



GAZELLE

مجموعة دبي للتاريخ والطبيعي

On January 15th, the planets were aligned in the early morning sky – Venus, Mars, Jupiter and Saturn, with Mercury due soon - as the group gathered at the Sharjah Monument Roundabout.

Bundled up against the cool air, everyone followed enthusiastic and extremely knowledgeable Ajmal Hasan by foot into the desert for a four-hour trek.

It was a photographer's paradise as the morning sun crept over the horizon while the fog softly hung in the valleys. The dew left sparkling jewels on the plants. Thanks to the recent rain, small shoots were poking their heads through and the plethora of animal tracks were easily seen crisscrossing the dunes. As expected, Ghaf trees (*Prosopis cineraria*), Rimth (*Haloxylon salicornicum*) and Sodom's Apple Milkweed (*Calotropis procera*) dotted the landscape. Several Ghaf trees, uniquely standing proud on exposed root stilts, stood in defiance of the harsh environment.

Under one tree was found a perfect Bagworm moth (genus *Amicta*) cocoon, which is an amazing example of animal architecture. A Ghaf Tree Jumping Spider (*Menemerus cf. taeniatus*) was sought and found in a



Bagworm (Lepidoptera *Amicta*) cocoon



Desert in the Mist

© Ajmal Hasan, January 2016

neighboring tree. There were also a few examples of the Mesquite Tree (*Prosopis juliflora*) native to Mexico, South America and the Caribbean, an invasive species that has effectively become naturalized on the sand and gravel plains and waste ground of the UAE.

Adding some color to the area were the blooming *Calotropis procera* and nascent *Haloxylon salicornicum* (whose seedlings surprisingly have red stems). Other shrubs and grasses were extremely rare due to overgrazing by camels from nearby farms, but a few examples were seen of nibbled turnsole (*Heliotropium kotschyi*), Limeum (*Limeum arabicum*) and Polycarpaea (*Polycarpaea repens*). One grazed specimen, about 10cm tall, has so far stumped the DNHG's experts.

The tracks left in the dunes told a story of lively night activity. Gerbils (probably Cheesman's Gerbil *Gerbillus cheesmani*), Arabian Red Fox (*Vulpes vulpes arabica*), and camels (*Camelus*

dromedarius) were evidently active in the area, although we actually saw no camels and few tracks. Some of the smaller inhabitants included the bold, black desert ants (*Cataglyphis* sp.), Zarudnyi's worm lizard (*Diplometopon zarudnyi*), and the sinuous trails left by small snakes, probably by the Crowned Leaf-Nosed

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

Renee Williams, Ajmal Hasan, Charles Laubach, Gary Feulner, R.F.Cook, Richard Allenby-Pratt, Stefan Beck, Sandhya Prakash and Willy Meyer.

Announcements

Next Month's Speaker

*The DNHG are delighted to welcome the following speaker, who will present an illustrated talk on:
"Satellite Habitat Mapping of Abu Dhabi' Emirate"*

Richard Flemmings - Richard is the General Manager of Proteus, a company who specialize in using innovative map making techniques, primarily using satellite imagery. He moved from the UK to Abu Dhabi in 2013 to lead the Environment Agency—Abu Dhabi mapping project. Richard has a degree in Cartography and a MSc in Geographical Information Science. He has 14 years' experience in surveying and map making. Richard has worked in offshore survey in the Indian Ocean and Australia, and was a camera operator in survey aircraft mapping several countries in Africa and Europe. His passion for map making and discovering new landscapes and environments has led to him becoming a Fellow of the Royal Geographical Society (FRGS), and achieving Chartered Geographer status (CGeog). Richard sits on the ENHG committee and is responsible for coordinating corporate sponsorship for the group.

