DUBAI NATURAL HISTORY GROUP-



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Contributors

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

Martina Fella, Angela Manthorpe, Tamsin Carlisle, Dr. Ulrich Wernery, Binish Roobas and Gary Feulner

New Species



This month the EAD announced the discovery of a new species of Cuckoo Wasp found on Abu Dhabi's Al Wathba Wetland Reserve.

It has been named *Hedychridium anithaae* in honour of the scientist who discovered it.

The full report can be found in the following link:

https://ead.ae/en/news/ new.species.added.to.the.global.li st.of.invertebrates.after.discovery. on.ab.dhabi.al.wathba.aspx



Urban Wildlife

This month I had the chance to wander the grounds of the Fairmont Bab Al Bahr Hotel in Abu Dhabi, on the lookout for urban wildlife, and encountered the pictured Graceful Prinia (*Prinia gracilis*) and a female Carmine Darter dragonfly (*Crocothemis erythraea*).

The Graceful Prinia is essentially a long-tailed warbler (and was formerly known as the Graceful Warbler). They are fairly common in UAE parks and gardens, but nonetheless delightful to watch. There were quite a few flitting around the hotel garden, alternately putting on aerobatic displays as they hunted for flying insects and perching in tree-tops or other prominent locations while chirring like demented grasshoppers.

On consulting Gary Feulner to confirm my ID of the pictured dragonfly, he agreed, but commented that multiple views are always helpful and a top view is generally the most useful. In the case of the Carmine Darter, a top view would show the distinctively broad abdomen. It is sometimes difficult to make a dragonfly ID from a side-view photograph alone, and especially from the dramatic close-ups favored by many photographers, because they do not show the gross features normally used for field IDs.

The gender of most dragonflies can be determined by inspection of the anal appendages or claspers, at the end of the abdomen. Males of the most common UAE dragonfly species (all in the Family Libellulidae) have a pair of long, closely spaced appendages, like little pennants. Females have shorter, more widely spaced appendages. The typical female configuration is seen in the accompanying photo of the Carmine Darter.

Gary also added a personal comment on the Graceful Prinia, one of the smallest of the local warblers: "To me, its flight always looks labored and leaves me in doubt if it will reach its destination. I tend to think of it as the 'Graceless' Prinia!"

Contribution and photos by Tamsin Carlisle



Female Carmine Darter (Crocothemis erythrea)

Our Next Speaker

Re-stitching and Intervention in Sharjah's Sougs

The lecture will describe the original extent and character of Sharjah's sougs and their significance for Sharjah during the 19th century.

It records partial demolition during redevelopment in the 1970s. In 2009, the Ruler instructed the covering of Souq Saqr and reconstruction of its gates. The new roof is both modern and traditional in spirit, its design maximising natural cooling, to blend contemporary functional requirements with traditional form and materials.

Each phase of the project has had to be completed keeping the souq fully operational. Following recent archaeological survey and excavation, a final phase will restore its broken continuity across Bank Street.

Peter Jackson studied architecture at University College London, working first in London, Dubai, Muscat and Zambia during the 1970s.

In 1980 he established an architectural practice in Zimbabwe, also with projects in Botswana and Mozambique. He returned to the UAE in 2002 and in 2007 he joined HH The Ruler's Office in Sharjah as Architect Advisor, with particular responsibilities for museums and historic buildings.

He was founding Chairman of the English-speaking Chapter of the UAE Architectural Heritage Society for its first five years. He lectures frequently and has written books, papers and articles on his architectural historical research.

Peter has been an active member of the DNHG and the RIBAgulf Chapter & is author of "Historic Buildings of Harare" (Harare, 1986) and co-author of "Windtower" (London 2007).

A Farewell

At the May meeting we said farewell and bon voyage to Judy Roberts, the very talented artist, who was one of our early members. She will be returning to the UK with her husband Colin at the end of the month.

In the late 1980s, Judy selected our logo, the head of the Arabian Gazelle (Gazella gazelle arabica) from her collection of UAE mammal drawings and she presented her original drawing to the Group to be the symbol of the DNHG. We wish them well.

END OF SEASON GET-TOGETHER

Our annual gathering before people leave for the summer will once again be held in the Utsav Restaurant, The India Club, off Oud Metha Road on Thursday, 19th June 2014 at 7.30 p.m. for 8.00 p.m.

Price is Dirhams 80/- per adult and Dh40/-for children 5-12 years for a varied buffet meal.

