

GAZELLE

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مجموعة دبي للتاريخ الطبيعي

DUBAI NATURAL HISTORY GROUP

PO Box 9234, Dubai, United Arab Emirates

Members' News

The Festive Season

Marijcke Jongbloed, who lives in south west France, wrote that she has had a spectacular year for her garden, and is now having a spectacular winter.



Along with pictures of the frosty garden, she sent some photographs of its residents including this 'firebug' (below). Those members with email versions of *Gazelle* can enlarge the picture to see its wonderful hairy iridescent head!



This beetle has a close relative here in the Emirates, the poisonous oil beetle, *Mylabris bipunctata*, which is deadly to birds and other predators because it contains the

toxin Cantharidin. There is a whole family of them, red and black, yellow and black, cream and black, chestnut, and metallic green. Very festive!

Mohammed Arfan Arsif won the 3rd Award at the Friends of Earth International Photo Exhibition organized in The Netherlands. The 2008 calendar features his picture of a rice cultivator in India (below), taken during a trip to Coorg in 2004.



His photo of black winged stilt has been published in the book on Marine Pollution by Dr. Hasan Anbar of Aramco, Saudi Arabia. This picture was taken on a bird watching trip, organised by DNHGroup in the late 1990s, at Wimpey Pits



DNHG Membership

It is now membership renewal time. New memberships and renewals are good for the coming year (Sep 2007 to Sep 2008).

DNHG Membership remains a bargain at Dhs.100 for couples and Dh. 50 for singles. You can join or renew at meetings or by sending us a cheque made out to Lloyds TSB Bank account no. 173746. (Please note we *cannot* cash cheques made out to the DNHG.)

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

This month's Contributors

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

Marijcke Jongbloed
Mohammed Arfan Arsif
Helga and Willy Meyer
Sandra Knuteson
Peter Cunningham
Gary Feulner



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



Time to plan!

Inter-Emirates Weekend

Thursday 28 February – Saturday 01 March 2008

The organizers of the Inter-Emirates Weekend, the Emirates Natural History Group, have issued the following information for those going to this excellent annual get-together.

Venue: Mafraq Hotel, Abu Dhabi

Rate per night (incl. breakfast, not dinner)

638 Dhs – Double Room

580 Dhs – Single Room

Provisional Program:

Elephant tracks – full day (Mark Beech, Drew Gardner)

Liwa Dunes tour – full day (Andrew Bean, Dick Hornby)

Sand ecology, near Sheikh's Palace on Hameem Road– half day (Allestree Fisher)

Birding, site to be announced – half day (Andrew Twyman)

Plant identification near hotel (Allestree Fisher)

Saltbushes – short walk near hotel (Dr. Shahina Ghazanfar)

Light-trapping insects near hotel – evening (Brigitte Howarth)

Star-gazing – evening, after dinner (leader to be advised)

Workshops:

GPS Workshop

Taxonomy / Plant identification with Dr. Shahina Ghazanfar, professional botanist from Kew Gardens & author of *The Flora of Oman Vols 1 and 2*.

Work under the microscope

Herbarium and photography for children

Competitions:

Photo competitions for the young and

Painting / drawing for children

Note: Please make your reservations

at the hotel soon, and remember to mention that you are part of the ENHG Inter-Emirates group.

ENHG Al-Ain Website

This seems a good time to remind you of the ENHG's website: www.enhg.org. On the site you can find information on a variety of UAE natural history subjects, and you will also be able to access the full details of plans for the Inter-Emirates weekend there.

* * *

Trips for Early 2008

Nature Walk - Gary Feulner
Late Jan / early Feb 2008
Mangrove Ecology Trip

Gary will announce plans for the nature walk when they are in place. Also, he is still watching the tides to find a suitable weekend for a slosh through the mangroves.

East Coast Shelling - Anne Millen
Friday 22 February

Details will be announced in January's *Gazelle*.



