

GAZELLE

Vol 27 no 1 January 2012



مجموعة دبي للتاريخ الطبيعي

DUBAI NATURAL HISTORY GROUP

PO Box 9234, Dubai, United Arab Emirates

Members' News

New Year & Goodbyes

This month we say farewell and bon voyage to two long-standing members of the DNHG committee. Peter van Amsterdam has been the publisher of our newsletter since February 1998. His wife, Anne Millen, has been our newsletter editor since March 2001 and has also made many contributions to the newsletter herself. In addition to these duties, Peter and Anne have led many trips for the DNHG, both in the UAE and Oman. Peter's Wadi Bih trips have always been very popular.



Anne & Peter with Valerie Chalmers

His excursions into Oman have included roses on the Saiq Plateau, the gravel plains on the edge of the Empty Quarter, wildflowers in the Ghubrah Bowl and the Bat Tombs at both Bat and Al Ayn, all wonderful trips and very much enjoyed by DNHG members. The Saiq Plateau trip has been repeated numerous times as it proved very popu-

lar. Anne who is an expert on UAE seashells has led many shelling trips on both coasts. We have greatly appreciated all they have done for the DNHG and shall miss them very much. We wish them well in their retirement to Sri Lanka. Maybe a DNHG trip to Sri Lanka is on the cards for the future?

Squirrels spotted in Jumeirah

While researching the species of squirrel living in her garden in Jumeirah, Roelie Le Roux came across the April 2011 volume of the Gazelle newsletter which contained a photograph of a squirrel in Fujairah.



Roelie notes that the the Gazelle suggests that there is no evidence that the squirrel photographed in Fujairah is anything more than escaped pet. Roelie has two squirrels living in the trees in her yard and thought the Gazelle readership

DNHG Membership

DNHG Membership remains a bargain at Dhs.100 for couples/families and Dh. 50 for singles. You can **join or renew at our meetings or by sending us your details and a cheque** made out to: Lloyds TSB Bank account no. 60600669933501. (Please note we cannot cash cheques made out to the DNHG.)

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

ENHG Al-Ain Website

Spurred by our November lecturer, Brien Holmes, Chairman of the Al-Ain ENHG, we remind you of that group's website: www.enhg.org. On the site you can find information on sundry UAE natural history subjects, including an archive of articles from the Abu Dhabi ENHG Bulletin (the successor to Tribulus), published from the mid-1970s

This Month's Contributors

The Editor would like to thank the following for their reports and contributions:

Roelie Le Roux
Valerie Chalmers
Gary Feulner

Christine Verreydt.
Michelle Sinclair
Tamsin Carlisle

Under the patronage of H.E. Sheikh Nahayan bin Mubarak Al Nahayan



might be interested in hearing about this development.



Photographs by Roelie Le Roux

Inter-Emirates Weekend, Thu-Sat, Feb 23-25, 2012

This years IEW will be hosted by the DNHG and will be based in Dubai at the Holiday Inn Express Hotel (Airport).

The hotel is located opposite Dubai International Airport Terminal 3. It is readily accessible by car via Business Bay Crossing, directly from the Al-Ain Road or Al-Khail Road. It is also just a short walk (0.5km) from Emirates Metro Station on the red line. Room rates are attractive and are intended to facilitate attendance by all NHG members who are interested.

A final itinerary and instructions for hotel reservations has been circulated to all DNHG members by e-mail. If you are intending to participate in field trips and/or the Friday night (Feb 24) dinner and program – even if you do not plan to book at the hotel – **please contact Val Chalmers (04-394-8 8 7 1 or ValerieChalmers@gmail.com) to register your intentions so that we can plan for the expected numbers.**

