



GAZELLE

مجموعة دبي للتاريخ والطبيعي

www.dnhg.org

Two geological mysteries explained

Towards the end of a pre-summer hike near Jebel Yibir, my eye was drawn to some delicate, tree-like patterning in the rocks. I knew these weren't fossils and it was Gary Feulner who suggested that I look up dendritic manganese. Sure enough, once you know what to look for, there's a wealth of information on the internet. Wikipedia provides a good explanation of how the crystals form:

"when water rich in manganese and iron flows along fractures and bedding planes between layers of limestone and other rock types, dendritic crystals are deposited as the solution flows through".

As dendritic mineral deposits look like plants they are often mistaken for fossils and are given the name 'pseudofossils'.

Inside this month:

	<i>page</i>
Geological mysteries	1
Announcements and Records	2
Spotlight and field clip	3
UAE climbing plants	4
Field Clips and Announcements	5
Dragonfly Season in Jumeirah!	7
Lectures and field trips	8

Contributors—Thanks to the following for their reports and contributions:

Binish Roobas, Angela Manthorpe, Margaret Swan, Tam Fely, Dr Panagiotis Azmanis and Gary Feulner.

Send your contributions for the next issue by 25th November, to gazelleditor@gmail.com



Secondly, a recent purchase of Oman's Geological Heritage, by Ken Glennie, has solved a mystery from last year's trip to Salalah, Oman. I'd stumbled across a number of very large, round boulders scattered around one of the villages in the hills of Jebel al Qara. It turns out that these are "limestone nodules that have weathered out from the surrounding rock", and not some outdoor weight-lifting equipment as I'd suspected. The dark colour is due to desert varnish.

by Angela Manthorpe



Announcements and Recorders

Monthly Speaker—8pm on Sunday 6 November, 2016

The DNHG are delighted to welcome the following speaker, who will present an illustrated talk on:

“Doing a Ph.D. on Peccaries in French Guyana”

Jacky Judas is the Research Manager, Wadi Wurayah National Park, EWS – WWF. He has a Ph.D. in tropical Ecology from MNHN, France and has been involved in Research and conservation for the past 18 years.

Jacky Judas, is currently working for the Emirates Wildlife Society – World Wide Fund (EWS – WWF), as Manager and Scientific Adviser – Terrestrial Biodiversity. He firstly joined this organization in December 2012 as wildlife consultant and, from July 2013 to December 2015, was Research Manager of Wadi Wurayah National Park, the first Mountain protected Area of the United Arab Emirates. His main duties are to initiate and implement the 5 years EWS-WWF terrestrial conservation strategy.

Jacky is from France and after obtaining his Masters in land management from Lille University (France), Jacky spent 1 year in the French Austral and Antarctic Territories studying albatrosses and penguins, and then 4 years in the tropical rain forest of French Guayana to complete his Ph.D. on the ecology of the collared peccaries for the French National Museum of Natural History.

In 1998, Jacky joined the National Wildlife Research Center (NWRC) of Saudi Arabia, where he started to work on Houbara Bustard conservation before joining the National Avian Research Center of Abu Dhabi near Sweihan in 2004. He occupied the position of Field research assistant from 2004 to 2009, then regional coordinator of research and conservation programmes on the Asian Houbara Bustard in Asia and Middle-East, and manager of the Ecology and Conservation department at NARC up to October 2012.

Lecture

In August 1993 Jacky, together with 3 professors of the MNHN and two other PhD students, flew to French Guyana from France, travelled up the Sinnamary River for 7 hours and established a temporary camp in the rainforest. Field assistants were recruited from local tribes for the group.

This was the start of an adventure that lasted nearly four years, implementing a research station in the rainforest, searching for peccaries for months, trapping them, and equipping them with radio-transmitters. It is the story that will be presented to the DNHG to give us a taste of experiences of what it is like to live in the rain forest for months, along with an introduction to the life of the collared peccaries. Results of Jacky’s research and notes will also form part of the presentation and Jacky will also discuss results of other remarkable species found in the Guyana plateau.

