

GAZELLE

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مجموعة دبي للتاريخ والطبيعية

DUBAI NATURAL HISTORY GROUP

PO Box 9234, Dubai, United Arab Emirates

Members' News

David Palmer sent us this report on the Dig House in Ad-Dour.

Anyone attempting to visit the 2000-year old site of Ad-Dour in UAQ will notice a new gravel track leading up the hillside to the right of the coast road, just before you get to the eminence on which the ruins of the so-called "Governor's House" stand (i.e. a few hundred meters before the petrol station).

Taking this track brings you to a new green security fence surrounding the roughly one square kilometre Ad-Dour site, which is now – after being exposed by the digs of the 70s through 90s – gradually crumbling away. A gate in the security fence takes you beside a brand-new compound, called "The Dig House" on the contractor's sign-board. According to the sign, this compound of spacious and solid-looking huts was built by the federal department of "tourism and antiquities", which I had not heard of before. Stopping there recently with an eye to wandering around Ad-Dour for the first time for years, our party was greeted and invited into the compound by John Martin, engineer, archaeologist and naturalist,

now retired and living in Carlisle, England.

John was previously a long-time resident of the UAE and a member of the DNHG. He is now assisting Sophie Méry, a prominent archaeologist of the UAE based in Paris, with an excavation of a Neolithic coastal site further north (near the big plane, to the right of the coast road). The Dig House has been constructed as a home and work base for visiting archaeologists, and John showed us the pile of shells he was sorting and sieving through, as well as a piece of Ubaid pottery recently found at the site, indicating trading links with Mesopotamia.

End-of-Season Function

The DNHG annual End-of-Season Function will be held on Thursday 14th June at the India Club (beside the Indian High School on Oud Metha Road, Dubai).

Further details will be published in next month's Gazelle. A good night will be had by all so do make sure to confirm your place.

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 and helps 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.

Editor wanted!

The Gazelle's current editor will be publishing her last Gazelle next month (May). If you would like to assist with editing the Gazelle, please contact any member of the committee for further information.

This Month's Contributors

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

Gary Feulner
Binish Roobas
David Palmer
Sonja Lavrenčič

Evelyn Brey
Michelle Sinclair
Bridget Dalton

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



Field trip to Delma Island from April 26 to April 28, 2012

Delma Island is a small, 10x5 km island, located approximately 26 miles (42 km) off the coast of Abu Dhabi and 72 miles (116 km) from Doha. It is of a volcanic origin and the landscape is a combination of hills, valleys and plains, with many splendid beaches. Delma is home to about 10,000 inhabitants, most of whom are Iranian Arabs Hansens and Qatari who have been granted United Arab Emirates (UAE) nationality.

Delma has been inhabited for the several thousand years (it is probably the longest inhabited place in UAE with archeological findings going back as far as 5000 BC), thanks to the numerous water wells and springs which still provide fresh water for the inhabitants and which made Delma an important stop for merchant and pearl diving ships travelling along the West Coast.

Unfortunately Delma's archeological sites are not open to visitors, therefore our trip will focus on geology of Delma, under the excellent guidance of DNHG geologist, Jean Paul Berger.

Due to the long drive (380 km one way and a ferry ride) the trip to Delma Island requires an additional half day to the weekend. We will start from Dubai on Thursday afternoon and stay the first night in Jebel Dhanna (hotel or camping). Friday morning we will take the first ferry to Delma. On Delma Island we will meet ranger Fathi, who will guide us through some of the most important sites of the island (museum, mosque, cemetery, water wells, etc). In the afternoon we will venture inland to explore the geology of the island. Overnight on Delma island, hotel or camping. Saturday morning will be free for individual explorations of the island, swimming, snorkeling, etc. We will return to the mainland with the afternoon ferry. Time permitting we will visit another geological site on the coast

and then drive back to Dubai. We should be back in Dubai Saturday evening.

Due to the travel logistics and limited space (ferry) the trip will be limited to maximum 4-5 cars or 20 people. 4WD and some basic off road driving skills will be needed for some parts of the trip.

