



GAZELLE

www.dnhg.org



مجموعتنا دورية للتاريخ والطبيعي

Inside this month:

	page
False Killer Whales	1
Announcements and Recorders	2
Spotlight!	3
Birds on the golf course	4
DNHG visit to the soil museum	5
Tented Cone Shells	6
Exploring a mountain	7
Lectures and field trips	8

Contributors—

Thanks to the following for their contributions:

Balasz Buzas, Dr Csaba Geczy, Claudio G. Garzarelli, Gary Feulner, Andrew Childs, Alexis Biller, Edurne Gil de San Vicente, Tolga Kutlu, Chandrashekhar. S. Sardesai, Gosia van Unen-Roszak, Ocean and Harold Bekker.

Send your contributions for the next *Gazelle* to:

gazelleeditor@gmail.com

by 25th March, 2019



INSIDE!

Learn some interesting facts about soil, seeds and agriculture on page 5 (photo by Tolga Kutlu)



False Killer Whales visit Fujairah!

On the 9th February a pod of false killer whales (*Pseudorca crassidens*) was sighted just a few kilometres off the Fujairah coastline by XR Hub Dive Centre. Amongst them was an associate team member of the Whale and Dolphin Research Project, which is run in partnership between The Port of Fujairah and Five Oceans Environmental Services, and is backed by His Highness Sheikh Mohammed bin Hamad bin Mohammed Al Sharqi, the Crown Prince of the Emirate of Fujairah, U.A.E. Photographs taken at the time have been verified by the project scientists as the first recorded sighting of this species since 1995.

The record from 1995 is indeed the only other official record of false killer whales in the emirate and has therefore raised the interests of scientists who believe that this species are probably more regular visitors than the records suggest.

Scientists of the Fujairah Whale and Dolphin Research Project have been surveying Fujairah waters for the past two years and, although they have not encountered false killer whales until now, they suspect that this species, which is a fast swimmer, travels widely throughout the Arabian Sea region, foraging on large fish such as tuna. Along with its close relative, the killer whale (or orca), which also occurs off Fujairah, it is a formidable



(Continued on page 4)

Announcements and Recordors

Monthly Speaker - 8pm on Sunday 3rd March, 2019

Lecture Title — "Using Undergraduate Students to Monitor Environmental Quality in the UAE"

Biography — Sandra Knuteson, PhD

Sandra Knuteson is currently a Senior Lecturer of Environmental Sciences at the American University of Sharjah (AUS).

In 2004, she earned her doctorate in Environmental Toxicology from Clemson University in South Carolina, USA, after which she moved to the UAE. Sandra Knuteson has taught environmental science and environmental toxicology, monitoring, assessment and management, as well as sustainability.

Sandra has advised over 25 undergraduate senior research projects. She has endeavoured to promote a passion for research within the students to enhance their understanding of science and environmental issues in the UAE. In order to give the students the opportunity to choose research topics that they are interested in, she has purposely left her scope of research broad to give them the opportunity to choose from a wide range of topics, from environmental monitoring of fresh and marine ecosystem water and sediment quality to the risk of heavy metals in the average human diet.

She has developed a non-laboratory research track in her environmental management courses considering the challenges, opportunities and key factors of success in environmental management in the UAE and nearby regions. Currently she is expanding that into education, "sustainability across the curriculum" and sustainable teaching methods.

From the Editor:

Based at the Centro Hotel, the annual Inter-Emirates Weekend (IEW), held between 22nd—23rd February, focused on the Emirate of Sharjah and surrounding areas. On offer were a variety of excursions into different environments including mountains, desert and wetland.

Less exertive visits took place to museums, forts and archaeological sites.

Diving had to be cancelled unfortunately but fish, animals and birds were observed at Sharjah Aquarium, Al Hefaiyah Mountain Conservation Centre, Arabia's Wildlife Centre Kalba Birds of Prey Centre and Wasit Wetland Centre.

A lively atmosphere was experienced by some at the fish market auction on Friday whilst on a quieter note, some chose to learn more about plants and trees at the Islamic Botanical Gardens.

Vice-Chairman Valerie Chalmers worked above and beyond the call of duty to make this weekend a huge success. Appreciation was expressed at the Gala Dinner (see photo inset).

More coverage on the IEW will be posted in the next issue. In the meantime, trip reports from the weekend are very welcome!

Enjoy your read!



Renewable Energy for Dubai

Dubai wants to provide a quarter of its energy from solar power over the next 30 years.

