Travel sometimes helps us understand our home turf better. *Prionyx crudelis* (a/k/a the Locust Terror) is one of the UAE’s largest wasps, capable of paralyzing and carrying off large grasshoppers or locusts in which it lays its eggs. I have seen this formidable and somewhat sinister looking creature on several occasions across the UAE, from the Musandam peninsula to Jebel Hafit.

But it was in Northeast India, in Buxa Tiger Reserve, where I first saw such large wasps (although not *Prionyx* itself) in action. While investigating a dry streambed I noticed a rather large and ungainly flying insect. It landed at a nearby hollow in the gravel bed and, with the aid of binoculars, all became clear: a large, powerful female wasp had just deposited a big green katydid (bush cricket) (Family Tettigoniidae) near the entrance to a burrow it had previously excavated in the gravel. Flying while carrying another insect slightly larger than itself was no small feat. I knew that in the normal course, the wasp would drag the katydid into the burrow and deposit its eggs in the body, which would serve as nourishment for the wasp larvae.

I hadn’t counted on what came next, however. I was undertaking my role as an observer from what I thought was a respectful distance of ca. 6 meters. But that wasn’t enough for the wasp mother-to-be. She sensed not only my presence but also my attention, highlighted by the pair of big binocular “eyes” directed at her – and she didn’t like it. Before even entering the burrow, she was back in the air and headed straight at me at a determined pace.

I took time to marvel that my presence had made her uneasy and that she was now going to try to see me off, and also to reflect that a sting from such a large wasp had the

(Continued on page 4)
From the Editor:

Due to cancellations, spaces are available on the Daymaniyat Islands Dhow Trip (see page 8 for details). Judging from the photographs and reports on page 5 (and Spotlight) from the first trip, this is the underwater world at its best!

Planning is underway for the Inter-Emirates Weekend (IEW) hosted by DNHG in February. More on this will be unfolded in due course so ‘watch this space’, as the saying goes!

Enjoy your read!

DNHG Recorders

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Lecture Title - "Bats! Introduction to Detecting & Recording techniques..."

Biography - Nick de Smith
Nick's background is as an microelectronics engineer but he has a lifelong interest in wildlife, the environment & somewhat confusingly, designing and building HiFi amplifiers & speakers...

Nick has designed several pieces of bioacoustics monitoring equipment and has a particular interest in ultra-low-powered remote monitoring, specifically with respect to remote apiaries (his own bees are several 1000 miles away).

* * * *

Lecture Title - "Sharjah's Towers - Defending Sharjah in bygone days"

Biography - Hazelle Page
Hazelle Page, Collections Manager for Sharjah Museums Authority’s 16 museums since 2006.

Since graduating in archaeological conservation from Cardiff, Hazelle has worked on archaeological material and objects from many museums and archaeological units before teaching conservation at Lincoln University for 8 years. Most recently before coming to Sharjah Hazelle was Conservation Manager with Nottingham City Museums and Galleries

* * * *

Lecture Title - "Challenges of Living Sustain-ably in the UAE"

Biography - Sandhya Prakash
With 20 plus years of experience, Sandhya is a Dubai-based entrepreneur and Enviro-Tech professional. Currently she heads Beacon Energy Solutions & Technology – an end-to-end energy management and renewable energy firm in the United Arab Emirates.

Sandhya urges companies to balance people, planet, processes and profit. She brings attention to the fact that “We have one earth; we need to live responsibly as a human community alongside all other creatures on the planet.”

As a community builder, Sandhya has recently taken on a worldwide role as the Chairperson of BITS Pilani Alumni Association. She is a TEDx speaker, a vegetarian advocate, singer and energy artist. Sandhya is known globally as a passionate woman leader in the field of sustainable living.

New Mammal Recorder

DNHG announces that:

Dr. Jacky Judas has been appointed as the new mammal recorder.

Unusual sightings to be reported to him. Contact details are set out below.

Speakers for Members’ Night
8pm on Sunday 9th December, 2018

Lecture Title - "Sharjah's Towers - Defending Sharjah in bygone days"

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Spotlight!

DNHG Dhow Trip, photos by Claudio Garzarelli.

(Please do not reproduce without express consent).