If interested, please contact Sonja Lavrenčič on sonja@publicisgraphics.ae for more information.



Next month's Gazelle will include reports from the recent DNHG trip to Nepal

IEW Photo Competition

Below is a copy of Angela Manthorpe's photograph that took the first prize in the IEW Photo competition. It was taken on Angela's trip to the Majlis al Jinn in Oman December 2007. The only way into the cave chamber, one of the largest in the world, is by abseiling in through the roof. The photo shows one of the team descending the line through the early morning sunlight.



Descent by Angela Manthorpe

Our Next Speaker

Ronnie Gallagher started his working life as a biology teacher in Glasgow and moved to the Shetland Isles in '78. Diving, marine biology, underwater photography and bird watching were main pastimes and opened the door to a terrific job as BP's Environmental Officer at Sullom Voe Terminal. Highlights from Shetland were the development of an oil spill wildlife response plan, and successfully putting it to the test with the stranding of the Braer oil tanker in 1993. He was seconded into UKOOA and then to the Kuwait Oil Company.

His next job was in Abu Dhabi with ADCO where he also enjoyed outings with the Natural History Group between 1997 and 2000 and developed a fascination for archaeology: interests he took with him to his next posting in Azerbaijan.

With 9 of the world's 11 climate zones and some fascinating geology, including the world's densest concentration of mud volcanoes, Azerbaijan offers amazing natural history diversity and study opportunities. It was there in a land of mystery and intrigue that previously unasked and unanswered questions to do with Caspian Sea level changes began to intrigue him. The evidence of flooding, as seen in the form of raised terraces and strandlines, clearly tell a very different story from the accepted understanding of tectonic uplift and limited Ice Age sea level rise. Recognising that something was not right with scientific understanding of prehistory and environmental conditions led to lots of field work, research and participation in several Caspian / Black Sea conferences where he shared information and tried to find answers to questions.

Ronnie is keen to encourage scientific interest in the Caspian flood questions and their potential significance to mankind at the dawn of civilization. His talk will focus on evidence for Caspian Sea level changes, cause and potential significance.



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) to Editor Clare O'Hare

Wadi Hiluw

One of the trips on the Friday of IEW was to Wadi Hiluw, in the mountains just off the Sharjah-Kalba road, inland from the tunnel. The group, led by David Palmer, first climbed up to a watchtower to get an overview of the very scenic wadi, and a bird's-eye view of the large ruined house or palace below, which the group speculated may have belonged to the local tribal chief. We descended to the wadi floor to explore this structure, with its remnants of fine plaster decoration, and from there wandered across the dried-up terraces, which until fairly recently saw plentiful crops of tobacco, the growing of which is now banned in the UAE.



We looked into the abandoned tobacco sheds built of smooth wadi stones, tree trunks and palm branches, and noted two vertiginous deep (but dry) wells, which have steps descending to a platform part-way down. Michael Creamer demonstrated the workings of the diesel engines used to pump water, and Stefan Beck explained the older system of using an ox to run down a ramp (still well preserved) to draw water from the well and send it down a channel into a cistern. Modern farms, built on artificial terraces along the sides of the wadi, and seemingly alive with cocks crowing all day long, have largely replaced the abandoned terraces and palm plantations on the wadi floor. After a lunch break, and a detour

through the large Islamic cemetery on the wadi terrace, we entered the Bronze Age. Wadi Hiluw was probably a significant contributor to the stream of copper ingots exported from the Hajar mountains to the advanced civilizations in Mesopotamia and the Indus valley 4000 years ago, for combining with tin to make bronze for weapons, armour and ornaments.



There are still many signs of copper smelting scattered about on the surface of the wadi terrace, especially large amounts of formerly molten slag, and smooth stones with tell-tale concave recesses used to crush the ore. There are also many trenches left by a German team which made sample excavations of the site in 2006-2008, exposing irregular groups of large stones which are the foundations of smelting furnaces, workshops and perhaps houses.