From the Editor:

As announced at the October meeting, librarian and book sales coordinator, Johanna Raynor, is leaving Dubai in December. The Committee and members alike, appreciate her valuable contribution over the years and wish both Johanna and her husband good luck for the future.

Geological mysteries unfold in our cover story, whilst on page 3, a bizarre beetle reveals its similarities with a cow!

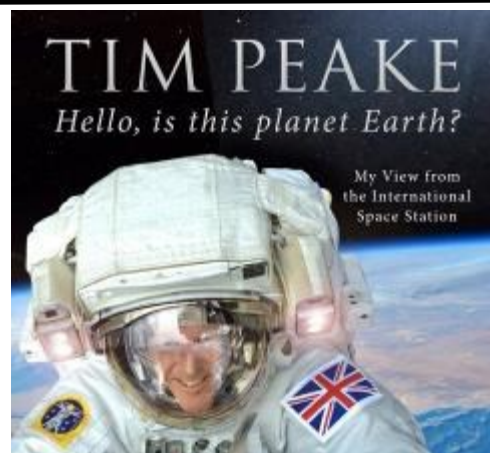
Art links with nature in various forms of media throughout this issue.

Enjoy your read!

Cheetah Art

Gulf News reports that a rescued cheetah cub is creating works of art using his paws and non-toxic paint.

Keepers at Emirates Park Zoo in Abu Dhabi observed Jasper’s pleasure when playing with children’s paint and introduced him to canvas. Proceeds from sales will go towards conservation and bring awareness to animal trafficking, which is how Jasper was rescued. Read the full report in [this link](#).



New Book Alert!

Last month an article about the Dubai beaches included a photograph of the coastline, taken from Space by Tim Peake. For your information, the book will be available on [Amazon](#) from 17 November, with all proceeds from sales going towards the Princes Trust.

DNHG Recorders

Reptiles - Dr. Reza Khan 050 6563601

Astronomy - Lamjed El-Kefi res: 06-5310467 off: 06-5583 003 email: lankefi@emirates.net.ae

Marine Life - Lamjed El-Kefi

Geology - Gary Feulner res: 306 5570

Insects - Gary Feulner

Fossils - Valerie Chalmers
res: 4572167 mobile: 050 455 8498
email: valeriechalmers@gmail.com

Plants - Valerie Chalmers

Archaeology - MaryAnne Pardoe
mobile: 050 724 2984 email: maryannepardoe@yahoo.co.uk

Mammals - Lynsey Gedman mobile: 050 576 0383 email: lynseygedman@hotmail.com

Seashells - Andrew Childs mobile: 050 459 0112 email: andrew.childs@eim.ae

Birds - Tamsin Carlisle mobile: 050 1004702 email: tamsin.carlisle@platts.com

Spotlight and Field Clip

Field Trip to the Falcon Heritage and Sports Centre, and the Falcon Hospital (September, 2016), by Tam Fely



Saker Falcon



Hooded falcons



Falcon skeleton

Cow Bugs and Milkmaid Ants

Cow bugs are a type of treehopper in the Order Hemiptera (true "bugs") and family Membracidae. They are also known as thorn bugs due to the short, thorn-like structures on their heads.

What do they do? They basically feed on tree sap (both adults and the nymphs). They are mostly seen on tree branches and they prefer trees with thorns, to camouflage themselves.

But why are they called cow bugs? They don't look like a cow, but they act like one. They secrete a sweet honey 'milk' which attracts ants, and the ants become 'milkmaids' by milking them for the honey. In exchange for this special treat, the ants give protection from predators. Ants also work like housemaids, keeping the cow bugs clean.