The Annual Photographic Competition will also be held. Members are invited to enter a maximum of five (returnable) prints on UAE and Oman natural history subjects from three different categories:

- (a) Life on Earth: Plants/ Animals/ Fossils;
- (b) Earth & Environment: Landscapes/ Geology;

(b) Earth & Environment: Landscapes/ Geology;

(c) Man and his Influence: Archaeology/Architecture/Culture (People)/Environment.

Photographs should be a minimum size of 5 inches × 7 inches (13 cm × 18 cm) and should be mounted. The competition will be judged by everyone present. There will be a prize for each category and for the photograph voted the best overall.

N.B. The photographers must be present at the function.

We will also have another team picture/video quiz with prizes for the winning team!

Tickets will be available at the meeting on Sunday 8th June. So make a date in your diary. If you cannot make the meeting, please email Valerie Chalmers at valeriechalmers@gmail.com by Thursday 12th June in order to obtain your tickets.







Field Clips

A change in Dubai's coastal marine environment

Ever since I arrived in Dubai more than 15 years ago, I have made it a habit to take my mask and snorkel with me to the beach whenever I felt like going for a swim. Along the sandy shores one could often see hermit crabs, needle fish and sometimes up to 10-15 small sting rays in the same area.

Snorkeling along the rocky break-waters one could always find lots of black sea urchins (mainly *Echinometra mathaei*, but also *Diadema setosum*), the Yellowbar Angelfish (*Pomacanthus maculosus*) and the Two-banded Porgy (*Acanthopagus bifasciatus*), just to name a few of the most prominent species.

Although these sightings were not really spectacular, I have always enjoyed just sticking my head under water to get a glimpse of a different world. However, since a few years ago, something rather remarkable has been going on under the surface of the sea along the Jumeirah coastline.

Three years ago I noticed it for the first time. In about 50 meters distance from the beach (near Jumeirah Beach Park) and in depths of approximately 2 meters, I spotted several small patches of sea grass (Halodule uninervis). This might not sound anything special at first but, in all my years of snorkeling in the Jumeirah beach area, I have never seen any sea grass here; in the sheltered lagoons of Umm Al Quwain and Abu Dhabi of course, but not here! Therefore I decided to keep an eye on those small patches. To my surprise I noticed that, only weeks later, they had doubled in size!



The dark patches are fields of sea grass now found off Jumeriah Beach Park



From left to right: Pinna muricata, Halophilia ovalis, Echinodiscus auritus, Halodule uninervis, a selection of unidentified sponges and second from the right the seasquirt Phallusia nigra

Now, three years later there are underwater meadows of hundreds of square meters, some of them nearly reaching all the way to the low tide zone of popular beaches.

The sea grass, *Halodule uninervis*, is the dominating species, but there are also some patches where *Halophilia ovalis* has the upper hand, which is the favourite diet of Dugongs.

What I find truly amazing is the entire underwater ecosystem seems to have changed along with the occurrence of the sea grass.

Sting rays don't seem to like the dense meadows and I now see them in much smaller numbers than before and never see them in the grassy areas itself. These areas are now inhabited by species that one would have hardly ever seen before, such as the giant bivalve shell Pinna muricata, which now appear approximately one every square metre. Like razor blades, its two calcareous, convex valves partly stick out of the sandy ground so that it can filter sediments for nutritious particles.

Also remarkable are the large amounts of burrowing sea urchins, the so called two-slit sand dollar (*Echinodiscus auritus* and *Clypeaster latissimus*), as well as the blue swimming crab (*Portunus pelagicus*) seem to love this new habitat. The sea grass meadows are also home to several types of soft sponges of different colours (unfortunately I was not able to

identify them) as well as many juvenile fish species. I was even lucky enough to snorkel on two different days side by side with a medium sized hawksbill turtle (*Eretmochelys imbricatea*). It was exactly the same animal as I was able to identify it by the barnacles growing on her head. The animal seemed in very good health and was feeding on some of the sponges.

The shore line of Dubai is apparently changing from open, sandy beaches that used to be exposed to waves and rough seas to a more lagoon like environment. This is probably due to the many manmade islands which are now protecting the coastal environment from the forces of the open sea.

Report and photos by Martina Fella

If any of you should find a sand dollar on the beach or in the shallow water and it is brownish in colour and its surface feels rough, then the animal is still alive and should be left alone.

Dead sand dollars are white or light grey with their feeding holes clearly visible on their flatter sides, which are safe to collect.



Field Clips



A Sticky Situation

Apart from Otto the goldfish, the only 'pets' I kept as a child were a bunch of stick insects. They laid eggs with gusto, none of which ever hatched and as they didn't move very fast and only required a few privet leaves for dinner, they were impressively low maintenance.