The Germans found a 4 kg ingot in one test pit, and estimated that the site produced around 30 tons of copper from several hundred tons of ore during its heyday. We noted in various places the quartz seams from which copper ore was extracted, and where blue-green pieces of stone containing copper can still be seen. Michael Creamer initiated lively speculations on how a high enough temperature to melt the ore was obtained from charcoal, what kind of bellows might have been available prior to the Iron Age, the role of the wadi wind,

possible use of wind funnels, use of mud bricks to enclose the smelters etc.



Beside the picturesque restored "modern" watchtower at the entrance to the archaeological site, with its square enclosure for keeping animals under the protection of the tower's gun slots, is the circular, partly-reconstructed foundation of a large Bronze Age watchtower, twice the diameter of the "modern" tower. When the German archaeologists first saw the mound which covered it, they thought it was an Um-an-Nar style circular tomb, like the ones at Hili and elsewhere in the UAE. Although this turned out not to be true, carbon from a fire pit indicated that the tower was from the same era as those tombs, i.e. middle Bronze Age (early second millennium BC). The wadi terrace is also strewn with walls, animal enclosures and house foundations (and yet another tobacco drying shed) from what the archaeologists quaintly refer to as the "submodern" era - i.e. not modern, but who knows how old? - providing an absorbing but relaxing afternoon's ramble.



If you missed the trip and want to explore Wadi Hiluw on your own, take the Sharjah-Kalba road past Showkah and past the modern village of Wadi Al Helo, go up the hill until you see the first tunnel entrance, do a U-turn before you enter the tunnel, go back down the hill and take the track to the right by a



big brown sign marked "Wadi Al Helo archaeological site". *Report by David Palmer, photos by Michelle Sinclair*

Bridging the Past with the Present.

Mairead Porter and Mary Anne Pardoe led a group on an IEW archaeological field trip. The day commenced at the Sharjah Archaeology Museum, the exhibits range from the Stone Age and displays a vast amount of artefacts.

The Curator, Khalid, gave a guided tour of the Museum, his thorough knowledge and passion for his subject being obvious. His desire to impart as much detail as possible, in the time available, ensured that the visit was highly rewarding and informative. He laid the foundation for the visits by the group to the three archaeological sites located in the Northern Emirates, by specifically focusing on findings from; Muweilah, Mleiha and Jebel Al-Buhais. Complemented by the independent research Mairead and Mary Anne had carried out, the site visits proved to be a fascinating tour into the Sharjah Mountains where bridges exist between ancient and modern civilizations demonstrating that the region is teeming with cultural, religious and historic treasures. In addition, it made for interesting discussion at the sites on topics ranging from diet, architectural design, thickness of walls and function of buildings, date palm cultivation, storage vessels used, and more.

The first site visited, **Muweilah**, an Iron Age II settlement which was occupied for about 400 hundred years from 1000-600BC. From research carried out by both geomorphological and archaeobotanical experts the conclusion is that the desertic environment of Muweilah today is more or less as it was during the iron age as the site was set back from the coast and consequently emphasises the harshness for humans to subsist in a hyper-arid environment at the time.

The next site, **Mleiha Fort, Graves and Cultural Park**, is another late Iron Age settlement. The existence of the Fort and abundance of other

material found implies this was probably a major administrative and political centre which controlled all or part of the economic activity in Mleiha. Findings also suggest there was a link with the trading routes as Greek black glazed ceramics, stamped Rhodian Amphora handles, and frankincense were discovered, along with Al Mahata coins and moulds found on the site. There is also evidence that the wealthy people of Mleiha buried their dead in huge monumental tower tombs with their possessions, as excavations have found camel and horse remains and valuable properties such as the horse bridle decorated with heavy gold medallions and roundels backed with iron which are displayed in the Museum.

