

GAZELLE

Vol 17 no 7 – July/August 2002



مجموعة دبي للتاريخ الطبيعي

DUBAI NATURAL HISTORY GROUP

PO Box 9234, Dubai, United Arab Emirates

Members' News

Near and Far... and Thar!

Barbara Couldrey writes from RAK to advise that the August issue of BBC Wildlife Magazine contains an article on the Arabian leopard featuring the exciting work done in Jebel Samhan, Dhofar, by David Willis and Andrew Spalton. We hope to be able to feature David or Andrew as a speaker next year.

David and Liz Palmer are among those who have left us this summer. They have returned to Canada but have written to send their best wishes. David will be back in December for consulting, and hopes to be able to join us for a field trip or two.

A special farewell is in order for **Fi Skennerton**, the DNHG's Membership Secretary for several years and one of our most popular Committee members. Fi leaves the UAE in September for her new home in South Africa, although she'll be returning briefly before too long. We hope she will send us occasional reports.

During an insect spotting trip on 25 June, the Al Ain Natural History Group walked up Wadi Tarabat on the north side of Jebel Hafeet. Their trip leader **Brigitte Howarth** reported:

"I took the group to Wadi Tarabat

yesterday, helped by Geoff to find the way, and we saw the oriental cherry in bloom, with seeds hanging from the branches. We also saw more vultures and, to make the morning complete, a tahr!" The tahr was a female with small horns. The oriental cherry turned out to be *Acridocarpus orientalis* - not a real cherry at all.

Keen catcher **Mike Shepley** found



this insect in his swimming pool the other day, and rescued and photographed it. Brigitte Howarth identified it as the red palm weevil - the ill-reputed insect that has affected so many palm groves in the UAE.

Farewell, too, to **Mary and Mike Beardwood** who are retiring to cruise the Bahamas and to have "other adventures". We appreciate Mary's long contribution to the DNHG as Field Trip Coordinator, and wish them well.

DNHG Membership Renewal

The DNHG's new membership year starts in September. DNHG membership remains a bargain at Dhs. 100 for couples and Dhs. 50 for singles. You can join or renew your membership at meetings, or by sending us a cheque made out to Lloyds 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, the incidental expenses of speakers and occasional special projects.



This month's Contributors

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

Sandy Fowler
Peter Cunningham
Gary Feulner
Marijcke Jongbloed
Barbara Couldrey
Mike Shepley



Field Trips etc ...

New Season Activities

Birdwatching at Dubai Sites Sep 27

The itinerary will include Wimpey Pits, Dubai Pivot Fields and (subject to admittance) Dubai Fish Farm. It will be warm (bring water) but worth it. Meet at 7:30am sharp at the Wimpey Pits. Meeting point is on the paved road to Dubai sewage treatment plant (off Al Awir - Hatta road), at a small concrete "blockhouse" on the right. 4WD recommended. Contact David Snelling or Gary Feulner for further information.

And Other News...

To Our New Membership Secretaries - Welcome!

Lena Linton and Anindita Radhakrishna have volunteered to serve as our new Membership Secretary and Assistant Membership Secretary, respectively. Lena and Simon are by now in that august category of "longtime" DNHG members. Anindita and her husband Pradeep and family are somewhat newer to the DNHG but have made up for lost time by being among our more frequent field trip participants during the past year. We thank Lena and Anin and we hope you will make their membership chores easier by renewing promptly.

Reptile Records

Professor Drew Gardner of Abu Dhabi, who in Oman helped to compile a reptile database for that country, is hoping to undertake the same for the UAE. Abu Dhabi emirate has been relatively well surveyed by researchers sponsored by ERWDA, but records for the Northern Emirates remain to be compiled. DNHG members including Peter Cunningham, Marijcke Jongbloed and Gary Feulner have volunteered personal records amounting to hundreds of data points, but all contributions are

welcome. What is required is a reliable identification of species (or a photograph) plus the location and (if possible) the date of the sighting. *Report by Gary Feulner*

DNHG Library Progress

The DNHG library collection has moved to our monthly lecture venue, the Emirates Academy of Hospitality Management, where it will be available on a reference basis. This will allow browsing and study, on premises, at the Emirates Academy library. The move was completed just before DNHG Librarian Deanne left for the summer, and cataloguing will be a long term task, but we hope to be ready for action in September. Details will be announced in the *Gazelle*. Anyone wanting access over the summer should contact Chairman Gary Feulner. For planning purposes, it would help us to know if there are any members who may have professional library training that would enable them to assist with the relatively time consuming job of cataloguing.

Chewing over Grasses

Marijcke Jongbloed spent the summer holidays working on the grasses chapter of the wildlife guide. Even with a number of books and drawings, many of the local grasses continue to be difficult to identify. However, some little bits of knowledge might help would-be "poalogists":

In a variation of "Rushes are round and sedges have edges" I now know that reeds (*Arundo donax* and *Phragmites australis*) are hollow and canes (*Saccharum spontaneum*) are solid. One other plant whose stems are hollow is the yellow garden dandelion *Sonchus oleraceus* that can be distinguished from members of the *Launaea* family by this feature.