A male stick insect of the short antennae variety

They came from someone at school and passed away months later – boiling in their ice cream container on the back shelf of the car as we drove down south for our summer holiday.

So it was like meeting an old friend when I stumbled across a stick insect on a recent ramble around Gastropod Gulch near Hatta. We'd gone for a wander after the rains and I hadn't been out of the car more than a couple of minutes when, on a low bush, I spotted the

pale coloured and very delicate skin that had been shed by a stick insect. On close inspection I found the stick insect itself nearby, as if it had only recently shed the skin and it was extremely well camouflaged. It moved slowly, with a gentle swaying action and settled deeper into the bush as I tried to get some photos.

Gary Feulner's article 'Stick insects of Eastern Arabia' published in Tribulus 20 - 2012 notes that there are at least 2 species of the genus Clonaria (Order Phasmida or Phasmatodea) that have been identified in the UAE and a comparison of this recent specimen with the photos in the Tribulus article shows many similarities.

The article continues: "males can be distinguished by the pair of claspers located at the end of the abdomen, used to hold the female during copulation" and a close inspection of this specimen reveals the claspers clearly against the dark backdrop of leaves.

Interestingly, during the course of researching his article, Gary unearthed 14 recordings of stick insect taken over a period of 22 years, not all of which had accompanying photos.



Bee hives and a pot of local honey

Today, the proliferation of high quality cameras in smart phones, makes the recording of unusual subjects far easier and perhaps we will see more records coming through in the future.

The stick insect was an interesting find, but by no means the only highlight of the morning. The rain had stimulated a tremendous amount of growth in the wadis and nearby we found a number of bee hives – both abandoned and functioning.

On leaving the area we spotted a very large raptor coming towards us from the direction of Jebel Rawdah. With the size and profile of this enormous bird it could only be a Lappet-faced vulture (*Torgos tracheliotos*) and indeed I learnt afterwards that they are known to nest in this area.

Report and photos by Angela Manthorpe

Band-eyed Hoverfly

The Band-eyed hoverfly (*Eristalinus taeniops*) belongs to the family of Syrphid flies, which is one of the largest families in the order Diptera.

Hoverflies are expert fliers and possess the ability to hover and fly backwards. Adults feed on the pollen and nectar of flowers making them important pollinators. The pollen provides females with the proteins and amino acids needed to mature their eggs, while the nectar contains large amounts of sugar needed for their energetic flight.

Adults grow between 12-15mm in length and have aquatic/ semi-aquatic larvae. Unlike adults the larvae are saprophagous: feed on decaying matter.

The geographical range of the band-eyed hoverfly begins in the Canary Islands, stretching across the Mediterranean, the Middle East and all the way to Nepal.

This particular hoverfly, photographed, was found hitching a boat ride during last March's field trip weekend to Dimaniyat islands.

Contribution and photo by Tamsin Carlisle







Pharaoh Cuttlefish

On receiving Harold Bekker's beautiful photo of a cuttlefish, published in last month's edition of the Gazelle, I was instantly reminded of a photo I had taken 3 years ago while snorkeling along the breakwater off Russian Beach in Jumeirah.

It was a late June morning when I spotted, what I believe to be, a Pharaoh cuttlefish (Sepia pharaonis) eagerly eye up a large shoal of fish, possibly a type of Scad (Selaroides sp.), which were engaged in energetic laps up and down the breakwater, with their mouths and gills agape feeding on plankton.

The cuttlefish's skin colour and texture had changed to match the surrounding environment and, as the Scad rounded the far bend and began swimming back towards us, the cuttlefish gradually pivoted its body upwards and, to my surprise, lazily stuck out its inner tentacles in a feeble attempt to catch its prey.

Of course I was hoping this would happen, as I had my camera poised and ready, but was surprised by the lack of effort on the cuttlefish's part. It did not display the lightning fast reflexes you often see in documentaries and I was shocked that I actually got the picture.

The fish retreated back down the breakwater and the cuttlefish lazily reeled in its inner tentacles before slowly rising up from the rocks, like a futuristic space ship and looked in my direction, where it quickly changed into a deep red.

At this point I tried to engage with the cuttlefish by giving it a two-finger peace sign, hoping it would raise two arms in return, as had happened in previous encounters, but this particular mollusc did not appear impressed. I had a feeling that, if it was going to make any gesture at me, it would have been the peace sign, but in reverse!