The last site visited, **Jebel Al Buhais**, is a series of archaeological sites, the area was used as a graveyard and settlement from c. 5000 to 200 BC covering the Bronze and Iron ages and the pre-Islamic period. Of specific interest, Buhais 66, a clover shaped tomb which is architecturally unique from the Wadi Suq Period. Buhais 18, which dates to the 5th Millennium BC where over 500 individuals were buried has provided a wealth of skeletal data into pathologies, muscle markings, stature, bone robusticity and findings reveal that all was consistent with a nomadic, pastoral economy. From research, one of the most intriguing aspects about this group was the high frequency of cranial injuries which has been concluded was due to repeated violent inter-group interchanges, possibly due to competition over scarce resources in times of environmental deterioration.

What was so incredibly interesting was the historical evidence to support the various site usage and to have viewed the artefacts displayed in the museum from the various eras the sites represent. Also, Jebel Al Buhais, where research is still in progress, the realisation that there are probably yet abundant findings and historical evidence to be uncovered and appreciated. *Report by Bridget*

Dalton

A Walk on the Wild Side

Together with a picture of a group of beautiful oryx standing under some trees in the desert, it was a headline in one of the daily newspapers which caught my attention last October.

I read it – and immediately went onto the internet to sign up for this expedition into the Dubai Desert Conservation Reserve (DDCR) in January 2012. This expedition was organized to help the resident scientists with labour intensive tasks such as setting up and monitoring traps, tracking oryx and gazelles and recording animal behavior.

I had always been interested in environmental and animal conservation issues but had never involved myself beyond reading articles and attending talks. I saw this as my chance, literally in front of my doorstep, to become more active. The expedition was organized by Biosphere Expeditions (a non-profit organisation and officially accredited member of the United Nations Environment Programme's Governing Council & Global Ministerial Environment Forum), with people from all over the world taking part. We would be involved with the resident scientists and biologists of the DDCR who would teach us to be conservationists for a week.

Together with five other people, we spent 9 days in the Dubai Desert Conservation Reserve. The Reserve is 225 sq km, is part of Al Maha Desert Resort and makes up nearly 5 % of Dubai's land area.

We worked together with three South African scientists who look after the Reserve. Under their guidance we learnt how to drive in the sand (and dig ourselves out), put up camera traps and live traps with bait, spot and record the wildlife and how to use various bits of equipment like GPS, binoculars, range finders, compasses, spotting scopes, etc. Batteries were recharged in the car.

We were very lucky to catch a male feral cat as well as a female Gordon's wildcat. The Gordon's wildcat was measured, weighed and had its left



Dubai Natural History Group Recorders

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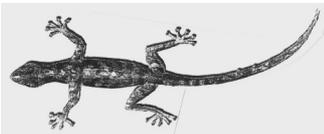
Fossils - Valerie Chalmers
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email: valeriechalmers@hotmail.com

Plants – Valerie Chalmers

Seashells, Birds 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.



ear clipped and was then released back into the wild. On the camera traps we could see a variety of nocturnal animals like foxes and hares, but also gazelles and oryx.



Sand Fish

During the day we drove through the whole reserve to spot herds of oryx and if possible to stop and observe their behavior, as well as the condition of the animals, male to female ratio, how many pregnant animals, how many calves, anything else unusual like sick animals or broken horns, and record these findings.

We saw many Arabian and Sand gazelles. One lucky group spotted a Lappet-Faced Vulture and a Golden Eagle. Even during the day we saw a couple of foxes, some hares, ravens, a kestrel and many sand fish. We also saw some beautiful houbaras (Macqueen's bustards), which had been released into the reserve.

Being out in the desert was fantastic and seeing all these animals was an immensely rewarding experience. This project has now been firmly established and will be repeated every year. The expedition was well organized and I can only highly recommend taking part in this venture. *Report and photos by Evelyn Brey*

Re-Discovery of Mudskippers in the UAE

The mudskipper *Periophthalmus waltoni* (Walton's mudskipper) has been re-discovered in the UAE at a site in the Northern Emirates. This species, a member of the goby family (Gobiidae) lives on mudflats in the intertidal zone of coastal lagoons. It is known today from the coast of Kuwait, Iran (the

Strait of Hormuz) and Pakistan, eastwards to the Indus delta. At least one record also exists from the area of Bahrain and Qatar.



