DUBAI NATURAL HISTORY GROUP

GAZELLE

Vol 29 No 1 January 2014

مجموعة دبي للتاريخ الطبيعي

Flowering Acacia with pods. Photo Credit: Anne Millen

Inside this month

Contributors

The Editor would like to thank the following for their reports and contributions:
Sadaf Khan, Gary Feulner, Anne Millen, and Binish Roobas

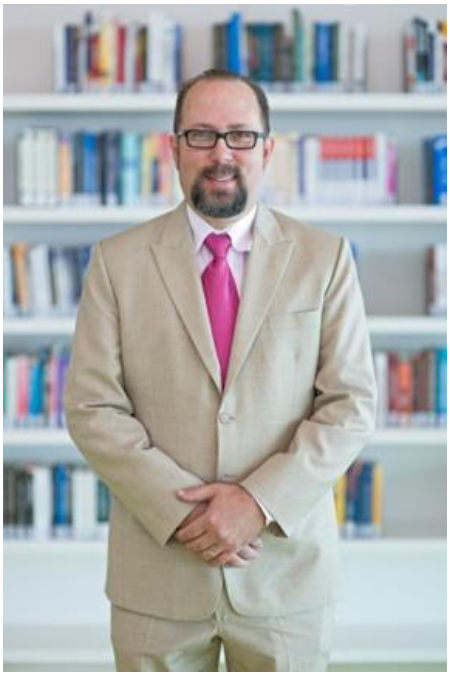
Under the patronage of H.E. Sheikh Nahayan bin Mubarak Al Nahayan

Our Next Speaker

Dr. Hector H. Hernandez will be giving a lecture on February 2nd titled “From the desert to the oceans: lessons learned from UAE microbial ecospheres”.

Dr. Hector H. Hernandez joined the Masdar Institute of Science and Technology as assistant professor in Chemical Engineering in 2011. Prior to joining Masdar Institute, Dr. Hernandez was a Dr. Martin Luther King Jr. Scholar in the Department of Civil and Environmental Engineering at Massachusetts Institute of Technology. In this role he led a team of graduate and undergraduate students in the characterization of microbial communities isolated from a Carbon Sequestration injection site.

Dr. Hernandez’s laboratory, Microbial Environmental and Chemical Engineering Laboratory (MECEL), focuses on applying biotechnology tools and engineering principles to microbial systems to address challenges facing society in the areas of energy, climate change, diminishing nutritional resources, and bioremediation of ecosystems in the United Arab Emirates. The MECEL team is working on isolating and characterizing microalgae species from the United Arab Emirates, identifying the microbial composition of camel gut ecosystem, identifying microbes from the desert for biotechnological use, and investigating the role of invasive microbiological species from shipping lanes in the Gulf waters around the United Arab Emirates.



See a brief introduction to his upcoming talk below:

The UAE deserts and oceans hold untold riches and a very diverse ecosystem at the microscopic level. These small organisms are responsible for maintaining plant life and nutritional turnover in this bleak and desolate environment. To date, there has been very little research done to study and identify these processes and relationships. Knowledge gained from the study of these microbes through an understanding of their role in maintaining the ecosystem holds the promise of unlocking novel chemical pathways capable of contributing to our pressing energy, nutritional, human health, and bioremediation needs. This talk will cover the recent work done in my laboratory in trying to unlock the mysteries of desert and ocean life at the microbial level.

Wanted: Gazelle Editor

The DNHG's monthly newsletter, *Gazelle*, has been an important element of the group since its inception more than 25 years ago, helping us keep in touch and share information about group activities and UAE natural history generally. We have been fortunate to have had an unbroken record of talented and enthusiastic editors.

Change is a way of life, however, in modern Dubai, and current Editor Sonya Benjamin has succeeded to new responsibilities that will jeopardize her ability to continue to meet our monthly schedule. She has therefore asked that we look for someone who can take up the Editor's post on a full-time basis.

The Editor's position has traditionally had great independence. Among those who have enjoyed the role are the late Jim Hart, Marijcke Jongbloed, Beryl Comar, Neil Curtis, Anna Griffin, Anne Millen and Clare O'Hare. Many have found it a 'bully pulpit".