Mapping Abu Dhabi's Habitats

In early 2013, Environment Agency – Abu Dhabi commissioned a project to produce a habitat map of the entire Emirate. The goal was to produce a highly detailed record of the entire landscape as a baseline to work from for future environmental planning. Using Very High Resolution satellite imagery the entire Abu Dhabi Emirate was mapped at 1:10,000 scale, classifying the land and sea into 42 terrestrial and 13 marine habitats. The map, which is now complete, was ground breaking in its magnitude and level of detail; the methods that were used are usually only deployed for small scale Environmental Impact Assessment studies. This map is the first of its kind in the world to use these techniques over such a large area.

This presentation will explore how this highly detailed habitat map can be used to inform environmental decision making in years to come, as well as briefly explaining how the map was created, using a mixture of disciplines and techniques, combining classic cartographic principles with cutting-edge satellite processing technologies and local ecological expertise. A demonstration of the final map will be given, and how this can be accessed by the general public through the Environment Agency's website.

From the Editor:

As we look forward to the 2016 Inter-Emirates Weekend with anticipation, there are still plenty of places to explore in the wadis, seas, deserts and mountains of the UAE, and the weather is perfect for exploration.

The sandy desert and dry (and not so dry) wadis provide perfect environments for many a specimen of flora and fauna, as you can see on pages four, five and six.

A recent visit to Sharjah Planetarium provided a learning opportunity for many. Willy Meyer gives us a pictorial insight on page three.

Staying with the night sky, according to the [National Geographic website](#), the planets are in alignment from January 23 until the first week of February. [Sky and Telescope](#) offer some helpful hints on how to view this phenomenon 45 minutes before sunrise. Click on the above hyperlinks to read more.

Finally, I think readers would agree that the photographs, especially

8pm on Sunday, 7th February, 2016



those of the fruit bat and crayfish on page three, could have been a lot clearer. I hope to improve my ability to focus through the lens at the forthcoming

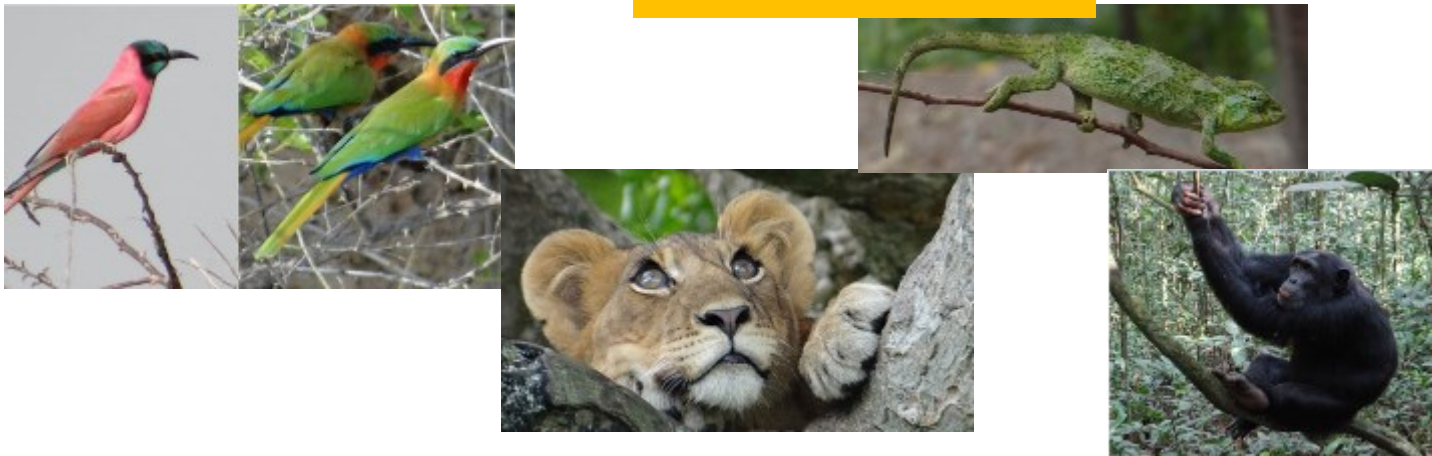
photography course. Members who enrolled on this course are reminded to pay 200 dirhams at the 7th February meeting. (see page 7 for further details).