Knowing when I'm not wanted I carried on snorkeling along the breakwater and watched the cuttlefish sink back down into the rock where its skin changed colour and texture to how I had originally found it.

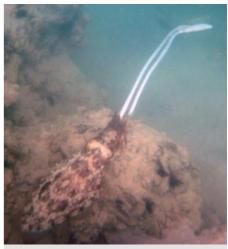
The cuttlefish is well known for its ability to change the colour, pattern and texture of its skin. A recent study reported in *BBC Focus* suggests this is down to its many layered skin, containing pigmented organs called chromatophores, light scatterers called leucophores and light reflectors called iridophores. These components allow cuttlefish to selectively absorb and reflect light, which allows them to change their appearance according to visual clues.

Of all the living cephalopod species, the cuttlefish is the only one with an internal chambered shell called the cuttlebone. Cuttlebones of dead cuttlefish are often found washed up on the beach or inside birdcages as calcium supplements for our feathered friends. Cuttlebones have been used in traditional medicines, cosmetics, polishing powders and toothpaste and have been found in late Islamic archaeological sites around the Gulf.

The cuttlebone serves as a buoyancy device and, unlike the swim bladders of fish, are unpressurised and are subject to imploding if the cuttlefish exceeds certain depths with increased water pressure.

Regarded as the most intelligent of the invertebrates, the cuttlefish can grow to approximately 40cm in length. They live for up to 2 years, but often die 3 weeks after mating, which for us is unusual as we generally presume intelligent creatures to live for longer periods of time.

Cuttlefish are decapods with 8 arms and 2 inner tentacles, which are displayed in this photo.



The cuttlefish with outstretched inner tentacles

When breeding, opposing males of the Pharaoh cuttlefish compete for females in non-physical standoffs and the winning male will display a vivid tiger pattern to his selected mate. If the female complies they will swim parallel, facing the same way, while the male caresses her dorsum. The pair will then face one another and interlock their arms and the male will use his 4th arm to deposit sperm sacks into an opening near the female's mouth.

Females can store sperm from many different suitors and decide which to use to fertilize their eggs.

The mated male will stand guard while the female lays her eggs, usually in bunches under a rock, and will fend off any opponent by splaying his arms, rapidly moving his fins and biting them as a last resort.

It is not uncommon for smaller males, who cannot compete against the larger males, to disguise themselves as female cuttlefish and sneak past a guarding male to deposit his own sperm sacks, showing that sometimes 'brawn' doesn't always get the girl.

Report and photos by Peter Olliff



Possible Scad (Selaroides sp.)?

Field Clips

MERS-CoV

New research has proved in four Middle Eastern countries, Saudi Arabia, Qatar, Oman and Egypt, that MERS-CoV infected camels can transmit the virus to people who have been in very close contact with the animals.

The camels showed no overt disease except a mild nasal discharge from which a high quantity of MERS-CoV was isolated.

Scientists from Germany compared the viruses isolated from camels with viruses isolated from humans in the same geographic areas and found them identical using modern genetic laboratory methods.



The Saudi Camel Kisser

Only a few people have been directly infected by camels because only young camels between 1 and 2 years of age are likely to transmit the virus to humans, and it seems that camels are transmitting the virus only for a short period of time, i.e. during an acute infection.

Recommendations of precautional measures were issued from the 2nd Scientific Advisory Board Meeting for Global Mass Gathering Medicine in Riyadh, Saudi Arabia:

- Avoid very close contact to especially young - camels and to all sick camels
- Never drink unheated camel milk (heat the milk to more than 75°C)
- People who are dealing with camels should take precautions when they find young dromedaries with ocular or nasal discharge.

Contribution by Dr. Ulrich Wernery Director of Dubai's Central Veterinary Research Laboratory



Lime Swallowtail (Papilio demolues) in Kerala

Common Swallowtail

The Common Swallowtail butterfly Papilio machaon (Family Papilionidae) is not very common in the UAE, but it is more likely to be seen in wet years such as the current one. It is a notorious "hilltopping" species. Males and females find each other by following the topography upwards to a high point.

Gary Feulner encountered one years ago on his only visit to the summit of Jebel Masafi, and more recently one was seen atop the 1000 meter Jebel Qitab ridge, overlooking the East Coast.

However, it is also possible to see the Common Swallowtail in the wadi environment. A chilly afternoon in mid-March allowed a relatively close approach for a good photo in a tributary of Wadi Wurayah. Five weeks before, in another tributary of Wadi Wurayah, we had encountered not only a Common Swallowtail, but also two of its large and colorful caterpillars, feeding on the highly (and unpleasantly) aromatic rue *Haplophyllum tuberculatum*, a member of the orange family.