If you have an interest in natural history and would like to indulge it, and to help us disseminate interesting local natural history information (sometimes information that can be found no place else), please consider this opportunity. Exceptional computer skills are not required; we can train you to use Publisher. More important are interest, a reasonable command of written English, a willingness to commit the necessary time on a regular basis, a measure of sensitive editorial judgment, and (sometimes) a dash of diplomacy. We can arrange back-up support to cover for vacation time or emergencies.

Members who feel they might be interested are invited to contact Chairman Gary Feulner, Vice-Chairman Val Chalmers, or any of the DNHG Committee members – all of whom are available for guidance in any case. This invitation is especially extended to our many enthusiastic new members. Long experience in the UAE is not a requirement. Indeed, a fresh perspective may be an asset.

Field Trip Report

The Red Island

I recently visited one of the only places remaining in UAE, that was not manufactured—a town called Jazirat Al Hamra, also known as the Red Island or the "Ghost town". My interest lead me to read about it, which gave me an idea about the place. But on my return, this idea had changed into a passion.

The Red Island is a coastal town that was established in the 14th century by the Za'abi tribesman who were fishermen and pearl divers. On a closer look at the broken walls it can be seen that that the 300 houses and 13 mosques were built using coral shells as it was the hardest material found near the peninsula.

A town once flourishing with life, was suddenly left abandoned on a mysterious night in the year 1968.

And since then, while the rest of the country marches to the height of progress, this little corner of Ras Al Khaimah has remained unchanged, protected from modernity, whispering of myth and mystery.

There have been tales of strange noises and mysterious apparitions about the village ever since. Maybe this is the reason why most Emiratis and expats stay away from the place, especially at night.

Driving back, the city of Dubai seemed unreal, the way a theme park feels when we return from a month-long backpacking trip through the Himalayas.

Contributed by Sadaf Khan

"Walking through the abandoned compounds and the ruins of mosques and houses was a resilient experience. For centuries this place was full of life, full of activity and now for reasons unknown, it is full of forgotten stories."
Photo Credit: Sadaf Khan

"Some walls tell a more recent story. These ancient retail shops were decorated with traditional materials such as palm wicker."
Photo Credit: Sadaf Khan

Field Trip advertisement: <u>Nepal Hill Country, March 28 – April 5, 2014</u>

Experience the verdant scenery and village life of Nepal's hill country – traditional houses, mountain trails, terraced cultivation of rice, corn and millet, footbridges across rivers, water buffalo milk, temple ceremonies, traditional dancing, and more – including 4 days homestay and optional day hikes. Also birds, butterflies, etc. Sightseeing in unforgettable Kathmandu to start. Return via highlands of the upper Sunkosi River, with temple visit and a detour to the Chinese border. Total 9 days 8 nights.

Our visit will include a mix of touring by vehicle, day hikes, cultural interaction and natural history observation. In the hill country, at Makadum in Ramechhap District, our host will be Narayan Karki, a former DNHG member known for his energy and enthusiasm, who has a wealth of knowledge about village life and customs.

[NB: This will be a customized visit. The village area is part of the Indigenous Peoples Trail network, but that initiative has not yet been developed into standardized commercial offerings. Accommodation in the hill country will be at a school, with possibly one night's homestay. Previous visits by NHG in 2012 and 2013 have gotten very good reviews.]

Limit 10 participants. Approx. basic cost: AED 2600 plus airfare (est'd AED 1500) and Nepal visa (AED 150). For more details and itinerary, contact Gary Feulner: grfeulner@gmail.com or 04-306-5570.

Field Clips

Stick Insects by Night

Stick insects of the UAE and northern Oman were the subject of a recent article and photographic review in the latest Tribulus (vol. 20). It seems from the limited records available that we have two species of the genus *Clonaria* – one with long antenna and one with short antenna. A recent nocturnal record adds to our knowledge of the behavior of these insects.

In late October, Andy Whitaker, an occasional Gazelle contributor who has previously tussled with feisty dhubs and bicycled over venemous cobras, was helping to build a mountain bike route in the Shawkah area. The work continued into early evening and Andy was walking ahead of his team in the dark.

Above: Stick Insect by night near Shawkah
Photo Credit: Andy Whitaker

He came upon the stick insect in a prominent position on top of a large boulder, about 10-12 meters from any vegetation cover. It surprised him to see it because of its size and also because of its behavior – it was "literally dancing on top of the rock – swaying from side to side".