Spotlight

Sharjah Planetarium, by Willy Meyer



Uganda Wildlife, by R.F. Cook



Seychelles Wildlife, by Margaret Swan



Field Trip



The group at the end of the trek

(Continued from page 1)

Snake (*Lytorhynchus diadema*).

Elusive were the Striped Mantis (*Blepharopsis mendica*) and Eastern Sand Fish (*Scincus mitranus*) but the group was rewarded with a good view of a White-Spotted Lizard (*Acanthodactylus schmidtii*), the most common diurnal lizard in this area, and a large, black Churchyard Beetle (*Blaps kollari*).

Our large group saw relatively few birds, but they included the Crested Lark (*Galerida cristata*), Desert Wheatear (*Oenanthe deserti*), and the splendid Purple Sunbird (*Cinnyris asiaticus*).

One could not help but join Ajmal's passion and appreciation for our local desert environment. A colorful Little Green Bee-Eater (*Merops orientalis*) was sitting on the fence as we reluctantly climbed into our cars and drove back to civilization but with a renewed appreciation and knowledge of the regional desert.

Contribution by Renee Williams (the last one there), with thanks to Ajmal Hasan, Gary Feulner and Charles Laubach



Dubai Natural History Books

The DNHG have a small selection of books for sale, which can be purchased at the monthly lectures.

If you are interested in obtaining any of the publications, please contact the DNHG librarian and book sales coordinator Johanna Raynor, whose contact details are on the back page of this newsletter. Here are three of the books, which are currently on sale:

Arabian Wildlife Encyclopedia - 130Dhs

Native Plants of Oman – An Introduction - 80Dhs
by Clive Winbow

Wild Flowers of the UAE by M. Jongbloed - 100Dhs

Winter Wadi Walk

Our January 22 wadi walk featured an unusually sharp-eyed and inquisitive group. We explored Wadi Daynah and Wadi Mansab, two of the many smaller wadis in the mountains south of Shawkah, where intermittent rains over the past two months have given the plants a boost, notwithstanding temperatures that are still relatively cool for the UAE. Among the common shrubs we found in flower were large clumps of the yellow-green, leafless *Euphorbia larica*, the wadi pea *Tephrosia apollinea*, and the toxic *Rhazya stricta*, a relative of Oleander. Some annuals have appeared and were beginning to flower as well, in spite of the temperatures, e.g., the prostrate *Tribulus terrestris* and the widespread but rare *Anticharis glandulosa*.

The plants appeared to be ahead of the browsers and grazers (goats, camels and donkeys), so we saw small plants of notoriously edible species such as the mint *Teucrium stocksianum* and the edible daisy-family shrub *Rhanterium epapposum*. In fact, evidence of the grazing history in this area was ambiguous. The abundance of *Rhazya stricta* in the wadi suggests that grazing was once significant, and the umbrella profile of the ghaf trees indicates that they are still browsed by camels, but we also saw quite a number of flowering shrubs of the Desert Thorn *Lycium shawii*, suggesting that in recent times there has been an interval when grazing pressure has been reduced. Perhaps local animal husbandry (goats and camels) is now more centered on farms, and herding in 'wild' areas is correspondingly reduced. That hypothesis is supported by the relatively small numbers of goat and



A happy DNHG hiking group (S.K. Beck)

camel droppings that we saw.

Unusually thick growth in the top of an Acacia tree proved to be a flourishing milkweed vine, *Pentatropis nivalis*, which we later found climbing on both ghaf and sidr trees as well. These vines can be seen



A male Blue Pansy butterfly basking in the wadi (R. Allenby-Pratt)



***Nebo omanensis*, a scorpion more common in traditional plantations (R. Allenby-Pratt)**



The wadi racer, a harmless mountain snake (R. Allenby-Pratt)

ascending along the trunks of the trees, but the elongated, heart-shaped leaves which allow identification are generally found only in the exposed crown.