DNHG Overnight Camping Trip to Daymaniyat Islands, Oman, by Evan Jones

DNHG Hike to Baqal, by Paul Rivers

Recent rainfall in the UAE created a ‘lagoon in the Empty Quarter’

(photo sent by Lamjed El-Kefi)

DNHG Dhow Trip, photos by Claudio Garzarelli.

(Please do not reproduce without express consent).
potential to be very unpleasant. I was surprised, but I elected to stand my ground – slower-footed with age – and in the end she turned away at a distance of about a meter-and-a-half. Her instinct was strong, however, and she feigned attack twice more while I watched, but humans are quick learners and I was no longer concerned.

After that, she went back to her burrow, which she entered and inspected a few times, doing some minor clearing of fine gravel, and inspecting her prey. I decided to leave the scene so as not to cause her (potentially) to abandon the considerable investment in time and effort that she had made in digging a burrow and "bringing home the bacon".

Contribution by Gary Feulner

Amur Falcons

The Amur Falcon (*Falco amurensis*) is one of the smallest raptors but is known for making one of the longest raptor migrations. They breed in south-eastern Siberia and north-eastern China, along the mighty river they are named after, but they migrate annually to South Africa for the winter, passing over the Indian Ocean. That route has occasionally brought individuals to the UAE, although only rarely.

During the course of an ambitious one month road trip in north-east India, Binish Roobas and Gary Feulner had a singular opportunity to see the mass migration (rare among raptors) over Nagaland and Mizoram. Near dusk one night in Nagaland we had seen dozens of birds sweeping back and forth across the sky at a great distance, feeding on even larger swarms of winged termites that we could also see in the air above us, recently erupted from their underground colonies and numbering in the millions -- but it took a while before we realized exactly who and what we were watching.

We were primed, however, and a few days later, over the Mizoram border, Binish pulled the car off the road unexpectedly near the crest of a low hill, and raced out with his camera. Gary and a Kerala schoolmate followed suit and the three were treated, at close range, to the spectacle of about three dozen Amur Falcons feeding overhead, sweeping back and forth at close range, on a mixed swarm of winged termites and smaller numbers of the migrating dragonfly *Pantala flavescens* (which is also now known to cross the Indian Ocean).

Photos stopped the action to reveal things we couldn't see with the naked eye. For example, the falcons do not hunt like swifts and swallows, catching their prey directly with their beaks. Instead, they catch the termites in their claws, then transfer them to their mouths to eat while still in winged pursuit of more. The accompanying photos may serve to share some of the excitement.

Contribution by Binish Roobas and Gary Feulner (photos by Binish Roobas)
Field Trips

DNHG field trip to the Daymaniyat Islands, Oman

Contributions by Ocean Bekker and Sumithra Subramaniam Vaidyanathan

I loved our trip to the Daymaniyat islands for a few reasons but for me the main reason to join this expedition is that these islands still remain an untouched underwater paradise and from our past experience with Sonja’s trips, I knew it would be a bit adventurous but pleasant and surely worth the effort ‘getting away’.

Although these islands are located very close to the capital city of Muscat, they are government-protected and closed for a few months (May-Oct) during the year due to turtles breeding. The Daymaniyat islands are a nature reserve and when their shores are open to the visitors, they can be accessed only after obtaining permission. So, we were enthusiastic to take the opportunity to join this two-day expedition organized by Sonja.

Due to protection efforts, this is an area that preserves the untouched beauty and is abundant in coral, fish and marine fauna, including spectacular turtles.

We camped overnight in a secluded spot among trace of turtles nests and a highlight of the trip was to watch the sun rising above the calm Arabian Sea waters and to take the first morning plunge with a snorkel.

What I saw was really rewarding:

- a group of 5 turtles having a morning ‘breakfast’ together
- spotting a turtle playing with the rays of the morning sun
- a 1.5 meters honeycomb moray just coming out of a rock crop for a morning swim
- a giant turtle gently hovering above the coral reef.

This was a short but wonderful and memorable trip.

We headed to Oman in the afternoon on a Thursday, looking forward to a lovely camping experience by the beach at As Seeb. We found a lonely spot as a part of the public beach of As Seeb to pitch our tents for the moonless night.

We were up early the next day morning, waiting for our boat ride to the Daymaniyat islands. We reached the islands in less than 2 hours. To our surprise, the ministry of environment had pitched their tents for an inspection. While the crew on board looked out for a ‘spot’ for us to camp, we dived in to the cool blue, clear waters of the spectacular islands.