Stick insects are slow moving insects whose defense is their camouflage, so to find one in the open is unusual. The swaying motion, however, is characteristic and is thought to enhance the deception by mimicking the effect of a light breeze. They sway rhythmically when walking as well.

However, all regional records of stick insects to date have been in the daytime. This is perhaps understandable but the insects seen have apparently been "active" and the default assumption has been that they are diurnal. It may be necessary to revisit that assumption.

Stick insects are remarkable for their prolonged copulation (the record is 79 days in an Indian species) but not much has been written about how they find each other in the wild. Was the nocturnal display which Andy interrupted somehow related to finding a mate?

Andy's specimen appears to be the species with the long antennae and appears to be a male, as determined by its paired terminal claspers. Andy adds an apology for the quality of the photo, which he explains was taken with the only available mobile phone.

Contributed by Gary Feulner

Not Your Grandmother's Daddy Long-Legs

On a sweltering August morning in Wadi Wurayah, observers were impressed to watch a large, nimble spider actively 'hunting' for *Vespa orientalis* or the Oriental Hornet, the large red-brown and yellow wasp that has spoiled many a picnic in mountain wadis.

From the shelter of a small 'cave' among boulders, and shaded by the cliff above, the spider had constructed a low, irregular, elongated web beside a depression in the wadi gravel, where a number of wasps were flying. The spider was perched at the edge of its web and seemed attentive to the wasps, aware of their presence and alert to a possible meal – sufficiently so that one of the observers, Maral Shuriqi of Fujairah Municipality, paused to watch the action.

Sure enough, the moment came. A wasp touched the web, the spider charged, and in an instant it had immobilized and wrapped its prey. Who was this impressive spider, to take on one of the more formidable insect denizens of the wadi environment?

Active and colorful in the open, the spider presented an unfamiliar appearance, but comparison of photo records showed that it is a Daddy Long-Legs spider, *Pholcus* sp. (Family Pholcidae), as determined by the shape of the cephalothorax and the pattern of the eyes (eight eyes in two paired triangles and a single smaller, lower pair). The same spider has previously been found and photographed in summer in a cave in the Musandam and above a shaded pool in the Hajar Mountains near Juwaif.

Contributed by Gary Feulner

Below: Pholcus sp. from a cave in the Musandam
Photo Credit: Gary Feulner

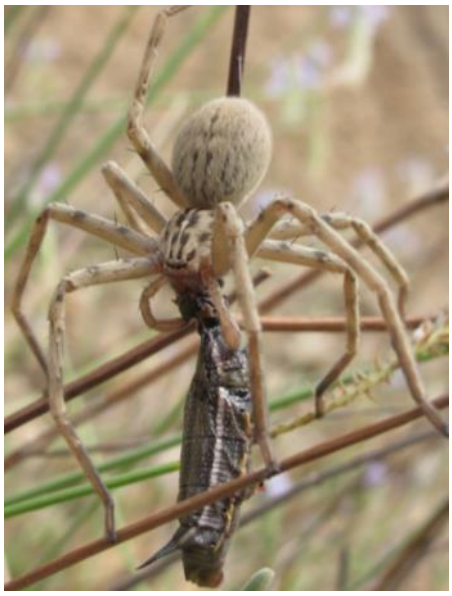
Field Clips

Giant Crab Spider

From time to time over the years I have seen in the mountains a spider that I had previously called the "Wadi Lion", for its relatively large size and tawny color. On one occasion, with a group of boy scouts, we exposed its resting place in a small silken sac under a rock on a gravel terrace. On another I saw one sheltered in a nook on a wadi wall. I made some earnest but inconclusive efforts to identify it to family. However, I had never had such good views as I had last winter, when I came across the spider shown in the photo, consuming a Striped Hawkmoth caterpillar. Moreover, digital photography is sometimes almost better than "being there" in that a good image permits considerable magnification and close study that would not be possible in the field.

It is often possible to identify a spider to family by the arrangement of its eyes (usually 8 of them). And with a confident family identification, more profitable use can be made of pictorial guides. As a result of that process, it now appears that the Wadi Lion is a so-called Giant Crab Spider, Family Sparassidae, and may be identical with *Eusparassus dufouri*, a species already known from Southern Europe and North Africa. The preferred habitat of *E. dufouri* is described in the Collins Gem Spiders as "stony areas, dry river beds and walls of old buildings." It is also said to construct a tough, papery silken sac which it sticks firmly to the underside of a stone, to be used for resting, moulting and egg laying. Thus habitat and behavior are consistent with the provisional identification.