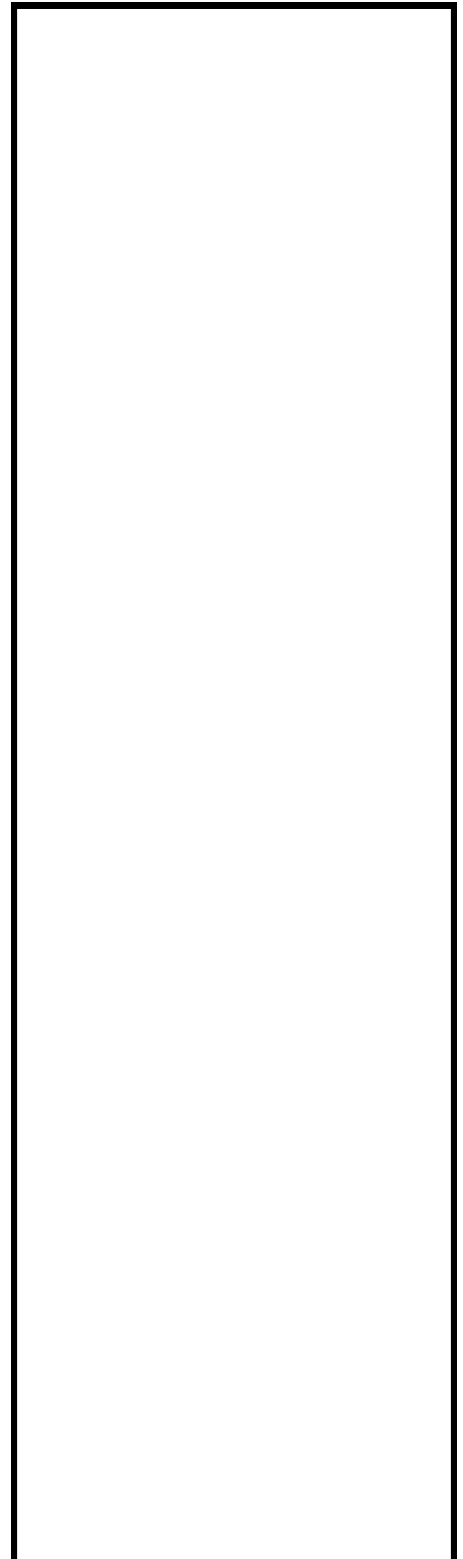
Nepal Hill Country, March 23-31, 2012

This trip now has a short waiting list. For inquiries, contact Gary Feulner: grfeulner@gmail.com or 04-306-5570.



Nepal hill temple ceremony

Our Next Speaker





Email your field reports and news to clare.ohare@gmail.com (Arial 10 justified). Please send your photographs as **separate .jpg files** (preferably compressed for documents) or deliver them to Editor Clare O'Hare for scanning.

Geology of the Hajar Mountains

Jean-Paul Berger was our guide in December for a field trip across the Hajar Mountains from the Dhaid plains to the East Coast, revealing and interpreting a cross-section through the thrust sheet that comprises the bulk of the Hajar Mountains in the UAE.



Geologist at work

The thrust sheet consists of a suite of rocks, collectively called *ophiolite*, representing a slice of the upper mantle and crust of the earth from beneath a 100 million year old ocean basin. Within the ophiolite, the rocks at the top of the thrust sheet are generally derived from those below, physically and chemically, by melting or partial melting.

At the bottom of the pile is the harzburgite (a rock composed primarily of the minerals olivine and orthopyroxene) that characterizes the upper mantle. Harzburgite is actually a residual product left after the fractionation of the components that became the amorphous and layered gabbros, the sheeted dykes and the pillow basalts (and other

minor rocks) that are found successively above. This idealized structural sequence is complicated by diffuse transition zones and by later faulting within the thrust sheet.

After emplacement on the edge of the Arabian platform ca. 90-70 million years ago, the thrust sheet was folded upwards in the west and downwards in the east, so that, after erosion, the lowest levels (from the upper mantle) are exposed along the western flank of the mountains, and successively higher levels are exposed eastwards. Beginning the day at Jebel Buhays, we could see that the leading (western) edge of the thrust sheet had been eroded and gradually covered in latest Cretaceous times by shallow seas that deposited the sediments in which most of the UAE's fossils are found today.



Pillow lavas for a pulpit

Driving eastward, Jean Paul tried to help us distinguish between the different components of the ophiolite -- the harzburgite, the pods of dunite (mostly olivine) and chromitite (rich in chrome-iron oxide) within it, the overlying gabbros and odd wehrlite, tonalite and other dykes of the transition zone, and the upper zones of sheeted dykes and pillow lavas. In many cases Jean-Paul's practised eye could make these distinctions on the basis of subtle differences in colour, topography or weathering style.

Members who missed the December trip will have a second chance at Inter-Emirates Weekend, when Jean-Paul will repeat this Hajar Mountain trip on Fri, Feb 24.

Then, on Sat, Feb 25, he will tackle the geology of the complex and still enigmatic Dibba Zone, at the boundary between the Hajar Mountains and the Musandam Mountains or Ru'us al-Jibal. Report by Gary Feulner

Wadi Wurayah Winter Walk

It was on one of these beautiful "winter" mornings on 13 January that around 15 DNHG members took off for a hike to the Wadi Wurayah National Park (the first protected mountain area of the UAE, by way of Fujairah royal decree No 2 of 2009).