Roses on Saiq Plateau - Peter van Amsterdam
18 & 19 April

This is a spectacular trip and you need a 4WD and good walking shoes. It is a long way, so we set off on Thurs. 17 after work, stay in Ibri, and reach Saiq on Friday morning. Bookings *must* be made early, as the hotel is popular at rose time. Please let Peter know by 15 Jan if you are coming. Email on pvana@emirates.net.ae

DNHG Treasurer Needed

We are as yet in the market for a Treasurer. This position requires a modest amount of attention on a regular basis in order to account for our membership income, regular and miscellaneous expenses and book sales. Experience with book-keeping is an advantage, as is familiarity with basic computerized accounting programs. We bank at Lloyds TSB in Jumeirah but the actual deposit of cash funds can be arranged through other Committee members, if necessary. The Treasurer would be expected to attend monthly meetings of the DNHG Committee (currently held on Tuesday evenings immediately following monthly lectures). Interested members should contact Chairman Gary Feulner or Vice Chairman Valerie Chalmers (see p. 7).

Our Next Speaker

Nancy Papathanasopoulou was born in Greece, where she studied law and got involved in environmental work, mainly conservation of species and environmental institutions. She specialized in Environmental Law and Management in Lyon, France.

Nancy has been working on sea turtles as well as environmental diplomacy and advocacy since 1988 in several countries. She currently manages a sea turtle conservation project in Masirah Island, Oman, sponsored by TOTAL Foundation. She is also co-founder of the Hellenic Society For the Promotion of Environmental Law and Policies in the Mediterranean.





Shelling with Sandy

You don't have to have an expert along on DNHG trips, but it certainly helps! Dr Sandy Fowler was in Dubai and led a shelling expedition on Mercato beach, helping all with his nearly encyclopaedic knowledge. On our previous trip, in March, Sandy took just a glance at a greenish rubbery flange-shaped thing which we found to say, "Egg ribbon of *Neverita didyma*". Anne Millen brought it home to scan, and found that there are not many rubbery flanges that smell like that!



In March, about 40 species of gastropod and 15 – 20 species of bivalve were identified, using *Seashells of Eastern Arabia* (and Sandy) and some unusual specimens were seen. Some that Bosch et al have not listed as occurring in the south east gulf were found. Whether they are brought with building material or shipping, or whether they just have not yet been recorded as occurring here, we did not know. An *Architectonica* and a *Bullia* (possibly *rogersi*) as well as *Cardita crassicosta* and *Acrosterigma maculosa* were found. Two specimens of *Pusia osiridis* were collected, causing Sandy to say ... something Spanish, Sandy? But these were the first he had seen for 16 years.



Pusia osiridis

We thought we identified *Lioconcha ornata* (though rather unlike the picture in SEA) by the pattern

of its internal scars, and *Plesiothyreus parabolicus* by its near-transparency and fine radial lines.



Plesiothyreus parabolicus

In places, the beach shone with tiny circles of transparent nacreous shell, some almost flat, some arcuate.



On this trip, we went only to Mercato beach, and again some good specimens were turned up, including many of those mentioned above. A few small *Thais carinifera* were found – as usual, just that bit at variance with one another. We again found little *Pusia osiridis*, and wondered whether numbers are building up or they are being brought with building sand. There were plenty of *Anadara antiquata*, and Sandy caught everyone's attention by saying that a live specimen has not yet been found. Bosch et al, in *Seashells of Eastern Arabia*, say that this species is rarely found alive, and that most shells are apparently rather old. That is certainly the appearance of the specimens we found.



Anadara antiquata

Perhaps our members who dive might find live specimens, though

as it is one of a subfamily of about ten white shells with a scruffy brown periostracum, it would not easily catch the eye!

As always, there were some wonderful tiny shells. These are all less than 1 cm in length or diameter.



The current stars of shelling are Helga and Willy Meyer, who, some 18 months ago, found a specimen of the spectacular *Homalocantha fauroti* on that beach.



Homalocantha fauroti
Photograph Willy and Helga Meyer

It measures 41mm x 26mm at its maximum extremities. This shell, also, is listed in SEA as being found in the Gulf of Oman and Masirah Island. We were all hopeful but, search as we may, we did not find another. Report by Anne Millen



Architectonica sp.
Photograph Willy and Helga Meyer



Email your reports to pvana@emirates.net.ae, (Arial 10 justified) and send your photographs as separate jpg files, or deliver them to Anne for scanning.