Contributed by Gary Feulner



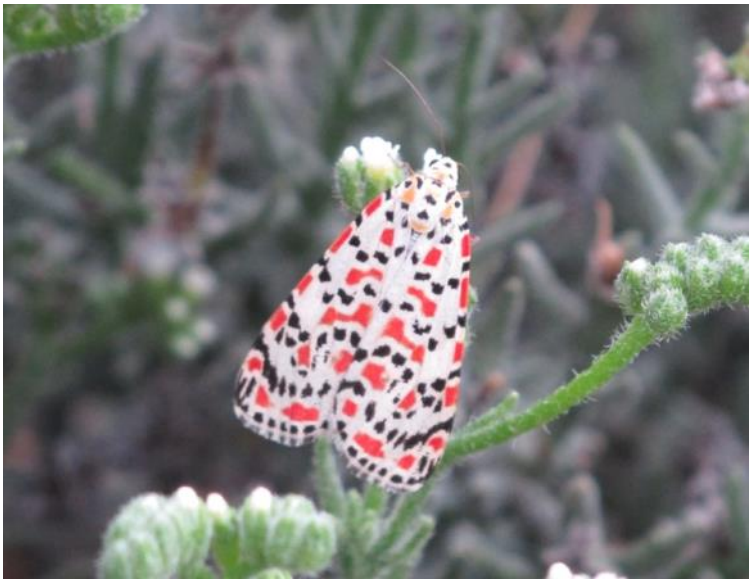
A giant crab spider, possibly Eusparassus dufouri, hanging in a shrub in a UAE mountain wadi while consuming a caterpillar of the Striped Hawkmoth. Photo Credit: Gary Feulner

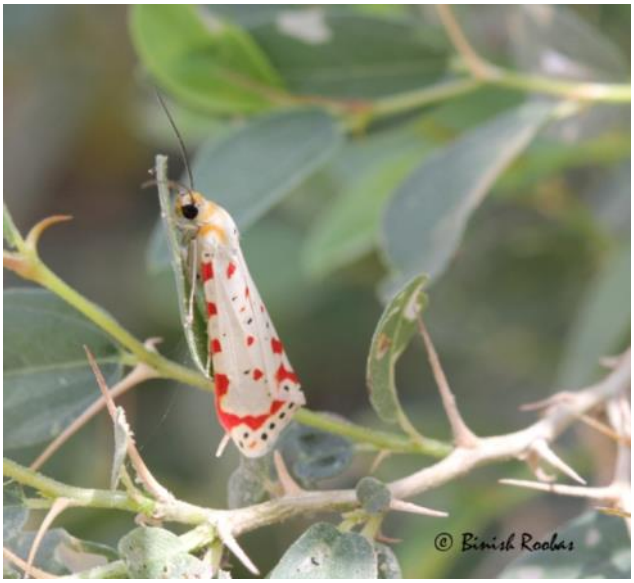
Crimson Speckled Something

The common Crimson Speckled Footman moth *Utetheisa pulchella* has at least a couple of rarer conspecifics that can be found in the UAE. Two are listed (*U. lotrix* and *U. amhara*) and one is illustrated in *Arthropod Fauna of the UAE*, edited by Tony van Harten. It takes patience and a sharp eye to distinguish them. The moth in the accompanying photo appears to be a *Utetheisa* sp. but it could not be matched with any of the three known UAE species. It was found, along with many *U. pulchella*, in plants growing in silt behind the main Siji Dam.

Contributed by Binish Roobas

Below Left: Utetheisa pulchella, the Crimson Speckled Footman
Below Right: Utetheisa sp., a so-far-unidentified relative of the Crimson Speckled Footman.
Photo Credits: Binish Roobas





Field Clips

Blackhawk Down

As I sat on the canvas bench, the wind in my hair and the noise of the rotors (further) deafening my ears, waiting to be dropped off in a remote location for an urgent small group mission, I felt transported back more than 40 years in time. EWS-WWF, which manages Wadi Wurayah National Park, had planned a program of camera trapping to try estimate the number of Arabian Tahr within the park, but execution awaited the availability of military helicopters. In the heat of early August, a helicopter was confirmed and volunteers were alerted. The call had come on short notice and I had answered.