Wadi Wurayah is remarkable, not only because of running water, waterfalls and pools the whole year round, but also for its stunning views, great hiking trails and natural wildlife and flora.



Narrow gorges

But, largely because of the presence of water, this is also "the" place for picnickers and wadi bashers, the result of which can be seen in the graffiti and barbecue left overs; it can also be heard from loud music and noisy cars.



Water in Wadi

Albeit this first disturbing sight, we were not discouraged. Once civilisation is left behind, the beauty of the wadi unfolds in all its aspects.

We did this hike twice in the spring of 2011 and at that time the walk was quite straightforward; the terrain was flat and easy. However, this time to our surprise, we were forced to change our route. Water had its impact, some parts were flooded and the passage through the narrow gorges had now turned into large swimming pools: there was no way to wade through it. Consequently we had to find alternative ways and we had to scramble and climb on many occasions. That made the hike quite remarkable and challenging...



Oman Sawscale Viper—*Echis Omanensis*)

Due to these unforeseen obstacles, we didn't proceed as quickly as we planned but it was a memorable hike. On two occasions we were able to spot an "Oman Sawscale Viper" (*Echis Omanensis*). *Report and photographs by Christine Verreydt.*

Mid-Winter Bloom

Wadi Zikt on the East Coast was surprisingly alive and colourful on a mid-January visit, notwithstanding the cold spell earlier in the month. Vying for attention were not just the green of seedlings and new foliage but also the yellows and whites and pinks and purples of flowers blooming in the wadi bed.



The small, bristly annual Arnebia hispidissima, flowering in mid-January in Wadi Zikt.

"To every thing there is a season" wrote the Ecclesiast. Botanically speaking, that is more evident in the temperate zones, but it is also generally true of the mountain areas of the UAE, where even substantial rain in late autumn and early winter will not normally coax most species to bloom until at least late February.

Nevertheless, it is a commonplace that arid region plants must be somewhat opportunistic about rainfall, and the Wadi Zikt flora demonstrated that adaptability, perhaps aided by its low elevation and the slightly milder winter temperatures on the East Coast. Prominent among the flowering wadi bed and wadi bank species were the perennials *Cleome rupicola*, *Convolvulus virgatus*, *Crotalaria aegyptiaca* and *Physorrhynchus chamaerapistrum*, and annuals *Asphodelus tenuifolius* and *Leucas inflata*.

On the other hand, rocky slope areas and gravel terraces did not appear to be greatly refreshed, and were dotted with the 'skeletons' of mostly dry-looking

and still dormant shrubs. Absent therefore were the annual species that in some years give the gravel terraces a carpet of color, such as *Diplotaxis harra* (bright yellow) and *Erucaria hispanica* (pale lavender). We may hope to see these a bit later in the year.

Also observed, in a robust shrub in the wadi bed, was a small web and a resident female of the large orb-web spider *Argiope lobata*. This species was commonly encountered in the UAE in the late 1980s and 1990s, but has been rare in the relatively dry new millennium. The female caught and wrapped two flies while we watched.



The large orb-web spider Argiope lobata with a freshly caught fly.

One or more *A. lobata* males can often be seen in the webs built by females, but none was present on this occasion. However the web did include a characteristic stabilimentum – a white "lightning bolt" of silk radiating from (or towards?) the centre of the web. As many as four stabilimenta may be present but their exact function remains to be conclusively determined. *Report and photographs by Gary Feulner*

***Schweinfurthia imbricata*: A Hajar Mountain Endemic Plant**

A bonus for our December geology field trip was a fruiting specimen of the distinctive but uncommon and unprepossessing *Schweinfurthia imbricata*.

The UAE has no endemic plant species of its own, but this spreading prostrate plant is one of only a handful of UAE species that is endemic to the Hajar Mountains of the UAE and



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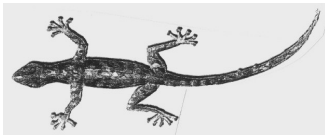
Fossils - Valerie Chalmers
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fax 340 0990
email: valeriechalmers@hotmail.com

Plants – Valerie Chalmers

Seashells and Mammals - Recorders needed!