An interesting bit of information came with the description of a grass called *Enneapogon desvauxii* or Spike pappus grass.

After the appearance of the first few leaves, this plant starts to produce "flowers" below ground level. The grains from these "flowers" ensure the survival of the grass in cases of drought or other extreme conditions. A similar adaptation occurs in the rare composite *Gymnarrhna micranthus*; this also has subterranean flowers that keep producing new plants in the centre of the old one.

The grass *Stipa capensis* is known by most hikers as the one that gets into your shoes and socks and causes abrasions of the skin. These lacerations (which can be very bad in the faces of grazing animals) are caused by a set of long hair-like appendages (awns) that are attached to the seeds of the grass. They are carried by a 1cm long twisted "column", covered with stiff bristles. When the seed with its awns drops to the ground, the bristles anchor it in the soil, and with changes of the humidity the twisted column unwinds and drills the seed into the soil. This same mechanism also occurs with the seed of the small Crane's bills (*Erodium neuradifolium*) which grow in wet springs, although its drilling equipment is not quite as sharp and harmful as that of *Stipa capensis*.

Thanks to Marijcke Jongbloed.

Our Next Speaker

Dr Brigitte Howarth holds a Ph.D. in entomology and is especially knowledgeable about hoverflies. However, she likes all natural history subjects and does not want to be thought of as just the hoverfly specialist.

More about her academic background at the meeting.





Domestic Cats: 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 hybridisation. 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.

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 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*), the last mentioned transmitted through rats/mice, as 2 important diseases



Special Report ...

E.mail your reports to pvana@emirates.net.ae, (Arial 10 justified) or deliver them to Anne Millen on floppy disk at monthly meetings.

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 re-colonising the area (Hartwell 1995). Cleared areas also attract new cats from outside due to the vacancy of a favourable habitat with under-utilised 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 focussed 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.

1. Keep only as many pet cats as you can feed and care for.
 2. Control reproduction and humanely euthanise unwanted cats.
 3. On farms, keep only the minimum number of free-ranging cats needed to control rodents.
 4. Neuter your cats or prevent them from breeding, and encourage others to do so.
 5. Support or initiate efforts to require licensing and neutering of pets. In areas where such laws already exist, insist that they be enforced.
 6. Locate bird feeders in sites that do not provide cover for cats to wait in ambush for birds.
 7. Do not dispose of unwanted cats by releasing them in rural areas.
 8. Eliminate sources of food, such as garbage or outdoor pet food dishes, that attract stray cats. *Do not* feed stray cats.
 9. If at all possible, for the sake of your cat and local wildlife, keep your cat indoors.
 10. Contact your local animal welfare organization for help.
- Report by Peter Cunningham*

Ed: If you would like the extensive list of references Peter included, or any further information, please contact Peter Cunningham at pcunningham@polytechnic.edu.na

Chicks on the Golf Course

Barbara Couldrey writes, "I can now confirm that the four turquoise eggs I saw on RAK's gravel plains golf course on 13 June belonged to a pair of red-wattled lapwings [also called red-wattled plovers]. I checked them out regularly and was firmly convinced that, after a fortnight without any observed evidence of parental attention, the eggs must be truly hard boiled. Wrong! Three weeks later, on 4 July, I was raucously "attacked" by two lapwings when I approached the scrape. Two chicks had just broken out. One was lying two feet away from the scrape so we carefully put it back into the clutch (with the blade of a golf club) so that no one would accidentally stand on it.

"On 6 July there was one egg and no chicks and next day no eggs, no egg shells, and no chicks, but a lot of lapwing noise coming from the next fairway. Did the parent birds pluck the babies off to safety to rear them in a more secure environment? I suspect so.

"A point to note: when I first saw the eggs on 13 June they were a fairly bright turquoise colour but on 18 June, they had faded considerably."

Thanks to Barbara Couldrey for both report and photograph.



Exciting Finds



Dubai Natural History Group Recorders

Reptiles - Dr Reza Khan
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Archaeology - Prof. John Fox
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Birds - David Snelling
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Geology - Gary Feulner
res 306 5570
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Insects – Gary Feulner

Fossils - Valerie Chalmers
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Plants – Valerie Chalmers

Mammals - Marijcke Jongbloed
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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.