In the UAE, only one species of cow bug is known so far, *Leptocentrus cf. horizontatus*, identified in vol.3 of Arthropod Fauna of Arabia. I have come across these cow bugs and their milkmaids twice during trips to

plantations close to the beach on the East Coast. Cow bugs were present in good numbers on the ends of branches of Mesquite trees (*Prosopis juliflora*), but both adults and nymphs were attended by much larger numbers of conspicuous black *Camponotus* genus ants. Ants consume the sweet honey themselves and do not use it for feeding the young ones in their colony.

Contribution by Binish Roobas



A cow bug (thorn bug) *Leptocentrus cf. horizontalis* being tended by two *Camponotus* ants.

Close up of an adult cow bug (center) and a juvenile or nymph (lower left).



© Binish Roobas

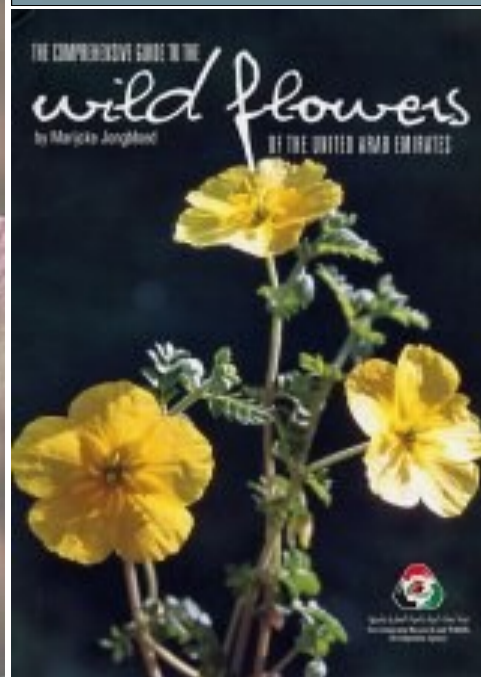
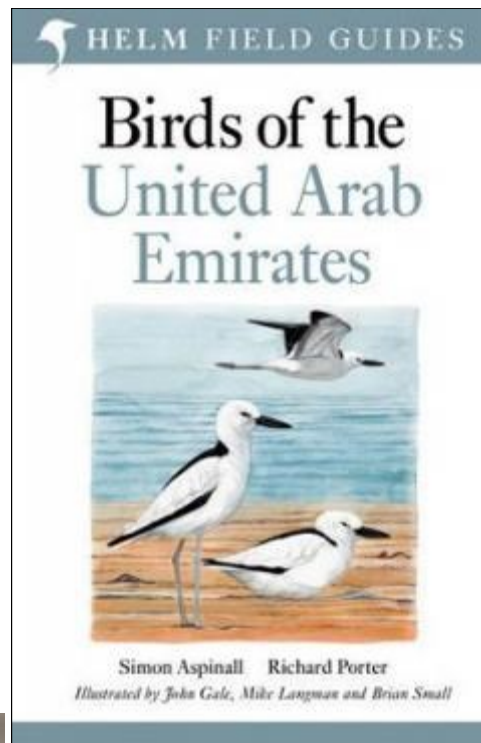
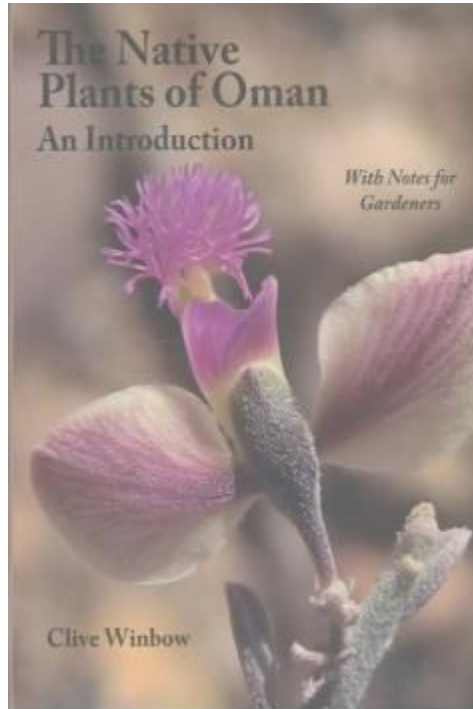
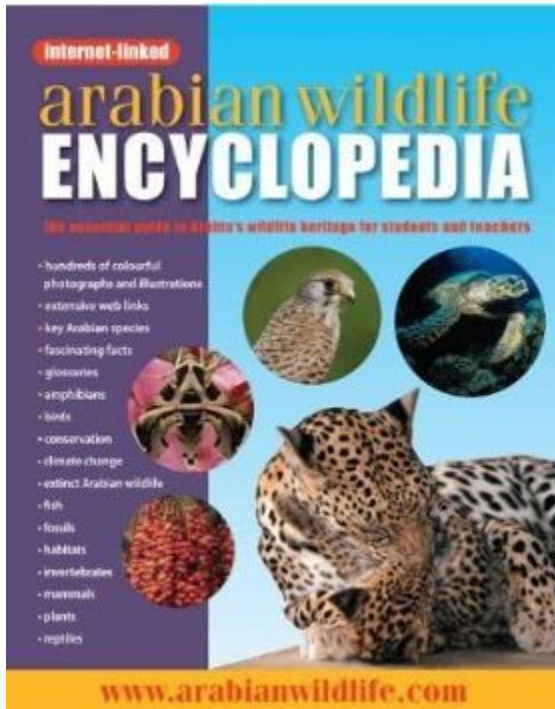
Books and Field Clip