Face-to-face with a mudskipper

In the UAE, *P. waltoni* was present in the mid-1970s at Khor Madfaq, on the border of UAQ and RAK, and at Khor Hulaylah, north of RAK, where it was said to be associated with freshwater springs. However, no subsequent records are known and it has not been included in more recent lists of UAE fish species. A middle-aged local resident who knows the fish agrees that it has not been seen in recent times at its former haunts.



Walton's Mudskipper at rest at its burrow

Our identification of *P. waltoni* has been made on the basis of photographs, but that can be done with confidence because of its distinctive appearance, the existence of regional records and comparison with a number of print and online photographic references. Its two bulbous eyes, set on top of its head, give it a peculiar appearance but a nearly 360° view of its environment. "Periophthalmus" is a compound name from the Greek 'peri' (around), and 'ophthalmôn' (eye), which refers to the wide visual field of these species. It grows to about 15 cm (6 inches) and feeds on the damp surface when the tide is out.

We are now trying to better ascertain its current range in the UAE and better understand its behaviour



and ecology here. Although its burrows may be mistaken for crab burrows, the animal itself is not inconspicuous either in size or deportment. We measured one large specimen at 17.5 cm (7 inches). Their normal movement is at a measured pace, but they are ambush predators and can pounce with great speed. We watched one lunge and gulp a fly. They can also flee rapidly to a burrow when surprised, and when displaying they may leap into the air.



Mudskipper displaying towards a nearby Violet Crab

It is interesting to ask whether *P. waltoni* has, in fact, been present in the UAE continuously since the 1970s, or whether it has only recently re-established itself. If the former, how has it managed for so long to escape the notice of professional and amateur observers alike, in the context of recreation, research, environmental impact assessments, etc. If the latter, what accounts for its return at a time when coastal environments in the UAE generally have suffered disproportionately from the ravages of development?

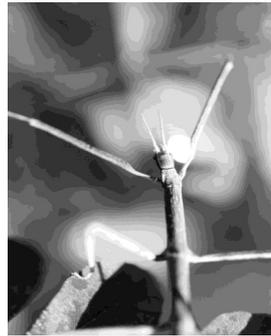
Needless to say, it was not only a surprise but a great pleasure to encounter this endearing creature. Its re-discovery is a rare piece of good news against a background of continuing habitat destruction in the UAE's coastal regions. *Report by Binish Roobas and Gary Feulner*

Date with a Stick Insect

Back in February 17, 1995 we had a DNHG Inter-Emirate meet-cum-field trip with counterparts from Abu Dhabi and Al Ain. The field trip headed for Wadi Sarfana, some 37 km SE of the Mahdhah town of Wilayat of Mahdhah (Oman), along

the Sohar-Buraimy Road.

On March 7 this year I tried to visit the same spot. However, just 7 km before the Wadi Sarfana there is a huge structure housing the new immigration check post. To cross this border post we needed visa. I had no clue of this as in 1995 there was no such check post. The immigration person was very polite and kind in allowing me to cross over the border just to make an about turn!



Stick Insect near Abool Fort

Frustrated by my own ignorance I decided to go back to our old haunt- the area of the Old Abool [also spelt as UBOUL] fort. The falaj system and nearly dying wadi systems are always rewarding as these have never completely dried up in spite of the fact that there has been little or no rain during the past decade or so.



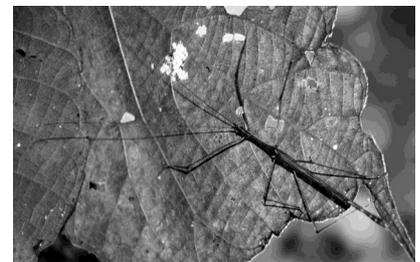
Stick insect found near Abool Fort

While my companions were unpacking our field gear at the veranda of the oldest mosque in the old Abool settlement I took a round of the abandoned houses looking for Fan-footed Gecko and Muscat Mouse-tailed Bat. As it was little a chilly these animals have possibly moved out and found new shelters elsewhere. I did see broken shells of lizard eggs still solidly glued to the mud wall of the old human dwellings

and an old nest of a crag martin.