Domestic Cats as a Threat to the Environment in the UAE

It is not certain when the domestication of cats occurred, but what is confirmed is that humans have always had an affinity for this feline. Ancient Egyptian art including the city Bubastis, that was devoted to their worship (Anderson & de Winton 1902), confirms this early association with humans. As they are highly versatile creatures with a very wide habitat tolerance, they can become feral very successfully and have managed to establish themselves as feral populations in as diverse situations as the Kalahari Desert in Botswana to Marion Island in the sub-Antarctic (Skinner & Smithers 1990). Marion Island is a good "bad case scenario" as five cats were originally introduced in 1949 (van Aarde & Robinson 1980) to control house mice, but by 1977 an established feral population of approximately 3400 were ravaging the marine bird population. An alarming natural increase per annum of 23% (van Aarde 1978) was estimated for the feral cat population which resulted in a dramatic eradication programme to rid the island of this scourge.

A pair of breeding cats, which can have two or more litters per year, can exponentially produce 420,000 offspring over a seven-year period (Savage 2001). It is estimated that the United Kingdom and the USA have 1 million and 60 million feral cats, respectively (Hartwell 1996). The problem is thus daunting with few real solutions offered. This note touches on a few issues concerning feral cats and possible implications.

Hybridization

A most disconcerting issue is the genetic pollution through hybridiza-

tion. According to Skinner & Smithers (1990) and Griffin & Simmons (1998), the African wild cat (*Felis lybica* – conspecific with *F. silvestris* from Arabia) interbreeds with the domestic cat where they come into contact. This results in fertile hybrids (Bothma 1996) and possibly the decline of pure-bred African wild cats anywhere near settled areas, rendering the species vulnerable (Smithers 1986). The fate of *F. silvestris* from Arabia is probably similar. Harrison & Bates (1991) state that great difficulty is experienced in differentiating between domestic cat and Wild Cat in Arabia. This could indicate historic interbreeding with the possibility that little if any genetically "pure" Wild Cats remain locally. This would however have to be determined genetically.



The buildings are abandoned but the cats remain at Mughsail Beach, Oman

Excessive predation

Fitzgerald (1988) states that the diet of feral cats include small mammals (70%), birds (20%) and a variety of other animals (10%). The diets of feral cat populations, however, reflect the food locally available. Observation of feral cats shows that some individuals can kill over 1000 wild animals per year (Bradt, 1949). It is estimated that over a billion small mammals and hundreds of millions of birds are killed by cats (including domestic cats) each year in the USA (Coleman & Temple, 1996). In Australia both feral and domestic cats kill more than 100 native Australian species of birds, 50 mammal and marsupial species, 50 reptile species, and numerous frogs and invertebrate species (Anon, 1997a). Worldwide, cats may have been involved in the extinction of more

bird species than any other cause, except habitat destruction (Coleman, Temple, & Craven, 1997).

Cats are skilled and successful hunters, as anyone who has ever watched a stalking cat would confirm. Virtually any species smaller than it is fair game. Bambaradeniya *et al.* (2001) state that domestic/feral cats, as opportunistic predators and scavengers, are an additional threat to the herpetofauna of Sri Lanka while Pero & Crowe (1996) recognize that nest predation by feral cats may cause potential danger to game birds. Cats can result in dramatic declines of birds as indicated on Marion Island with its vulnerable ground nesting and burrow nesting marine birds. By 1965/66 the once common Diving Petrel no longer nested on the island due to heavy predation by cats.

It is not documented how many cats are officially and/or unofficially resident in and around towns and cities throughout the UAE, but it can fairly accurately be assumed that an alarming number of reptiles and small mammals must certainly fall prey to them. What the effect on local bird and reptile populations is could only be speculated. For the defense of feral cats the following has been documented. Hartwell (1995) states that cats prefer to hunt introduced "pest" species (pigeons, rabbits, mice, etc.) and even co-exist with the marsupial "Native Cat" in Tasmania. Ally Cat Allies (ACA) state that the impact of feral cats on bird populations is negligible and that the decline of bird and other wildlife populations is rather directly linked to the loss of natural habitat (Anonymous, 1997b).

It is feared that feral cats also compete with native predators by reducing the availability of prey species. The effect that feral cats have on the local environment is something that has to be investigated further.