DNHG Bookseller Wanted!

A variety of books and journals on UAE natural history are available for sale at most lecture nights. Some are hard-to-find classics, others are new arrivals not always seen on local bookshelves. However, our bookseller of many years, Johanna Raynor, will be leaving the UAE with her husband Steve and family, to return to their native New Zealand and we all very much appreciate her valuable contribution to the DNHG.

In order to continue this service to our members, we need someone to take charge of the bookseller's role. We are looking for someone who attends most DNHG monthly lecture nights, and who can bring with them a selection of books and journals on these nights and handle the sales transactions. We can supply a small wheeled suitcase for transport, if necessary.

Being the bookseller is a good way to meet other members, new and old. You also get to read the books and journals at home. If interested, please contact Chairman Gary Feulner, Vice Chairman Valerie Chalmers or Bookseller Jo Raynor. (Contact information is shown on page 8)



UAE Climbing Plants

The UAE has three main climbing plants from three very distinct families:

(1) *Ephedra foliata* (Ephedraceae), a leafless species with branches/stems arranged in whorls, is the UAE's only native gymnosperm (the group of higher plants that includes conifers, cycads and

gingkos). It can grow as an independent shrub, but more typically it straggles through neighboring vegetation or up adjacent trees. Its fruit is a small white capsule.

(2) *Cocculus pendulus* (Menispermaceae) is typically seen as a hanging plant, but it can also grow as a straggler or climber. It has small oblong

(Continued on page 6)



Stems of *Ephedra foliata*, showing branches in whorls

Field Clips and Announcements

The Caracal Challenge

An adventure company is organising a trek in the Abu Dhabi desert on 11th November. Husaak Adventures, in partnership with the Environment Agency, Abu Dhabi (EAD) and others, state that net profits will be contributed to the Emirate Wildlife Society and World Wildlife Fund (EWS-WWF). There are three exit points on the route, but participants need a high level of endurance and fitness, to complete the full 15 kilometer challenge. Further details [here on the EWS-WWF website](http://www.husaak.com/tcc).

A full event schedule with the option to sleep over, map, what to bring and cost details can be found at:

<http://www.husaak.com/tcc>

Systematical monitoring of resident raptors.