The recorders are not necessarily scientific experts in their designated fields. In fact, most are not. However, they are interested and knowledgeable amateurs - please contact them if you have any interesting reports or queries.

The intention is that information will be channelled through to the *Gazelle* editor, so new information can be shared with all our readers.



northern Oman. It belongs to the Family Scrophulariaceae, sometimes called the figwort family.
Report and photographs by Gary Feulner



Schweinfurthia imbricata, a Hajar Mountain endemic found in the UAE

Sea Squirts – a 'Science' Story

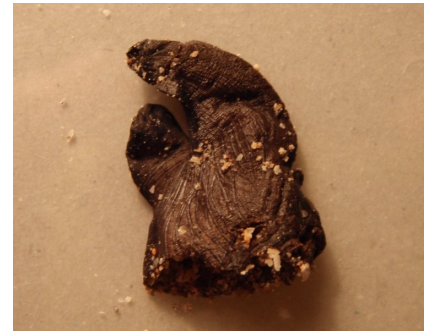
Last month we published a query from Barbara Coudrey, looking to identify some "black blebs". We received an answer from Dubai member Gary Feulner and the ENHG-Abu Dhabi December Focus published a response from Dr. John Burt.

Barbara gave me a double specimen for further examination. Manipulation showed that each bleb was hollow. I sliced one open transversely with a scalpel and found that the black coating was a discrete "shell", having the thickness and flexibility of the red wax used to wrap some cheeses. Immediately within the smooth interior was a brown membrane like a sleeve within the shell. The center was filled (now) with loosely packed fine sand, mostly tiny bits of shell material.



A cross-section of the dissected boxing glove.

When I cleared the sand and gently pulled out membrane, I could confirm that this was a sea squirt (also known as tunicates or Ascidians). The roughly conical membrane, actually the "body" of the animal, had two distinct, tubular apertures, one at the top and one at the side, being the animal's intake and out-flow siphons. This prompted me to examine the black shell more closely and I found, with difficulty, the corresponding pinholes that allowed water to enter and exit.



The interior membrane – the body of the sea squirt – showing the two siphons.

Could I identify it? The best ready references for shallow water marine life in the UAE are Matthew Richmond's *The Seashores of Eastern Africa* (where a chapter by Monniot & Monniot describes and depicts sea squirts taxonomically) and *The Emirates – A Natural History* (where an entry by David George describes some UAE sea squirts). These suggested the "boxing gloves" were perhaps *Phallusia nigra*, a relatively large, solitary sea squirt.

Our Abu Dhabi-based member Dr. Richard Hornby confirmed the identification from his experience. The appearance of Barbara's specimens was due in part to the death and desiccation of the animal on the beach. Alive and underwater the animal is more flexible and symmetrical, resembling a black, slightly tapering tube with a side spout. Their normal habitat is hard seabed, but Dick Hornby and David George mention that in the UAE they are also common "fouling" organisms on pontoons and pylons.

Finally, it's worth mentioning that, although they are often discussed



along with shallow water marine invertebrates, sea squirts are actually more closely related to humans and other vertebrate organisms, whom they join in the Phylum Chordata (as Subphylum Urochordata, Class Ascidiacea). The free-swimming larva has a dorsal, not ventral, nerve cord and a notochord – a precursor of vertebrate backbones. *Phallusia nigra* is a solitary sea squirt, but many other sea squirts are colonial, resembling soft coral. *Report and photograph by Gary Feulner*

And from Dr. John Burt in Abu Dhabi: This is a sea-squirt: On the taxonomic side it's known as an ascidian, and the species is *Phallusia nigra*. It's common on rocky substrates and piers around here. Believe it or not, these are among the invertebrates most closely related to us because they have a notochord, which in human embryos becomes the vertebral disks. Their biology also has a humorous side: these sea squirts start out their life as highly energetic, quite brainy individuals. Eventually, they settle down on a rock, become inert, and their brain (ganglia) dissolve. In that way they're a lot like tenured professors!

Dr. John Burt, Biology Department, New York University - Abu Dhabi, published in the ENHG-Abu Dhabi December 2011 Focus

And another question for our sleuths

In December 2011, Sandi and Myki Ellis joined Anne Millen on a shelling reconnoitre to the beaches of northern Oman – those between Kalba and Shinas. We found many wonderful things, but after our adventures crossing the border, which is being fenced, formalised and generally beefed up, we would recommend others wait until things, including the dust, settle a bit. Access to the beaches from Shinas up to the border is made difficult by the roading and bridging works going on between the (failing) date plantations and the shore, but access them we did, for

a marvellous day of discoveries, including the odd rock.

