Hellyer

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(Mention here does not preclude a review in a subsequent issue)

Coral Reefs in the southeastern Arabian Gulf (2008). Prepared by Dolphin Energy and Emirates Wildlife Society – Worldwide Fund for Nature, EWS-WWF. (No editor given). ISBN 978-9948-03-844-3. Published by Dolphin Energy, Abu Dhabi.

New Perspectives on Recording UAE History (2009).

Proceedings of the International History Conference, New Perspectives on Recording UAE History, National Center for Documentation and Research 40th Anniversary Conference (23-25 November 2008). (No editor given). National Center for Documentation and Research, Abu Dhabi, UAE. ISBN 978-9948-05-071-1. For contents, see **Conferences** (Page: 87).

Abuzinada, A.H., H-G. Barth, F. Krupp, B. Boer and T. Abdessalaam (2008). **Protecting the Gulf's Ecosystems from Pollution**. Birkhauser, Berlin. 285 pp. ISBN 978-3-7643-7946-9.

Agius, D. A. (2009). **Seafaring in the Arabian Gulf and Oman – The People of the Dhow**. (Digital Print version). First printed 2005.

ISBN 0-7103-0939-2. Routledge, Oxon and New York. Price: 25 GBP. New paperback version.

Al-Tamimi, Faris (2008). **Falcon and Hunting in Arabia**. 320 pp. ISBN 9780973885309. Hancock House Publishers, Surrey, BC, Canada. http://www.hancockhouse.com 320 pp.

Bailey, T. (2008). **Diseases and Medical Management of Houbara Bustards and Other Otididae**. Emirates Printing Press LLC, Dubai.

ISBN 978-9948-03-562-6. 494 pp.

Cleuziou, S. and Tosi, M. (2007). In the Shadow of the Ancestors – The Prehistoric Foundations of the Early Arabian Civilization in Oman. Ministry of Heritage and Culture, Sultanate of Oman.

Publication no. 135/2007. Available from http://www.mhc.gov.om 334 pp.

Cordoba, J., Molist, M., Perez, C., Rubio, I. & Matinex, M. (2008). Proceedings of the 5th International Congress on the Archaeology of the Ancient Near East (Madrid April 3-8, 2006). Published by UA Ediciones, Madrid. Three Volumes (Vol. 1 ISBN: 978-84-8344-41-1. 820 pp; Vol. 2 ISBN 978-84-8344-142-8. 814 pp. Vol. 3 ISBN: 978-84-8344-147-3. 814 pp.

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Hellyer, P. & M.C. Ziolkowski, [eds.] (2008). **Emirates Heritage Vol.2**

Proceedings of the 2nd Annual Symposium on Recent Archaeological Discoveries in the Emirates and of the Symposium on the History of the Emirates, Al Ain, 2004. ISBN 978-9949-06-078-9. Zayed Center for Heritage and History, Al Ain. Available from: www.zayedcenter.org.ae 190 pp.

King, Geoffrey (2009). **Old Mosques of the Coasts of Abu Dhabi**. National Center for Documentation and Research, Abu Dhabi.

(The focus of this book is the group of three Late Islamic mosques on Dalma, already published in a previous edition of Tribulus, with other notes on smaller mosques found on the islands of Abu Dhabi and on the old 'Grand Mosque' of Abu Dhabi, the 'al-Otaiba mosque').

Mouton, M. (2008). Peninsule d'Oman de la fin de l'Age du Fer au debut de la periode sassanide (250 av.-350 ap. JC). ISBN-13: 978-1-4073-0264-5. ISBN-10: 1-4073-0264-7. Archaeopress, Society for Arabian Studies Monograph 6, British Archaeological Reports International Series 1776. 355 pp text, 162 pp illustrations. Price: 55 GBP.

Available from:

http://www.oxbowbooks.com/bookinfo.cfm/ID/85751

(This thesis was written fifteen years ago and is now published, unchanged but with a supplementary bibliography).

Muller, M.G (2009). **Practical Handbook of Falcon Husbandry and Medicine**. ISBN 978-1-60741-608-1. Nova Science Publishers, Hauppauge NY11788-3619, USA. email: Main@novapublishers.com

(The author is director of the Abu Dhabi Falcon Hospital).

Petraglia, M.B. & Rose, J.I. [eds.] (2009). The Evolution of Human Populations in Arabia: Paleoenvironments, Prehistory and Genetics

Vertebrate Paleobiology and Paleoanthropology. Springer Academic Publishers. Hardcover: 300 pages. Publisher: Springer; 1 edition (August 1, 2009). Language: English. ISBN-10: 9048127181 - ISBN-13: 978-9048127184.