BBC reporter, Marc Lobel outlines these plans, together with ideas from the recent Middle East Solar Decathlon. This is an inter-university competition. Hosted in Dubai this year, a DNHG field trip to it was organized by Alexis Biller.

Watch the full video report at: <https://is.gd/bbcsolardubai>

DNHG Recordors

Reptiles - Dr. Reza Khan
050 6563601

Astronomy - Lamjed El-Kefi
res: 06-5310467 off: 06-5583 003
lankefi@emirates.net.ae

Marine Life - Lamjed El-Kefi (contact as above)

Geology - Gary Feulner
res: 04 306 5570
grfeulner@gmail.com

Insects - Binish Roobas
050 243 8737
johanrphus@hotmail.com

Fossils - Valerie Chalmers
res: 04 4572167
mobile: 050 4558498 email:
valeriechalmers@gmail.com

Plants - Valerie Chalmers
(contact as above)

Archaeology - Anelisa Lambert
056 6904508
anelisalambert@gmail.com

Seashells - Andrew Childs
050 4590112
andrew.childs@eim.ae

Bird Recorder— Panos Azmanis
050 7083555
azmanis.vet@gmail.com

Mammals—Jacky Judas
04 354 9776
050 6181026
jjudas@enwwf.ae

Spotlight!

Sweihan Heritage Festival, by Claudio G. Garzarelli (do not reproduce without permission)



These stunning photos seem to have captured the very essence of the Sweihan Heritage Festival.



Should you require Claudio's email address for this purpose, please contact me. (Editor)

Snippets from the Inter-Emirates Weekend (IEW)



Peter Jackson leading the Sharjah souks walk



Al Mahatta Airport Museum

This photo was taken by one of the IEW photographic competition winners, Chandrashekhar. S. Sardesai. Chandrashekhar has used the rule of thirds to capture the unusual cloud formation. It was taken on the early morning desert walk, led by Ajmal Hasan



© Chandrashekhar Sardesai - The DhandaNot



Sharjah Fort (Al Hisn), Sharjah Heritage Museum and Al Naboodah House, an insightful trip led by Hazel Paige

Waiting for the fish auction



Field Clips

(Continued from page 1)

predator and is placed at the very top of the food chain. The rich waters of the UAE provide good hunting grounds for these remarkable, rarely seen marine mammals.

False killer whales belong to the dolphin family and can reach a length of 6m. These large oceanic animals are actually more closely related to Risso's dolphins (*Grampus griseus*), pygmy killer whales (*Feresa attenuata*) and pilot whales (*Globicephala* sp.) than they are to killer whales (*Orcinus orca*), all of which also belong in the dolphin family. These are likely to be some of the same animals recorded only a day earlier just north east off Ras Ad-Dalaj in Musandam, Oman by the staff and clients of Ras Musandam Divers. Thanks to our citizen scientists we can add yet another species to the growing list of cetaceans that are observed in Fujairah waters.

Contribution by Balasz Buzas
(Photo credit: Dr Csaba Geczy)

Birds on the Golf Course

For many bird lovers, Al Qudra Lakes are a primary location to visit for bird watching. If you don't feel like going too far, there is an alternative closer at hand. Jumeirah Golf Estates with multiple ponds, waterfalls and creeks, immaculate lawns and abundant hiding places among the shrubs offers excellent conditions for birds and many other creatures. Among the man-made pools that teem with fish, birds enjoy their resort-style stopover as well as permanent living. At different times throughout the day they can be encountered in various locations. Some of the species that you can see daily are Red-wattled Lapwing (*Vanellus indicus*), Black-Winged Stilts (*Himantopus himantopus*), Black-Crowned Sparrow Lark (*Eremopterix nigriceps*), Mallard

(*Anas platyrhynchos*), Northern Pintail (*Anas acuta*), Northern Shoveler (*Spatula clypeata*), Socotra Cormorants (*Phalacrocorax nigrogularis*), and more common species of heron, bitterns, egrets, duck, geese and quail.