We were met instantly with a large school of transparent tiny fishes that dazzled in the sunlight. As we moved away from the big boat, we saw many schools of the butterfly fish including black finned melon, Horseshoe and Threadfin. Many species of the parrotfish and angelfish swim before us in pairs or groups.

The Picasso triggerfish has a beautiful, colourful appearance and strikingly patterned body. Its most striking part is its mouth that is a bright yellow, in contrast to its grey body. It is a lonely fish and is usually found close to the ground or nibbling on the corals.

We were very lucky to spot a baby sting ray flying out of sight in a second and its mother settled well on the sand at about 10m below us spanning close to 1.2m in the width and 2 m in length.

Sea cucumbers were widely spread out in shallow waters. A few moved lazily to look up at me while the others simply looked like they slept through it all.

We spent the night camping in the tiny island amidst a great colony of hermit crabs that left their trail all around our tents. There was condensation of dew on our tents when we woke in the morning. I presume this is a source of fresh water for the life on this island.

Another interesting phenomenon was the glowing planktons on tiny stones in the night that would glitter and sparkle in blue every time the waves hit the beach. This was a surreal experience.

We were very lucky to spot a group of 6 adult sea turtles indulging in coral breakfast the next day for close to 3 hours. Four of them stuck to eating while together while the other two swim around a bit breaking out of the water surface, swimming beautifully.

Contribution by Sumithra Subramaniam Vaidyanathan

As always, it was always special to share the company of the like-minded nature lovers.

We are already looking forward to our next trip!

Contribution by Ocean Bekker

* * * * *
Field Trips

Mountain Hike to Baqal (October 2018)

The track to the agricultural settlement of Baqal, at about 800 meters above Wadi Naqab in the mountains of the Musandam peninsula, is well-worn if rather steep. Before heading off Sonja explained clearly what was in store for us and ensured that we were all suitably prepared with hats, sunblock and plenty of water. The hike up took us about two hours, starting in the shade of early morning.

As we climbed, we were rewarded with views of the mountains, Ras Al Khaimah, and the sea in the distance, not to mention cooler air and a breeze. David Kingston helped to explain fossils and other geological phenomena we saw in the sedimentary rocks, including fossilized worm casts, bivalve shells and possibly a few brachiopods.

Arriving at Baqal, we rested and snacked in the shade of a sidr tree while Sonja gave us an introduction to life in the settlements of the Musandam mountains.

Settlements like Baqal exist primarily because the higher elevation enabled cultivation of wheat and barley, which cannot thrive at sea level. These crops can only be grown, however, if sufficient water is available. Water was fed to fields and cisterns (possibly 15 or more in Baqal) by cleverly constructed channels stretching across the surrounding hillsides. When in use, the cisterns would normally have been covered (using tree trunks and barasti) to prevent evaporation and contamination.

Baqal features one of the largest falaj 'bridges' in the Musandam, which effectively annexes a second water catchment area to their one and thus significantly increasing the water supply for the village (this possibly explains why this village has so many cisterns). We marveled at not only physical effort needed to build this impressive falaj system but also the engineering and surveying skills required to ensure that the downward flow of water was always maintained, all without the use of a theodolite or spirit level!

Most of the physical area of Baqal and other settlements consists of terraced fields which were created using stone retaining walls with some up to several meters high. The soil depth helps to retain water, so that after good rainfall two crops could be grown in one season.

The earliest terraced settlements in the high Musandam are thought (from pottery evidence) to be as much as 750 years old, coincident with the rise of Julfar under the kingdom of Hormuz. Up to the earliest 20th century, wheat farming is said to have been a profitable activity, but it was later impacted by international competition and perhaps also by climatic factors. Today, farming in the high Musandam continues only as a hobby activity in a small number of settlements, and the work is conducted principally by expat labor.

Unfortunately, most of the traditional houses in Baqal (the Bayt al-qufl or "locked house" with their courtyards) were in disrepair. The roofs had long since collapsed and their wooden doors had also been removed. Outside, however, we found evidence of daily life in the form of a number of well-worn potholes in the rocks beside the houses. These were the mortars in which spices and herbs and selected foods would have been ground and mixed, using another stone as a pestle.