An email was sent out recently requesting members to upload sightings of the above (if they had not already done so) onto the site of Tommy Pedersen, namely 'UAE birding' (link follows):

<http://www.uaebirding.com/forum/showthread.php?8101-Submitting-your-records-to-the-UAE-Bird-Database>

This was requested by Dr Panagiotis Azmanis, from the Dubai Falcon Hospital/Wadi al Safa Wildlife Center, who is monitoring the movements of the Barbary falcon, Bonellis eagle, Osprey, and in particular, the vultures (Egyptian and Lappet-faced).

Should you prefer, you can email your sightings directly to Dr Azmanis at:

azmaniz.vet@gmail.com



Lappet-faced Vulture in captivity at Kalba Birds of Prey, ©Tamsin Carlisle



Shells—dead or alive?

Following an article published last month regarding shells and groynes in Umm Suqeim/ Jumeirah, an interesting point was raised by a reader - 'Does the above sign mean 'dead' shells or shells with animals still living in them?' The writer just assumed all shells, regardless. However, looking more closely, this particular rule is highlighted in yellow and linked with fishing, so perhaps it does only mean occupied shells.

In the meantime, another reader was challenged by a municipality worker, who explained that some people fish illegally. It would appear that the sign is open to interpretation, as it doesn't actually specify whether the shells it refers to are empty, or those that still have an occupier. However, the sign also bears a severe warning as you can clearly see for yourselves if you zoom in at the base of the above photo.

Calling all creative artists!

New member, Zahidah Zeyton Millie is appealing for local artists to support a forthcoming exhibition entitled, "Mangroves from the Water."

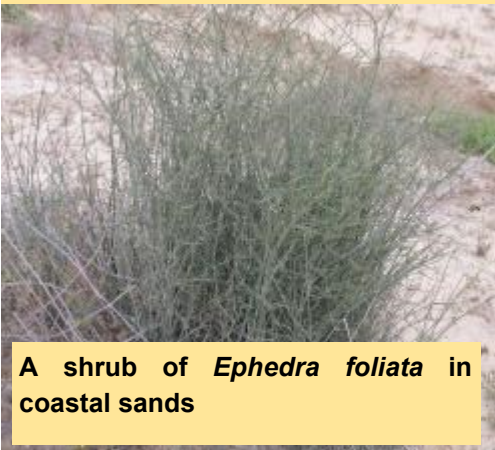
Zahidah asks, "If you are a botanical artist, painter, sculptor, photographer, writer, poet, scientist graphic designer, short movie producer, musician, a fashion designer or a sport coach, then please show us a piece of your work about the mangroves or its habitat by 30 November 2015. Send it through our exhibition [Facebook page](#) after you press the "like" button. **The UAQ mangroves are under threat and they suffer from daily harm by camel farmers, illegal fishing, falcon hunters, crab hunters, litter and general misuse from people.**"

Another artist contributing to the same community project, requests donated 20 x 20 cm crocheted or knitted squares, which will all be joined together. [Mangroves from the Water](#) is a blog which has details of this, the deadline for the squares being January, 2017.

This is the second year of the exhibition, which brings awareness of the importance, beauty and plight of the mangroves. The exhibition is scheduled to take place in February, 2017 under a traditional Emirati tent, and has the support of the UAQ Municipality and HCT Sharjah. Updates will be posted on the Facebook page.

Field Clip

(Continued from page 4)



A shrub of *Ephedra foliata* in coastal sands



The fruit of *Ephedra foliata*

leaves, tiny yellow flowers and diffuse clusters of dark red berries.

(3) *Pentatropis nivalis* (Asclepiadaceae) is a milkweed with long, blade-shaped slightly rubbery, succulent leaves. It is exclusively a climber. Its flower is relatively large and showy; it looks like a star turning



A fence of *Pentatropis nivalis* in a Hajar Mountain farm

into a pinwheel, with stringy, unruly flagelli at the points. In the plantation environment, it flowers even through the dry late summer and early fall.