As the compatriots were taking more time to unpack I took a round of the mosque and its perimeter turning old rags, pieces of carpentry materials and stones. Barring a few scorpions and a lizard there was nothing much to record.

Suddenly my attention was drawn to a small stick-like object tucked on the rough but otherwise spotlessly cleaned boundary wall of the mosque veranda. On a closer look I found it was a stick insect! I could not believe such a creature exists anywhere in the Abool area that I have been visiting since 1991.



Stick insect found in Bangladesh

On my return to Dubai and after an internet search I found that there are two records of this kind of stick insect in the area – one from Al Faqa, now called Al Foa, agricultural fields in Al Ain and one from Wilayat of Mahdhah but the reports did not identify the species. May be there are scientific publications on these that did not show up during my search.

So far as the UAE is concerned Peter Helleyer and Simon Aspinall (2005) mentioned that, 'Stick insects (Phasmida) have only recently been found in the UAE. Previously, small nymphs were known from the Mahdah area of Oman, but unidentified adult insects have now been found in grassy areas of sand desert near Al Faqah, Abu Dhabi' ("*The Emirates- a natural history: Insects and arthropods*", pages 168-195, this paper is available at http://www.uaeinteract.com/uaeint_misc/teanh/016inse.pdf). I could not confirm its species identity but found record of three species of such stick insects reported from Yemen.



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These are *Burria brachyixpha*, *B. cana* or *Ramulus dicranurus*. Reports and photos by Dr. Reza Khan

Mystery of the Solitary Spheres: The Answer

The March Gazelle posed questions about a 1-inch diameter, hard, sandy ball thought to have been rolled by the large local dung beetle *Scarabeus cristatus*. Walker & Pittaway, in *Insects of Eastern Arabia* (1987), have this to say about the parenting habits of a closely related species, the Sacred Scarab Beetle *Scarabeus sacer* of northern and central Arabia: "In Arabia, swarms [of the Sacred Scarab] often follow herds of camels and sheep in the desert. They pounce on any fresh droppings, making them into balls which are then rolled to an area of relatively soft ground. Here the insect excavates a hole into which the ball is rolled. The female lays an egg in the ball which is then coated with a cement to delay dehydration and finally covered with earth. By

this process the larvae, when hatched, have a ready source of nourishment sufficient for complete development."



The interior of a dissected, desiccated dung ball

Gary Feulner adds: "Walker & Pittaway do not address the occasional failure of the dung ball project, or the two pinholes, so a more active investigative approach was required. I sliced the ball in the photo in half, using a serrated kitchen knife, cutting so as to leave the two small holes in one hemisphere. This revealed an outer 'shell' of very hard, cemented mud, varying from 4-6 mm thick, surrounding a core of

only slightly less hard material having the appearance of soil.

"The whole was very dry and there was no sign of an egg or of any larva having developed. The only observable life was a small cluster of some nearly microscopic mushroom-like structures, resembling the fruiting bodies of a tiny fungus. So it seems that this dung ball represents an unsuccessful reproductive effort, perhaps because it was unearthed prematurely. Only one of the two tiny holes penetrated the shell. Presumably this was the site of oviposition. However, it remains somewhat difficult to imagine how the grub-like, C-shaped larva can emerge from such a seemingly impregnable capsule."

Field Trips

Do you know of any interesting natural history trips? You don't have to be a topnotch organiser or an expert - the Field Trip Co-ordinators will help you organize. Just let us have your ideas; we'll take it from there.

Dubai Natural History Group Programme

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

- May 6 Ronnie Gallagher: The Rise and Fall of the Ponto Caspian in the Ice Age: Ancient Mariners of the Asiatic Mediterranean
- June 3 Dr. Brigitte Howarth

Field Trips (Members only, please)

- April 26-28 Delma Island
- June 14 End-of-season function

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