Insects of Eastern Arabia says that caterpillars of the Common Swallowtail feed on carrot and orange family plants exclusively. From these they extract noxious substances that can be extruded as a defense by a special two-lobed retractable organ called the osmeterium, situated behind the head and shown in the accompanying photo.

Binish Roobas has experience in Kerala with the caterpillar of another member of the Papilionidae, and still remembers it vividly:

"It was at Kumarakom, at the southern tip of India. I found the caterpillar of the Common Mime *Papilio clytia* on a spice plant (cinnamon). It was so beautiful that I tried taking a picture with a compact digital camera.

After few disturbances, the osmeterium was suddenly erected like a radio antenna and sprayed some chemical on my hand. I fled the place because of the smell. It stayed in my hand the whole day, even after washing it immediately (maybe partly because of the aromatic cinnamon plant)."

The most common swallowtail in the UAE is the Lime Swallowtail, *Papilio demoleus*, found in and around plantations and gardens where the caterpillar feeds on citrus trees. It has a similar ability to discharge repellent substances from an osmeterium.

Report and photos by Gary Feulner and Binish Roobas



The orange, two-lobed osmeterium of the Common Swallowtail exudes noxious substances when danger threatens. The osmeterium shown here is only partly extended

DNHG Recorders

Reptiles - Dr Reza Khan

res: 344 8283 off 344 0462

Astronomy - Lamjed El-Kefi

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Marine Life - Lamjed El-Kefi

Geology - Gary Feulner

res: 306 5570

Insects - Gary Feulner

Fossils - Valerie Chalmers

res: 394 8871

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Plants - Valerie Chalmers

Archaeology—MaryAnne Pardoe

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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 online 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!

Announcements

Change of date — June Lecture

Please be advised that next month's lecture has been re-scheduled to:

Sunday June 8

This will be our last lecture for the season, so don't forget!

Letter from the Editor

We are fast approaching the end of our season, but that doesn't mean things stop in the world of natural history!

So if you happen to come across an interesting find in the field of natural history then we'd like to hear from you.

It could be an interesting news article or an unusual find while walking the wadis, a surprise discovery in your fresh caesar salad, or a photo of an unexpected visitor in your garden! Just send it in to us at: gazelleeditor@gmail.com

If you would like to submit a report, but are not confident with your written English skills, do not fret - we are here to ____

help.

All the best and happy exploring,

Peter

We still want your Snails

A reminder, especially for new members: Your unwanted garden snails and slugs are of interest for scientific study and an accounting of the terrestrial molluscs of the UAE.

All specimens will be gratefully accepted by Chairman Gary Feulner, and contributors will be kept informed of progress and pedigrees. Suburban gardens are home to several native Arabian snails, but also a number of introduced species. There have been a few surprises over the years and we suspect there are more out there.

Dead shells are preferred; we'll follow up if you've got something unusual. **It's easy. Just bag 'em and tag 'em!** Please remember to record the location and the habitat, as well as your name.

Old Tribulus Volumes Wanted

The ENHG journal, *Tribulus*, is now in its twenty-third year of publication. Since it began, it has become increasingly important as a source of published data about the natural history and archaeology of the UAE. Much of the material published in *Tribulus* is available nowhere else.

As the journal continues to expand its reputation overseas, the Editorial Board have received an increasing number of requests from overseas academic and other scientific institutions for sets of *Tribulus*. Unfortunately, it is not possible to meet all of these requests, since some of the older issues are out of stock and reprinting would make no economic sense.

If any DNHG members are leaving the UAE and do not want to take their copies of *Tribulus* with them, then the Editorial Board would be delighted to have them back! Anyone wishing to hand back copies should contact any member of the DNHG Committee, who will arrange to get the copies to the Editorial Board. Many thanks, in advance.

Dubai Natural History Group Programme

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

June 08: Peter Jackson: Re-stitching and Intervention in Sharjah's Sougs

*Please note there are no lectures scheduled for July and August. Lectures will resume in September.

Field Trips (Members Only)

May 23 to 24: Two-day/one-night dhow trip to the Musandam

May 23 to 29: Trip to Georgia

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

DNHG COMMITTEE 2014

When possible, please contact committee members outside office hours

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Greater Flamingo at Wathba Lakes Photo Credit: Tamsin Carlisle

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 <u>HSBC</u> account no. 030100242001. (Please note we <u>cannot</u> 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 <u>not</u> identify you as the payer. If you wish to pay by cash, please also <u>scan</u> 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.