This book includes several papers on the archaeology from the United Arab Emirates, including: chapter 3: 3. Pleistocene Climate Change in Arabia: Developing a Framework for Hominin Dispersal over the Last 350 ka, by Adrian G. Parker; chapter 9: A Middle Paleolithic Assemblage from Jebel Barakah, Coastal Abu Dhabi Emirate, by Ghanim Wahida, Walid Yasin Al-Tikriti, Mark J. Beech, and Ali Al Meqbali; chapter 10: Paleolithic stone tool assemblages from Sharjah and Ras al Khaimah in the United Arab Emirates, by Julie Scott-Jackson, William Scott-Jackson, and Jeffrey I. Rose; and chapter 15: The Holocene (Re-)Occupation of Eastern Arabia, by Hans-Peter Uerpmann, Daniel T. Potts, and Margarethe Uerpmann.

Order from: http://www.amazon.co.uk/Evolution-Populations-Vertebrate-Paleobiology-Paleoanthropology/dp/9048127181/ref=sr_1_1?ie=UTF 8&s=books&gid=1247571146&sr=1-1

Pickering, H. & Patzelt, A. (2008 & 2009 reprint). **Field Guide to the Wild Plants of Oman**. ISBN-13: 978-1844-617-78. Royal Botanic Gardens, Kew.UK. 281 pp. Price: 38.99 GBP.

Available from:

http://www.nhbs.com/title.php?tefno=158791

Taha, M.Y. (2009). The Discovery of the Iron Age in the United Arab Emirates. ISBN 978-9948-15-017-6. Ministry of Culture, Youth and Community Development, Abu Dhabi. Available from: http://www.mcycd.ae A published version of the author's 1981 PhD thesis submitted at the University of Cambridge.

Uerpmann, H-P., Uerpmann, M. 7 Jasim, S.A. [eds.] (2008). The Natural History of Jebel al-Buhais: past and Present. The Archaeology of Jebel al-Buhais, Sharjah, United Arab Emirates, Volume 2. Department of Culture and Information, Government of Sharjah, UAE, University of Tuebingen, Germany. 148 pp. ISBN: 978-3-935751-05-06

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Conferences

The following conferences dealing, at least in part, with the archaeology of the United Arab Emirates took place during 2008 and 2009. Papers, where not already published, are expected to be published in due course.

5th Annual Symposium on Recent Archaeological Discoveries in the United Arab Emirates, Al Ain.

3rd – 4th April 2008

Zayed Centre for Heritage and History.

Seminar for Arabian Studies. The British Museum, London. 24th-26th July 2008

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UAE-related papers:

Sophie Mery, Mark Beech and Vincent Charpentier. New evidence for deep sea fishing: the Neolithic settlement at Akab, Umm al-Qaiwain.

Mark Beech, Tatsuo and Hanae Sasaki, Mohammed Amer Al Neyadi,, Jaber AL Merri, Ahmed El-Haj, Dia'eddin Tawalbeh, Mohammed Mater Al Dhaheri, Hamdan Al Rashidi and Ali Al Meqbali. Fish in the Desert - Late Islamic period Bedouin camp sites in Abu Dhabi.

Margarethe Uerpmann and Hans-Peter Uerpmann. Muweilah and the problems of dromedary domestication. Mark Beech, Marjan Mashkour, Matthias Huels and Antoine Zazzo. Prehistoric camels in Abu Dhabi's Western Region.

New Perspectives on Recording UAE History. 23-25 November 2008

National Center for Documentation and Research, Ministry of Presidential Affairs, Abu Dhabi.

(Page numbers refer to the Conference Proceedings, published in 2009

ISBN 978-9948-05-071-1. Order from:

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Part 1 – Prehistoric roots of the UAE: From the Stone Age to the Pre-Islamic Period.

Globalization, 'big history' and multi-scalar analysis: Conceptualizing 8000 years of the UAE's cultural development, by D.T. Potts (Pages 13-22);

Middle Palaeolithic Assemblage in Abu Dhabi Emirate: The view from Jebel Barakah, by G. Wahida, W.Y. al-Tikriti, M. Beech and A. al-Meqbali (Pages 23-36);

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Archaeologically, by H. Bin Seray (Pages 115-132); Emirati Place Names and Locations in Early Arabic Sources, by H. Al Naboodah (Pages 133-144); Omani Maritime Trade in the Early Islamic Period, by J.C. Wilkinson (Pages 145-154):

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Britain and State Formation in the Gulf: The case of Abu Dhabi and Shaikh Zayid bin Khalifa, by J.E. Peterson (Pages 207-214);

The British contribution to development in the Trucial States, by T. Clark (Pages 215-226);

The period 1900-1971: "Let There Be Light", by L. McLoughlin (Pages 227-238).

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In Focus: Sources of UAE Modern History, by A. Darwish Imran (Pages 239-242);

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