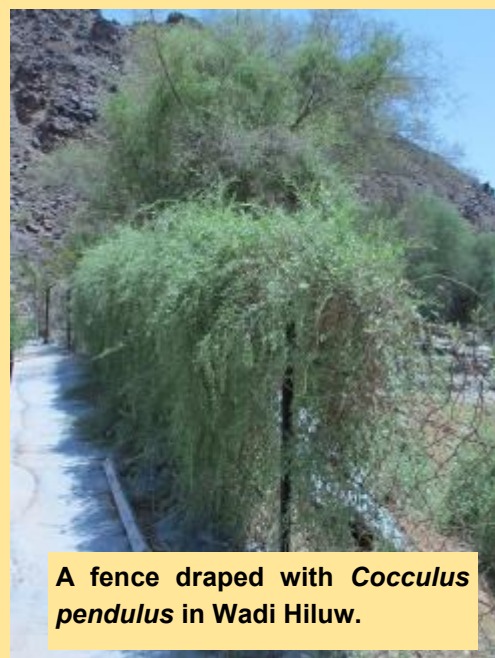
In natural environments all of these climbers are infrequent, although DNHG visitors have occasionally seen all three on a single field trip. They are found mostly in the mountain regions, but *E. foliata* also climbs ghaf trees in the desert and beach shrubs on the RAK coast. Climbers are especially common in abandoned field areas, where they may infest neglected trees. All of them may grow profusely, ultimately at the expense of the host tree. They should not be mistaken for parasites, however. They do not take nutrients from their hosts, only support.

Recently I have seen *Cocculus pendulus* and *Pentatropis nivalis* used as fencing material in a number of plantations on the East Coast and in Wadi Hiluw.

Contribution by Gary Feulner



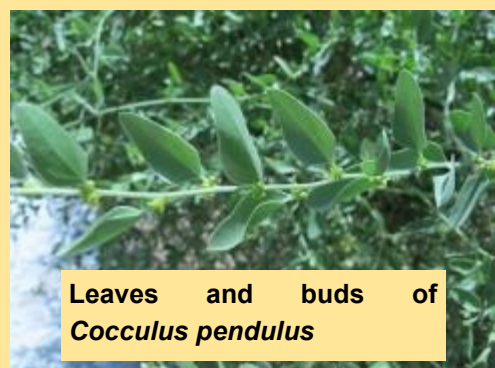
Typical leaves of *Pentatropis nivalis*, on a plantation hedge



A fence draped with *Cocculus pendulus* in Wadi Hiluw.



Cocculus pendulus draping an Acacia tree



Leaves and buds of *Cocculus pendulus*

A pinwheel flower of *Pentatropis nivalis*



Field Clip

Dragonfly Season in Jumeirah!

Judging from the early morning and evening congestion around the bird bath, our garden must stand out to any passing aerial traffic. I'll explain. Due to relocation of company staff, most of the villas in our street emptied a year ago and the gardens are now barren. I therefore assumed that this was the reason for the early morning dragonfly visit earlier this month. It was resting on a low branch, amongst the freshly-watered greenery. It was very still and I probably would not have noticed it at all, had I not seen it land there.

Having observed dragonflies and damselflies around waterfalls, falaj systems and wadi pools, where there is an ample supply of fresh water from natural sources, I must admit that I was a bit surprised to see this large and colourful winged insect in our Jumeirah garden. Hours away from the mountains, how did the dragonfly manage the distance?

Luckily for me, the camera was already set up with the telephoto lens and I managed to capture the images on the right. Though the photos are a little hazy, the clarity was good looking through the actual lens, revealing this insect to be quite spectacular! Zooming in revealed dazzling spots of reflected sunlight on its wings and eyes. My photo appears to show two sets of wings but as I moved around to try and get a side view, the dragonfly panicked and flew away.