Dr. Jacky Judas, Research Manager at WWNP, had designed an array of camera sites, relying on field research and satellite photography, but many of the proposed sites were in areas difficult to reach on foot, especially in the summer heat. Hence the helicopters. Teams of two were dropped off in the vicinity of designated camera sites, with the assignment to hike to the sites and install the cameras. Because of the heat, for the protection of the hikers, the helicopter and the crew, operations began early and ended at midday.

The camera sites were well chosen. Most showed clear evidence of at least intermittent surface water that might attract Arabian Tahr and other animals. One remote site was already well known to local hunters, who had cached supplies nearby. However, the proposed landing sites did not always prove to be suitable, so both pilots and hikers sometimes had to improvise, including occasional close maneuvering within the mountain wadis. For those who have not experienced it, the noise of the rotors and the wind and dust that they kick up are such that when the helicopter finally departs a landing site, the world seems very peaceful indeed.

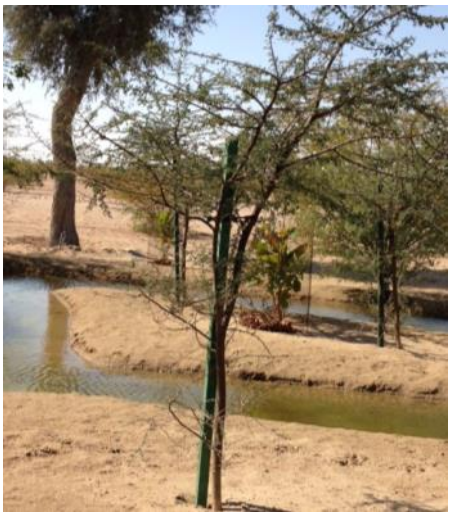
It was exciting to have a close aerial view of the Hajar Mountains and of an area I have come to know relatively well in the course of a baseline plant survey. The terrain is extremely rugged and the red-brown ophiolite rocks are broken only by occasional grey granitic dikes. The camera trapping exercise was also an opportunity to fill some gaps in the coverage of the plant survey. One happy result was a record the elusive dock *Rumex limoniastrum* within WWNP. The species is endemic to the UAE and northern Oman but it has seldom been recorded since it was first collected from the Jebel Akhdar in 1837.

The cameras are scheduled to be retrieved during the coming winter and the results will be analyzed and reported by WWNP in due course.

Contributed by Gary Feulner

Left: Hajar Mountain scenery from the window of a Blackhawk helicopter. Photo Credit: Gary Feulner.

Dubai Desert Surprise



Behind the Dubai Cycle Club's bike-hire place on the way to Bab al Shams, there is an acacia plantation. Neat rows of yellow-flowering A*cacia sp*., loaded with fluffy flowers, green buds and tight black-skinned seed pods much chewed by insects, stretch beyond sight. Five tall greener-than-usual ghafs and a couple of large stumps are the only things to break the uniformity. As we walked to the plantation, the few gazelle tracks became many. There were signs that they had been resting under the acacias.

Closer still, it became obvious that the ghafs had been planted or transported there. It is only a few minutes walk from the road, but what a surprise the little ghaf grove holds. An artificial pond, constructed as a narrow winding channel round two islands, is fed by a bore or some other supply. The pond is lined to conserve its water and has two logs lying across the channel to allow the sure-footed to cross. On the bank in the shelter of a tall acacia, there were many tracks and it was obvious that it has proved a valuable water source for gazelle.

In the pond, there were signs of aquatic life. A plant grew below the surface, sending up a narrow stem with tiny bulbous parts on the sur-

Above: Acacia tortilis tree. Photo Credit: Anne Millen

Other Announcements

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

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.

Are You a Techie with Time?

The website sub-committee would like to find volunteers who can help with maintenance of the on-line newsletter, and to upload the wealth of information and photographs from past *Gazelles*. Full training will be given. Contact any Committee person - we will be very pleased to hear from you!

Dubai Desert Surprise (Cont.)

face. The whole pond had a greenish, maybe spirogyra-ish, tinge. There was also a plant which looked like dirty cotton wool, some lying on the bottom, some floating and some with a connecting 'stalk' between the two. By one of the logs, insects milled about in the shaded water and broke the surface frequently. Up the bank of the island, some subterranean creature had burrowed to the base of a tree. For an artificial pond lying in the desert, there was a surprising amount of life. Birds twittered in the ghafs, but we could not spot them.