Like other larger terraced settlements, Baqal was inhabited for a long enough period each year that it has its own traditional cemetery. We also saw a small number of petroglyphs on building stones around the settlement. Some of these indicated that the stones in question had been re-purposed, because the drawings were now upside down.

We would all like to thank Sonja immensely, not only for organizing this wonderful trip, but also for sharing with us her obvious passion, knowledge and understanding of the workings of these mountain villages.

Contribution by Paul Rivers (with reference to Sonja Lavrenčič and Gary Feulner)

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Harvested grain was/is stored in cubical stone structures called yanz (plural yunooz), sealed using a material called sarooj, a cement-like material produced by combining mud and limestone (also sometimes used to seal falaj channels). It is said that, within a sealed yanz, grain can be kept for up to two years.

One of the largest Falaj 'bridges' in the Musandam.

We also marveled at the terraced fields, particularly the impressive height of the retaining walls and the sheer volume of soil required.
Field Clips

Patrolling the Meadows under the Sea
Noticing a dark underwater mass from the Jumeirah shoreline, snorkelling out revealed a submerged eco-system, not far from the shore under less than five metres of water.* Neither rock nor seaweed was found, but a swaying carpet of seagrass. This little-known habitat is a provider and protector for much marine life in and around it, including a seemingly plentiful supply of Pharaoh cuttlefish *Sepia pharaonis*. The cuttlebone seen washed up on beaches is all that is left after a cuttlefish dies.

Pharaoh cuttlefish are cephalopods related to squid, octopus and the chambered nautilus (more information at Monterey Bay Aquarium). There are many videos online to demonstrate how the eight arms and two long tentacles operate. As can be seen in the photos, this cephalopod can change colour in an instant, either to match its surroundings or for communication purposes. It can shoot out sepia-coloured ink to confuse a potential predator, whilst simultaneously making a quick getaway. I encountered several cuttlefish over the summer.

On one occasion, a cuttlefish was focused on darting repeatedly into the grass (too quick for pictures). Others were seemingly cruising, usually alone but sometimes in pairs. Some were resting. Exiting the water, I noticed one perfectly camouflaged against the sand in shallow water.

Returning to the seagrass find, there are over 50 species of seagrasses recorded globally but, due to the high temperatures and salinity off the coast of the UAE, only three exist (mainly in Abu Dhabi), which are:

- *Halodule uninervis*
- *Halophila ovalis*
- *Halophila stipulacea*

According to the publication *Marine Ecosystems in the United Arab Emirates*, seagrasses are 'rhizomatous flowering plants, forming meadows, which are homes to a variety of marine life.' Seagrasses are vascular and function in a similar way to terrestrial grasses, having roots and shoots. Roots hold down the sediments of the sea floor, lessening the threat of coastal erosion and making the water above less turbid. Clearer water allows more light to reach the grass, enabling photosynthesis. Seagrass meadows multi-task in even more ways. Apart from stabilizing the ocean floor and being vital nursery grounds, seagrasses also absorb carbon dioxide and release oxygen into the water. These unsung marine ecosystems therefore play a very important role all round.

Tiny shoals of fish were observed on each visit but some other animals found in and around the meadow included sand dollar communities, sea anemones, a lone swimming crab and young needlefish to name a random few.

* Jumeirah and Umm Suqeim beaches are now manned by lifeguards. Always stay within sight of a lifeguard when swimming.

Contribution by Margaret Swan
Membership remains one of Dubai’s best bargains at Dh100 for families and Dh50 for singles. Membership is valid from September 2018 to September 2019. You can join or renew at meetings or by sending us a cheque made out to HSBC account number 030100242001. (Please note we cannot cash cheques made out to the DNHG).

Payment can also be made by cash deposit at a bank or ATM, using our IBAN number AE900200000030 100242001. However, this process does not identify you as the payer. If you wish to pay by cash, please also photograph or scan a copy of your payment confirmation and send via e-mail to the Membership Secretary, so we know whose money we have received.

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

Committee

Field Trip Coordinator

We are looking for a second Field Trip Coordinator to assist with field trips.

Membership Secretary

DNHG would like to welcome Aubrey Baugh as our new Membership Secretary.

Thank you to Anindita Radhakrishna, for her many years of service as Membership Secretary. Anin and her husband Pradeep remain on the DNHG Committee as at-large members, providing good counsel from their long experience.

DNHG COMMITTEE 2018

When possible, please contact committee members outside office hours

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