Looking in **The Emirates: A Natural History** I matched my photograph to a Purple-blushed darter *Trithemis annulata* and the publication states that 'after the adults hatch out, they often migrate vast distances to find feeding areas and new bodies of water for reproduction to begin anew.' (Hellyer Ed., et al. 2005). This would explain the earlier 'distance' question - or perhaps it was born closer to home.

The images below are courtesy of **An Illustrated Checklist of the Damselflies & Dragonflies of the UAE** by Graham B. Giles (TRIBULUS Vol. 8.2 Winter 1998). As is often the case in nature, the male is a lot more colourful than the female, which is 'less easy to spot', according to this checklist. I concluded that my garden visitor was indeed a male Purple-blushed darter, with possibly a female companion nearby that I could not see. Giles describes this particular specimen as 'very common' and this proves that my daughter is more observant than I, as she has since mentioned that she has seen dragonflies in the past, more so in our previous villa in Umm Suqeim 3. Giles also states that 'in some cases, identification requires expert examination of anatomical details, particularly wing venation,' throwing doubt on my earlier conclusion. Indeed, my visitor could be one of three very similar-looking specimens in this publication.

My own copy of **The Living Desert** revealed a dragonfly and a damselfly, which were observed in a wadi by the author, Marijcke Jongbloed, between November and December. It is likely then, that there will be other flying creatures to look out for over the next couple of months, though perhaps not that many in our garden!

Contribution by M Swan



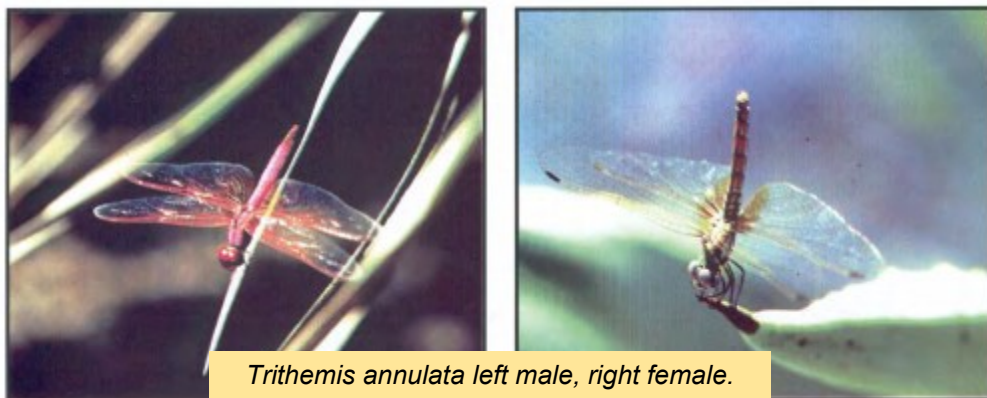
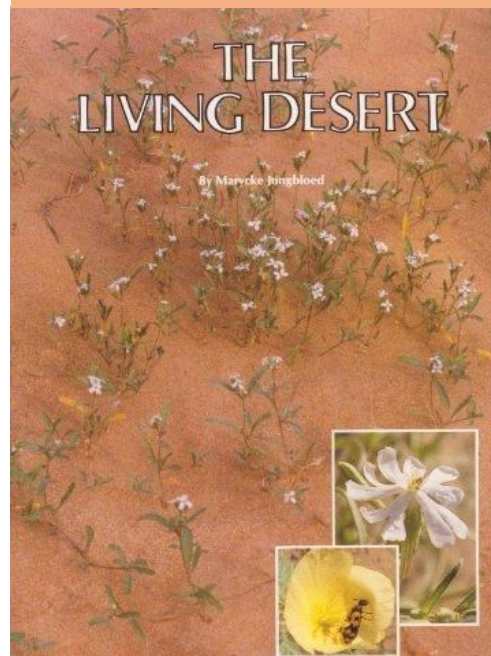
Actual photo of the dragonfly



Another photo, cropped and magnified

The book below last had a print run in 1993. I have found this book to be a useful guide, not just because of the well-researched photographs, illustrations and field guide, but especially the month by month observations. Although now out of print, second-hand copies are available through online booksellers, such as AbeBooks and Amazon.