On one of the beaches in the northern half of that stretch, Sandi found a rock which she thought might make a good speaker present, a pancake of dark, slanting glittery material with a thin smooth layer of grey rock on each side. Anne was dismissive, saying it was man-made and not of interest. However, when it was shown to geology recorder Gary Feulner, he wrote, "I'm pretty sure I know what it is, geologically - it's a piece of a quartz vein (dark, smoky quartz) within limestone (and so it was probably found in or near the Musandam or the Jebel Akhdar).



Two views of the "odd" rock



"However, I don't know if the very smooth limestone surfaces on both sides are natural or man-made. And at home I noticed two tiny holes in one side so perhaps it had a use. But the holes don't seem to go through as they would for fastening a string (for example), so ..."

There were indeed two well-placed little holes in the smooth surface added to the mystery, but well-placed for what? Are they simply a natural phenomenon? Gary has supplied photographs of the rock, and if you know what it

is, and whether the holes are significant, do tell us! *Report by Anne Millen, photographs by Gary Feulner*

New Year Resolution— Spot the wildlife

Recently transferred member Tamsin Carlisle (previously a member of ENHG-Abu Dhabi) sent us a selection of photographs from her growing urban wildlife gallery. The waterbird photos were all taken at the lake in Dubai Media City in December 2011 and January 2012. There are an increasing number of places to see Dubai's urban wildlife (including the areas around the metro stations noted by Gary Feulner in the December 2011 *Gazelle*) and, influenced by the ENHG- Abu Dhabi's January Focus, we thought we would publish these to encourage us to get outside and see our local wildlife.

Can you identify these birds? Some handy hints can be found in the helpful birdbook *Common Birds of the UAE*. Answers will be published in the February *Gazelle*.



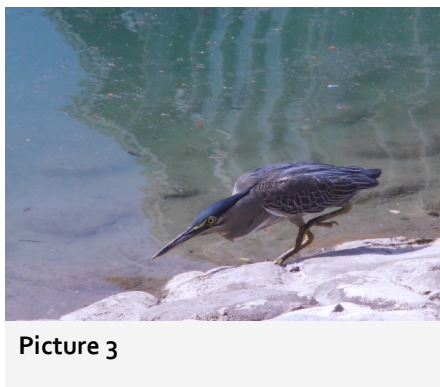
Picture 1



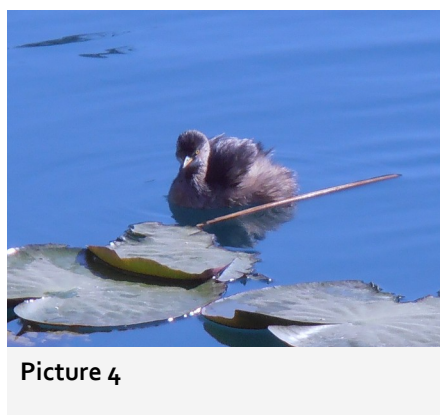
Picture 2



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Picture 3



Picture 4

Some more Members' News

Dr. Reza Khan recently returned from one of his many visits to his native Bangladesh. On this occasion he had been to both the Sundarban mangroves in the south-west and the Tanguar Haor, and extensive wetland in the north-east (Sylhet District), where he took part in a bird count.



Dr. Reza Khan receives conservation award from the Prime Minister of Bangladesh

Some members may yet not know that Dr. Khan was the recipient in 2011 of the Bangabandhu Award for Wildlife Conservation, Bangladesh's highest award for wildlife conservation, in recognition of his contributions to the study and conservation of the country's wildlife over four decades. He received his award directly from the Prime Minister of Bangladesh, Sheikh Hasina, at a prestigious ceremony held on National Tree Planting Day, at which other conservationists received awards for their contributions to various fields in the forestry sector.

Writers & photographers wanted!

Contributions to the Gazelle from new and old members alike are welcomed. Short pieces of 100-500 words are ideal as this allows publication of more pieces. Photographs of local wildlife and suggestions for places to spot Dubai's wildlife are always appreciated.

Dubai Natural History Group Programme

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

Feb 12 The Medicinal Properties of Camel Milk – Renata Wernery

Mar 4 TBC

Field Trips (Members only, please)

Feb 24—25 InterEmirates Weekend

Further field trips, details or changes to trips will be announced/confirmed by e-mail circular.