We also saw a number of large groves of the Dwarf Palm *Nanorrhops ritchieana*, a fan palm. This plant is more common to the south, in Central Oman, where it is used for a variety of handicrafts. In the UAE it has sometimes been described as endangered, but in fact small groves can be found in the lower and middle reaches of every wadi from Wadi Shawkah southwards into Oman. It favors shallow wadis where islands of silt



***Anticharis glandulosa*, widespread but rare, found in wadi beds (R. Allenby-Pratt)**

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accumulate.

In contrast to plants, animals were much less in evidence. Many invertebrates, especially flying ones, are still waiting for warmer temperatures before they emerge. Conspicuously absent, for example, was the Oriental Hornet *Vespa orientalis*, the spoiler of many a picnic.



***Argiope cf. sector*, the UAE's largest orb-weaver (R. Allenby-Pratt)**

Most butterflies are also waiting for warmer temperatures, but there are exceptions. At lunch time we saw several of the large, pale African Emigrant, a powerful flier and strong migrant, that was probably visiting the Hajar Mountains in response to the recent rains. We also saw small numbers of the widespread



Displaying a spider in the field (R. Allenby-Pratt)

Plain Tiger, Painted Lady and Blue Pansy (a common mountain species which regularly basks in the open wadi bed but is difficult to approach closely). The most common butterfly was the exasperatingly flighty Mediterranean Pierrot, one of the "Little Blues", which features distinctive zebra stripes on the underside of its wings.

We were lucky to see two large scorpions under some decaying wood, the multi-colored *Hottentota jayakari*, the most common scorpion in the mountains, and the dark brown *Nebo omanensis*, which is more common in and around mountain cultivation.

We also found two distinctive spiders. One was the UAE's largest orb-weaver, *Argiope cf. sector* (often misidentified over the years as *Argiope lobata*), which we found in a web strung between two low shrubs. This spider was fairly common in the wet 1980s and 1990s, but has been scarce since then. Binish Roobas found and briefly showcased a male jumping spider,



Stefan and Charles tracing the course of a falaj (R. Allenby-Pratt)

Rafalus arabicus, a species common in the UAE mountains but new to science when it was first described and named in *Arthropod Fauna of the UAE* in 2010. This spider is among the few ground-dwelling invertebrates that are regularly seen in the mountains by day in the open sun. The male is distinguishable by the bare yellow "biceps" on its forelegs. Reptiles were scarce but the vanguard of our party encountered a Wadi Racer



How green was our wadi! – Refreshed by winter rain (R. Allenby-Pratt)

Platyceps rhodorachis at a low spot in Wadi Mansab, where surface water accumulates after rain. A few shallow puddles were found upstream. Otherwise we saw only a few of the common Semaphore Gecko *Pristurus rupestris*.

Our route featured archaeological interest as well, including a number of large but abandoned terraced fields flanking a long bend in the wadi. These fields, we found, were served by a falaj built along the wadi bank that Stefan demonstrated could be traced, with interruptions, for several hundred meters upstream. At a scenic overlook we stopped beside a single cairn tomb, still relatively well-preserved, but, as is often the case, not associated with any pottery or other artifacts that might help to date it. (Cairn tombs of various sorts in the UAE and Oman have been found to date from before the Bronze age into the Iron Age.)

On our return we took a slightly different route, which carried a reminder that it is necessary to be especially careful in the mountains when hiking out of one watershed and into another. Not only are the intervening ridges potentially treacherous, but navigation is potentially fraught as well. If you "guess" wrong, you could come out quite some distance from where you intend.

Contribution and photos by Gary Feulner, Richard Allenby-Pratt, Stefan Beck and Sandhya Prakash

Moses delivering the law (R. Allenby-Pratt)



Field Clips and Announcements



Prickly Pear cactus (*Opuntia* sp.)