There are plentiful Eurasian Hoopoes (*Upupa epops*) that constantly prod the ground with their long beaks, very noisy Rose-ringed parakeets (*Psittacula krameri*) and the beautiful Indian Rollers (*Coracias benghalensis*), only truly appreciated in flight when their blue wings are visible. There are plenty of Common Mynas, always seen in pairs just as White-eared Bulbuls and Purple Sunbirds (only male is opalescent purple-blue) that effortlessly hover above the flowers from which they take the nectar. There are herons at the water's edge and egrets keeping distance from one another on the immaculate lawn of the golf course and quail hiding in the bushes. Socotra cormorants line the water's edge or roost in large numbers in the surrounding trees with their wings spread wide. With the abundance of greenery and blooming trees and flowers there is not a dull moment. Grey house crows can be found among others on highest tree branches and fly away only if it's absolutely the last resort.

For the past four years I noticed shifts in birds arrival time, numbers and variety. This may be due to external conditions like weather and food availability elsewhere as well as changing local environment here. It could be decline in fish population during the summer, more disturbance in the area or increase in cat population. For the moment, there is still plenty to see and enjoy! You can park your car



Indian Roller



Eurasian Hoopoe



Socotra cormorants

outside the Club House and explore the perimeter of the golf course on foot concentrating on the areas around the ponds. Be well aware of the golfers! If you come early there will be lots to see and hardly anybody around.

Contribution by Gosia van Unen-Roszak

(Gosia is not sure if the bird on the left is a common quail, partridge or something else. Perhaps someone out there can help to identify it? Editor)

Field Trips

Soil Museum

2019 was kicked off with a stroll around the Biosaline research fields of the The Emirates Soil Museum, and guided access to the seed bank and soil museum. The DNHG tour was led by Mai Shallaby and Dr. Mohammed Shahid.



A young member in the landscaped gardens

The facility is home to the International Center for Biosaline Agriculture (ICBA) Campus. Dr. Shahid shared insights from their long-running bio-saline research efforts. The site's external landscape offers a diversity of desert plants and rocks found across the UAE.

The UAE's hyper-arid climate results in irrigation being essential for important crops - both culturally and economically. Groundwater holds a key role, yet the rate of use risks being unsustainable. This is compounded by a drop in the water table that results in the groundwater becoming more saline.

The bio-saline research places important focus on the Salt-Tolerance and Salt-Adaptation capacity of plants for sustained agriculture practices. As such, their effort seeks to identify enhancements to current farming practices -

including irrigation management, and to better comprehend the environmental responses and attributes of halophyte (salt-tolerant) plants.

We observed how salty water impacts the growth of Date Palm trees (*Phoenix dactylifera*). Tree growth and productivity differed due to water salinity: increased salinity stunting canopy cover and reducing weight of fruit yield. In the case of Date Palm plantations, ICBA's recommendation is to irrigate at the same level irrespective of salinity, yet to tailor to seasonal needs based on evapotranspiration (ET) and adjust for higher salinity that results in higher leaching. ICBA projects that their adaptive approach would deliver 25-50% saving compared to current irrigation practices.

ICBA is collaborating on innovative efforts to obtain Biofuels from saltwater crops, and to deliver alternative energy via sustainable agriculture. *Salicornia* (Family *Amaranthaceae*) is being developing as a sustainable aviation biofuel. The first crop of *Salicornia* was harvested and processed in February 2018 as a pilot for Masdar Institute's "Seawater Energy and Agriculture System" (SEAS).

The site's seed bank is a global collection of plants that offer favourable adaptations to saline environments. As such, there are both native seeds and those that originate from different arid climates across the Globe.

The soil museum offers visual and tactile insights into the different soil profiles of UAE. This explains the diversity of



colour across the 41 different soil types and how this has changed over time.

ICBA is working on a number of technology developments, including the use of conventional and non-conventional water (such as saline, treated wastewater, industrial water, agricultural drainage, and seawater), water and land management

technologies and remote sensing and modelling for climate change adaptation. The centre's strategy seeks to address the specific challenges of ensuring water, environment, income, and food security in UAE and the wider region. Ongoing research appraises innovations in the assessment of natural resources, climate change adaptation, crop productivity and diversification, aquaculture and bio-energy, and policy analysis.

With gratitude to warm hospitality of Mai Shalaby and Dr. Mohammed Shahid, and great thanks to Edurne for coordinating our visit.

Location: near Dubai's Academic City on Al Ain Road, Dubai.

For more information: biosaline.org / emiratessoilmuseum.org

Contribution by Alexis Biller

Group in front of the building (photo taken by Edurne Gil de San Vicente)



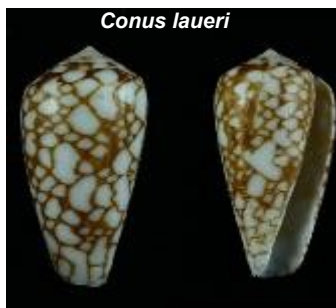
Field Clips

Some Tented Cone Shells to look out for when you stroll down the beaches in the UAE.