On the islands, several *Acacia tortilis* have been planted, their silvery thorns obvious on the upper branches. These carried neither flowers nor pods, though the rows of prolifically flowering Acacias suggested it was Acacia flowering time. We got a little help from the Municipality watering men, who said this was Sambur but gave the yellow flowered one a name we could not recognize. They did however manage to convey that the seedlings had come from the nursery at Mushrif Park. Ah! Dr Reza Khan would know!

Dr Reza Khan, who has written a book on UAE trees, identified the planted yellow-flowered species as *Acacia farnesiana*, Sweet Acacia or Cassie Tree. He went on to comment that Dubai Municipality first planted this species in the Mushrif area in 1993 and onwards and now it can be found in many plantations. Apart from such planted ones, the naturally growing smaller trees forming isolated clumps are our indigenous *Acacia ehrenberghiana.*
Surprisingly, the ghafs are watered. They are certainly green and happy and very pretty, as ghaf trees go, but ghafs put their main root down very deep to access water whatever the conditions, so watering might cause shallow rooting in these big trees. *Contributed by Anne Millen*

Attention: GEORGIA trip in May 2014.

The dates originally *planned* for the 2014 Georgia trip were 25-31 May (see Gazelle of November 2013).

However due to schedule changes of Flydubai we were forced to change the dates into: **Friday 23 to Thursday 29 May**.

For DNHG members who are interested in this trip to ancient Georgia, please contact Christine Verreydt for a detailed program:
Email: christineverr@hotmail.com
Mobile: 050 8974625

Upcoming Field Trips

The DNHG has a number of upcoming field trips, both in the UAE and further abroad. Due to the large volume of trips, exhaustive details cannot be given within this month's issue. Details and information regarding the following trips will be send out by email.

Friday February 7th: Dibba Geology Trip with Jean Paul Berger

Friday February 14th: Wadi Walk with Gary Feulner

February 13th to 18th: Sri Lanka Trip (#2)

February 20th to 22nd: Inter-Emirates Weekend in AUH hosted by ENHG-AD

May 23rd to 29th: Trip to Georgia

Dubai Natural History Group Programme

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

Sunday February 2nd: Dr. Hector H. Hernandez will be giving a lecture entitled: *"From the desert to the oceans: lessons learned from UAE microbial ecospheres".*

Sunday March 2nd: Peter Jackson will be giving a lecture entitled: *"Re-stitching and Intervention in Sharjah's Souqs'".*

Upcoming Field Trips (Members Only)

See Page 7 for full list of upcoming trips and events

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

DNHG COMMITTEE 2013

When possible, please contact committee members outside office hours

	name	tel	email
Chairman	**Gary Feulner**	04 306 5570	grfeulner@gmail.com
Vice Chairman	**Valerie Chalmers**	050 455 8498	valeriechalmers@gmail.com
Treasurer	**Rakesh Rungta**	050 558 2435	rakesh99@emirates.net.ae
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	**Pradeep Radhakrishna**	050 450 8496	wgarnet@emirates.net.ae
Fieldtrip Co-ordinator	**Jenny Hill**	050 886 1508	jennyhill76@hotmail.com
Fieldtrip Co-ordinator	**Sonja Lavrenčič**	050 256 1496	lavson@gmail.com
Newsletter Editor	**Sonya Benjamin**	050 5027 089	sbenj792@gmail.com
Librarian / Book Sales	**Johanna Raynor**	050 604 2575	jorayoman@gmail.com
Postmaster	**Sandi Ellis**	050 644 2682	sandiellis@gmail.com
Chief Engineer	**Ajmal Hasan**	06 5043523	ajmal_hasan@hotmail.com
Website Coordinator	**Sandhya Prakash**	050 551 2481	sandy_pi@yahoo.com

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

Contributions

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 *(Arial 10 justified).*

DNHG Membership

Membership remains one of Dubai's best bargains at Dhs. 100 for couples and Dh. 50 for singles. Membership is valid from Sep 2013 to Sep 2014. You can join or renew at meetings or by sending us a cheque made out to HSBC account no. 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 AE900200000030100242001. 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 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.