Disease

Contagious diseases of domestic



Dubai Natural History Group Recorders

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Geology - Gary Feulner
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Insects - Gary Feulner

Fossils - Valerie Chalmers
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Plants - Valerie Chalmers

Mammals & Seashells - 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.



cats can be important since these diseases can possibly be transmitted to wild cat species (Bothma 1996). Cases such as feline leukemia spreading to mountain lions (Jessup *et al.* 1993) and feline panleukopenia (feline distemper) spreading to the endangered Florida Panther (Roelke *et al.* 1993) have already been documented in the USA. Domestic carnivores should always be considered a potential source of contamination for wild ones. Mönning & Veldman (1989) name cat flu (Parvovirus disease) and cat tapeworm (*Taenia taeniaeformis*), last mentioned transmitted through rats/mice, as 2 important diseases which are linked to domestic cats. How these diseases affect wild cats is also unknown. Feral cats are thought not to act as a vector for rabies although they are susceptible to the disease and do die from it. Toxoplasmosis is another disease transmitted by cats and which can cause blindness, birth defects and miscarriage in humans (Anon 1997a).



Eradication

On Marion Island it took almost 15 years of crude methods ranging from the introduction of Cat flu, actively hunting to poisoning to eradicate a few thousand cats in a relatively small and isolated area (Bester *et al.* 2000). However, extermination isn't simple or straightforward and is often counter-productive. No eradication method is 100% effective in eliminating cats and those which evade the exterminators breed several times a year depending on climate and available food/shelter, thus quickly recolonising the area (Hartwell 1995). Cleared areas also attract new cats from outside due to the vacancy of a favourable habitat with under utilized food/prey.

Australian studies found that the neutering of several feral colonies led to an overall reduction in cat

numbers as the resident, non-breeding populations deterred other cats which would have swarmed into a vacated area (Hartwell 1995).

Eradication methods, even if implemented humanely, cannot solve the feral cat problem. Trapping and neutering does however offer a longer-term solution although it is very expensive. The only way to keep an area cat-free is to remove food sources (edible refuse, prey species, handouts by cat-lovers), something, which is often impossible or impractical.

What to do

Very little scientific work has focused on the influences of domestic and/or feral cats on their immediate environment in the UAE. The concerns as documented in this note do however acknowledge a potential threat and warn against the long-term implications of the further establishment of feral cats throughout the country.

It is thus strongly suggested that the feeding of feral cats be dissuaded and an effective neutering and/or eradication programme be implemented to protect indigenous and endemic species, and ultimately the UAE's heritage, from falling prey to feral cats. Further research is also necessary to determine the extent of the problem.

Keep only as many pet cats as you can feed and care for.

Control reproduction and humanely euthanise unwanted cats.

On farms, keep only the minimum number of free-ranging cats needed to control rodents.

Neuter your cats or prevent them from breeding, and encourage others to do so.

Support or initiate efforts to require licensing and neutering of pets. In areas where such laws already exist, insist that they be enforced.

Locate bird feeders in sites that do not provide cover for cats to wait in ambush for birds.



Do not dispose of unwanted cats by releasing them in rural areas.

Eliminate sources of food, such as garbage or outdoor pet food dishes, that attract stray cats.

Do not feed stray cats.

If at all possible, for the sake of your cat and local wildlife, keep your cat indoors.

Contact your local animal welfare organization or vet for help.

Thanks to Peter Cunningham for this very useful information. For bibliography, please contact either the editor or Peter.

punningham@polytechnic.edu.na

UAE Specimens Clarify Gastropod Taxonomy

Specimens of UAE gastropods collected by Chairman Gary Feulner have contributed to two recent scientific papers on the taxonomy of different mollusc groups. DNA analysis of what was previously considered *Bulla ampulla* from Khor Julfar in RAK helped to confirm that the species present in the northern Indian Ocean, including the sea-shores of Arabia, is in fact distinct from *B. ampulla*, which otherwise is found throughout the Indo-Pacific from the shores of East African to Asia, North Australia and New Caledonia. The newly recognized northern species has been named *Bulla arabica*.



Bulla sp.