We are fortunate in the Emirates that we have around 50 species of cone shells which can be found in UAE and Oman, and they come in a variety of shapes and sizes. In the UAE, these range from the big, heavy *Conus betulinus* (Linnaeus, 1758) that grows to well over 100mm to the small, slim and thin *Conasprella elegans* (G. B. Sowerby III, 1895). Among the variety of forms present, there are a few species of cone shell which exhibit strongly tented patterns and that are endemic to the UAE, or are found only in nearby regions. The identification and naming has moved on somewhat from that listed in Kathleen Smythe's 1982 book "Seashells of the Arabian Gulf" or in the 1995 Donald Bosch book "Seashells of Eastern Arabia".

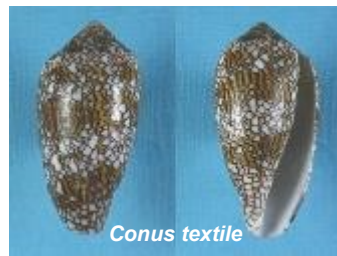
As a generalisation, all forms of cone shell that have this type of markings are highly venomous, and some are potentially dangerous to humans, so any live specimens should be handled with care, or not at all! The cones use a harpoon-like mechanism to fire darts (from the pointy end) which are loaded with a mix of toxins to paralyze their prey before enveloping it and swallowing it whole.

We have collected six UAE tented species that are of particular interest, all of which we found by walking along the local beaches, or looking under small rocks at low tides, with no snorkelling or diving involved. I would be interested to hear from anyone who has found additional species.



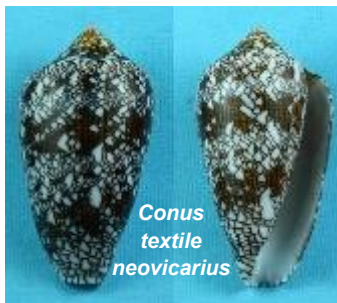
Conus lauri

Firstly *Conus lauri* (Monnier & Limpalaër, 2013), which is known only from the south-east corner of the Gulf, and can occasionally be found washed up on the beaches of Jumeirah. The markings are dark brown when fresh, fading to orange in more worn shells.



Conus textile

Secondly *Conus textile* (Linnaeus, 1758). We have only found dead specimens of these, so I am not sure whether the red colour is faded from something different. They are however very different from the following subspecies.



Conus textile neovicarius

Thirdly *Conus textile neovicarius* (Da Motta, 1982). This is the heaviest of the five species, and we have found specimens up to 90mm. This has dark red blotches with fine black wavy striping in two bands around the shell, along with



Tented Cone Shells

Conus milneedwardsi clytospira

white tenting. These are also found along the coast to the Red Sea.

Fourthly *Conus quasimagnificus* (Da Motta, 1982), which was previously believed to be a subspecies of *C. pennaceus*, as described in "Seashells of Eastern Arabia" but is now accepted as a separate species. This



Conus quasimagnificus

is the most heavily tented of the cones listed here, with a rounded shoulder. We have several of these including some quite small specimens. Size is 22mm – 55mm

Fifth is *Conus pennaceus* (Born, 1778) which has a broader profile, lower spire and squarer shoulder than the closely related *C. quasimagnificus*, as well as a more open pattern. This species is highly variable in size, shape and pattern, and it is quite possible that several different species are currently lumped under this group name, which is probably well overdue for revision.



Conus pennaceus

Finally (see main photo above) I must include the local subspecies of the impressive "Glory of India" cone shell; this is *Conus milneedwardsi clytospira* (Melville & Standen, 1899). Although we have only found one rather battered example of this magnificent deep-water cone, this is proof that it can indeed occasionally be picked up on our beaches.

Contribution by Andrew Childs

Field Clips

Exploring a Mountain

Inspired by the Copper Hike last month, Harold and Ocean Bekker decided to explore more of the neighbouring mountain area. Their report follows:

We parked our car in a wadi, just behind the first dam, driving from Dubai. Having no information about hikes in this area, we decided to do a bit of scouting for a possible trail. Shortly after setting off, the wadi bed split into two branches so we decided to climb the one on the right, make a loop behind the tops,

returning through the top on the left side.