It is worth investing in a desert reference book, especially at this time of year. Once the rain arrives, the desert will provide much to look for. New members, browse through the books on offer at the next meeting.



Trithemis annulata left male, right female.

Dubai Natural History Group Programme

Lectures at Emirates Academy of Hospitality Management, 7.30 for 8.00pm

- November 6: Jacky Judas—doing a Ph.D. on peccaries in French Guyana.
 December 4: Members' Night: Angela Manthorpe on "Svaalbard", Sahil Latheef on "Amphibians of the Western Ghats" and Nirmal Rajah on "Fossils".

Scheduled Field Trips (Members only)

- October 29: Visit to Al Hefaiyah Mountain Conservation Centre
 November 4—5: Overnight dhow trip to the Musandam (open to all ENHG groups)
 November 12: Visit to Al Saruq Al-Hadid Museum in the Shindagha Historical Area
 November 30 – 2 December: Geology of the Western Hajar Mountains (arranged by ENHG Abu Dhabi)
 December 16—23: Northern Vietnam

*Field trip
 notifications will
 be circulated to
 members via
 e-mail*

DNHG COMMITTEE 2016

(When possible, please contact committee members outside office hours)

	Name	tel	email
Chairman	Gary Feulner	04 3065570	grfeulner@gmail.com
Vice Chairman	Valerie Chalmers	050 455 8498	valeriechalmers@gmail.com
Treasurer	Rakesh Rungta	050 774 4273	rakeshrungta10@gmail.com
Membership Secretary	Anindita Radhakrishna	050 656 9165	anin@emirates.net.ae
Speaker Co-ordinator	Martina Fella	050 358 6485	martina_fella@hotmail.com
Speaker Co-ordinator	Michelle Sinclair	050 458 6079	sinclairm2004@yahoo.com
Fieldtrip Co-ordinator	Sonja Lavrenčič	050 256 1496	lavson@gmail.com
Member-at-Large	Pradeep Radhakrishna	050 450 8496	wgarnet@eim.ae
Newsletter Editor	Margaret Swan	050 7984108	gazelleeditor@gmail.com
Librarian/Book Sales	Johanna Raynor	055 604 2575	jorayoman@gmail.com
Postmaster	Sandi Ellis	050 644 2682	sandiellis@gmail.com
Chief Engineer	Ajmal Hasan	056 5047006	ajmal_hasan@hotmail.com
Website Co-ordinator	Sandhya Prakash	050 551 2481	sandy_pi@yahoo.com
Greeter at meetings	Helga Meyer	055 821 7266	willyroaming@gmail.com

Postal Address: DNHG, PO Box 9234, Dubai, UAE

The Anthropocene

**An Exhibition by
 Artist/Photographer
 Richard Allenby-Pratt**



*Will be held on
 13 November in
 Al Serkal Avenue*

*[More details
 here](#)*

Membership of the DNHG remains one of Dubai's best bargains at Dh100 for families and Dh50 for singles. Membership is valid from September 2016 to September 2017. You can join or renew at meetings or by sending us a cheque made out to HSBC account number 030100242001. (Please note we cannot cash cheques made out to the DNHG).

Payment can also be made by cash deposit at a bank or ATM, using our IBAN number AE900200000030 100242001. However, this process does not identify you as the payer. If you wish to pay by cash, please also photograph or scan a copy of your payment confirmation and send via e-mail to the Membership Secretary, so we know whose money we have received.

DNHG membership entitles you to participate in field trips and help pay for our lecture hall, publication and distribution of our monthly newsletter, the *Gazelle*, our post office box, additions to our library, incidental expenses of speakers and occasional special projects.