Specimens of *Turbo* and *Lunella* spp. collected by Gary and by Angela Manthorpe contributed to an extensive study of the broad class of Turbinid (turban-shaped) gastropods. A subsequent paper will focus more narrowly on the two genera *Turbo* and *Lunella* in particular.



A specimen of Lunella

The results are expected to confirm the existence of a hitherto unrecognized species in the UAE, which was first suspected on morphological grounds.

In each case the relevant work was conducted by researchers at the Molluscan Research Unit of the Department of Zoology at the Natural History Museum in London. *Report by Gary Feulner. (Members may remember Gary Feulner's May 2004 article "New Intertidal Mollusc for the UAE?" which described his early observations of differences in Lunella shells.)*

Wadi Hatta Clean-up

In November, Sandra Knuteson, who lectures at American University of Sharjah and is an enthusiastic member of the DNHG, organized a clean-up of an area of the Hatta pools as a project for her students. They wanted to assess the impact of National Day weekend on littering and water quality. She was hoping that members would join in, but none did. It was "Clean Up The World Week" and the theme of this year's campaign was One World, One Eco-System, One Humanity.



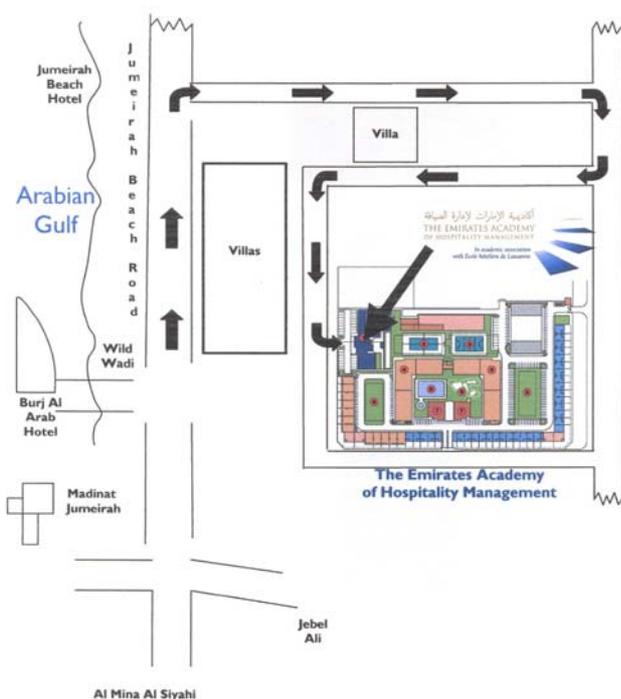
*A good message for
Clean Up The World Week*

Sandra wrote, after the work, "My students did a great job cleaning up. We focused on the area with the jumping rocks and swimmable pools. Working from one end to the other of the most used area, nine people filled 36 overflowing bags of trash (20 gallons each) We did clean up the area pretty well! I did a walk by afterwards, and found no large trash. Nine days later, we cleaned again, and found 12 more 20 gallon bags of trash. I am very proud of my students! *Thanks to Sandra Knuteson for this report.*



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THE EMIRATES ACADEMY OF HOSPITALITY MANAGEMENT



Errata (Don't Believe Everything You Read)

A number of alert readers wrote in to question several photo captions in the November 2007 *Gazelle*, in the item about our field trip to the Al-Ain Zoo. In fact, the "hyena" was an Arabian wolf (as suggested by the author's comments - apparently the zoo's signage was the source of the confusion).

Similarly, the photo captioned "Barbary sheep" is actually a Nubian ibex. The Barbary sheep we saw were properly labeled, so we don't know how that confusion arose. Finally, the "kangaroo rat" was the similar but distinct Arabian hopping rodent, the jerboa (*Jaculus jaculus*).



Dubai Natural History Group Programme

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

Jan 13	Marine Turtle Conservation – Nancy Papathanasopoulos (Please note later date)
Feb 03	TBA
Mar 02	Strategies for Conservation - Dr Shahina Ghazanfar (TBC)

Field Trips (Members only, please. Details inside.)

Jan / early Feb	Nature walk with Gary Feulner
TBA	Mangrove Ecology Trip with Gary Feulner
Feb 22	East Coast shelling with Anne Millen
April 18 & 19	Roses on the Saiq Plateau, Oman

Additional trips may be announced by e-mail circular.