Prickly Pear Cactus

To an extent that is remarkable, given the scale of municipal and private landscaping using dry-adapted species, wild areas of the UAE have remained free of invasive plant species. This is an oblique tribute to the rigors of the UAE environment. The sole exception is the mesquite tree, *Prosopis juliflora*, a native of semi-arid tropical and subtropical America and a notorious invader in Africa and Asia.

Mesquite is now effectively naturalized in the UAE. Efforts to contain it have been mostly unsuccessful in the UAE and elsewhere, but botanist Dr. Ali El-Keblawy has expressed the view, to which I subscribe, that it has already spread to all areas of the UAE that it can reasonably colonize, so there is little more that can be or needs be done. Ecologist Dr. Benno Böer has suggested the possibility of harvesting mesquite for charcoal production. It has not proved to be invasive in sand desert or undisturbed gravel plains or mountain areas.

Another dry-adapted species that has always seemed to me to have the potential to spread in the UAE is the Prickly Pear cactus (*Opuntia* spp.). Prickly Pears are native to southwestern North America but are now widespread around the Mediterranean and in South Africa. *Opuntia stricta* proved to be a particularly destructive invader in Australia, where it was brought under control only by biological methods. So I have

paid attention when I have seen Prickly Pears on a few occasions in the past, at tourist sites in Oman.

The Prickly Pear was reportedly introduced to arid North Africa as early as the 16th century, and has become naturalized from Morocco to Tunisia, on the edge of the Sahara. Its edible fruits have histor-

ically been sold in the casbah markets of Fez and Marrakech as the "Moroccan Fig". More recently, it has been re-branded as the "Barbary Fig" and is in demand as an anti-ageing additive to cosmetics, so much so that the United Nations is said to have encouraged its commercial development in Morocco as a cash crop.

In the UAE, I had previously only seen Prickly Pear planted at the refurbished Bidiyah Mosque (the "Ottoman Mosque") on the East Coast, but in January I came across a grove of perhaps a dozen cacti on waste ground in an East Coast plantation, outside the fences of a cultivated plot but in the shade of a very large, old ghaf tree, and on a slope where they might receive seepage from irrigation. The fact that the cactus seemed to thrive only(?) in such a relatively mesic (moderate) environment gives hope that the *Opuntia* species present there may not pose an invasive threat in wild areas. *Contribution by Gary Feulner*



A grove of Prickly Pear in an East Coast plantation, in the shade of a large ghaf tree

March Photography Course

Many people signed up for this, but in order to secure your place, payment of half the cost (200 dirhams), must be paid to Michelle Sinclair at the February meeting. The three-day course will be conducted by a professional visiting photographer.

Roberta Lattuada, who is presently out of the country, requests that if you have difficulty attending the meeting, please contact Michelle by 7th February, which is the deadline. Michelle's contact details are on the back page of this newsletter.

Failure to pay by this date, may result in the course being cancelled.

Tentative dates for beginners is 23, 24 and 25th March.

DNHG Recorders

Reptiles - Dr. Reza Khan res: 344 8283 off: 344 0462

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: 394 8871 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

Dubai Natural History Group Programme

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

March: To be confirmed

Scheduled Field Trips (Members only)

February 18—20: Inter-Emirates Weekend

March 23—25: Photography Workshop

April 1—9: Nepal Hill Country

April 1—7: Andaman Islands

Further field trips, details or changes to trips will be announced/confirmed by email.

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Contributions

We need a variety of contributors. Do you have a field report, unusual finding, interesting news article, book review, amazing photograph, or community news to share?

If so, email your contributions to:

gazelleeditor@gmail.com

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DNHG Membership

Membership remains one of Dubai's best bargains at Dh100 for families and Dh50 for singles. Membership is valid from September 2015 to September 2016. 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 scan and e-mail a copy of your payment confirmation 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.