Climbing up was fairly easy and we were rewarded with a breathtaking view from the top.

However, the return trek was a little more tricky so we decided to add an extra climb to another peak close by. The views were really spectacular as was the refreshing breeze.

What really made this hike an adventure was the fact that we had to figure out where the optimal place was to cross the range, leading us back to the same wadi where our car was parked. Although we were 'only' 615m above the sea, it felt like being on top of the world.



Dramatic rock formations

On the other side of the peak, facing north, we started our descent but was distracted, or rather, attracted by a dramatic rock formations on the slope.

At times it took some effort and patience to progress down but what helped us was to simply follow one of

the many donkey trails.

Down in the wadi we were pleasantly surprised to spot several Hummingbird moths and were rewarded with a beautiful shot capturing one of these moths having a late brunch.

There were many wonderful trees, some with the most amazing forms and shapes. There were also plenty of shrubs, flowers and grass, most in blossom with white or yellow flowers.

We were also very lucky to spot a Semaphore gecko and get an interesting shot of its curly tail.

If you're not really up for a hike but want to have a quiet walk, a picnic or just a stroll, this wadi is a wonderful opportunity to do just that in a truly serene setting. It does not have visible water pools but still offers greenery and plenty of energizing air.

Contribution by Ocean Bekker (most photos by Harold Bekker)



Donkey trails can be seen in the distance



Further information:

Here is an extract from an explanation provided by Gary Feulner regarding the following species:

(left photo) "Hummingbird" is the Striped Hawkmoth *Hyles livornica*, which appears to be common just now.

(right photo) "The gecko is a very colourful example of the Dwarf Semaphore Gecko *Pristurus rupestris*. These are diurnal geckos whose main form of communication is visual, using their tails to signal territoriality."



Dubai Natural History Group Programme

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

March 3:	Sandra Knuteson presents "Using Undergraduate Students to Monitor Environmental Quality in the UAE "
April 7:	Marina Tsaliki presents "Vegetation mapping and plant species diversity in Ras Al Khaimah"
May 5:	Vishnu Sunil Kumar presents "Emirates Environmental Group (EEG) – Your sustainability partner - focus on what happens to all the recycled waste EEG collects and more"

Scheduled Field Trips (Members only)

March:	DNHG members will be advised
--------	------------------------------

Field trips will be circulated to members via e-mail

DNHG COMMITTEE 2018

When possible, please contact committee members outside office hours

	Name	telephone	email
Chairman	Gary Feulner	04 306 5570	grfeulner@gmail.com
Vice Chairman	Valerie Chalmers	050 830 5018	valeriechalmers@gmail.com
Treasurer	Puneet Kumar	050 452 4820	puneetcps@gmail.com
Membership Secretary	Aubrey Baugh	052 103 5167	aubaug@gmail.com
Speaker Co-ordinator	Michelle Sinclair	050 458 6079	sinclairm2004@yahoo.com
Fieldtrip Co-ordinator	Sonja Lavrenčič	050 256 1496	lavson@gmail.com
Member-at-Large	Pradeep Radhakrishna	050 450 8496	wgarnet@eim.ae
Member-at-Large	Anindita Radhakrishna	050 656 9165	anin@eim.ae
Newsletter Editor	Margaret Swan	050 798 4108	gazelleeditor@gmail.com
Librarian/Book Sales	Angela Manthorpe	058 135 4143	manthorpe2005@yahoo.co.uk
Postmaster	Sandi Ellis	050 644 2682	sandiellis@gmail.com
Chief Engineer	Binish Roobas	050 243 8737	johanruphus@hotmail.com
Website Co-ordinator	Sandhya Prakash	050 551 2481	sandy_pi@yahoo.com
Greeter at meetings	Helga Meyer	055 821 7266	willyroaming@gmail.com

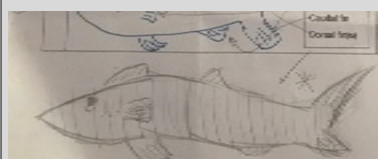
Postal Address: DNHG, PO Box 9234, Dubai, UAE

DNHG Gazelle

Field Trip Reports or photos

Did you attend the inter-Emirates Weekend?

Please send your trip reports and/or photographs to: gazelleeditor@gmail.com



Something Fishy!

Well done to all who took part in the Friday Fish Market quiz during the IEW weekend this month. During the speeches, one young participant took the opportunity to finish the quizsheet and draw his own fish!

DNHG Membership

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.