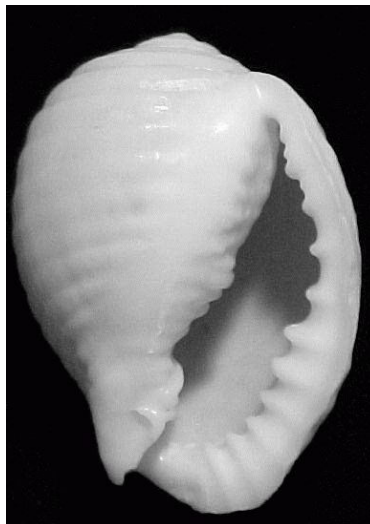


Terebra triseriata

The curse or blessing of Dubai's summer is that it forces shellers who fail to face the furnace blast of the July and August beaches to check over what they have "bagged up" in the pre-summer months. Bagging up is simply scraping up handfuls of shells from the shell tide line into the ubiquitous supermarket plastic bag (or bags) and taking the whole lot home to be labelled and dried off and sifted through at leisure.

Unable to cope with the heat of the beaches this year, and unable to go long without shelling, I resorted to checking some bags. One bag labelled "Khor Fakkan beach, April 2002" has yielded two shells, *Malea pomum* and *Terebra triseriata*, not only new to my personal collection, but also described in *Seashells of Eastern Arabia* as only one previous recorded specimen of each.

Malea pomum



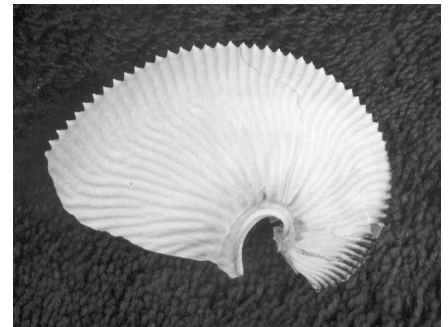
The book quotes, "Only a single worn shell has been found in Eastern Arabia". Distribution: Southern Oman.

The book quotes, "Record based on a fresh shell, lacking early whorls, from Khor Fakkan, collected by H. Kauch".

Obviously I would prefer these two specimens to be independently identified but if they are what I think they are, it surely confirms there are still shells out there worth finding!

It is vital to label such material at collection time for later identification. All it needs is a piece of paper dropped into the bag the day you collect it, identifying beach location and date. This information is essential if you happen to find something interesting, rare or unknown.

Minnie's A. argo



Argonauta argo

Sandy also reports that Minnie van der Weg found an *Argonauta argo* (pictured above) on the east coast, in May this year. This is only the second reported to Sandy, after Yvonne Kerek found one last year on Rams beach. The books that Sandy checked (four) are terribly vague on *A. argo*'s distribution, and even Bosch's book can only say "Gulf of Oman, Masirah and Southern Oman".

Thanks to Sandy Fowler for both these reports.



Fishing in the Jebel Akhdar

Following up on field inquiries recommended by February's CAMP conference on the threatened mountain fauna of Arabia, which for the first time included freshwater fish, I detoured from the planned itinerary of the DNHG's June field trip to the Saiq Plateau in order to search for a rare fish.

Some 35 years ago long-finned specimens resembling the common wadi fish (*Garra barreimiae*) were collected by military personnel from "a wadi near Saiq" and found their way to scientific professionals. They were studied and assigned to a separate species, *Garra longipinnis* or the Long-finned Garra. In the intervening years, *G. longipinnis* was sought again by only two other researchers and on only a handful of occasions. The original site was not well defined and these subsequent investigations focused on the neighbouring oasis villages of Saiq, Al-'Ayn and Shuraijah. The latter two occupy steep cliffsides and their only water source is from springs, which are channeled into falajes for extensive and picturesque agriculture. Fish were found there, but the only scientifically determined specimens (collected by Michael Gallagher of the Oman Natural History Museum) were considered *G. barreimiae*.

I reasoned from the single available sketch of *G. longipinnis* that it would be possible for me to distinguish it in the field, I set out to have a look. I started by asking plateau residents where I could find fish in the area. Mostly I was told that there were none, but at the Jebel Akhdar Hotel itself, a clerk was able to tell me that there were small fish in a pond in one of the terraced villages. I arrived at the village and asked the first responsible looking young man I met, who was happy to show me to a large natural pool, fed by seepage and itself feeding into the main falaj system. The pool contained some 200 or more fish, all

looking much like *G. barreimiae*, but clearly somewhat different in detail from those of the UAE and northernmost Oman. They had relatively large fins, but not the extremely long fins depicted for *G. longipinnis*.

This was followed by a tour of the terraces where, among other things I saw walnuts (*ghoz*) growing on a tree for the first time. My new friend assured me that I must know what they were, despite my obvious skepticism. One thing led to another and late afternoon saw me joining my friend and a couple of other area residents for sundowners at a scenic promontory. We discussed politics, religion and life in general, as always more clear-headed and reasonably than most politicians, theologians and other mortals.

As darkness closed in and we prepared to break up, one of the gentlemen said casually, "Of course, we have many more and larger fish in the wadi near my village." He volunteered to show me and we made a date for the next morning. Sure enough, in a wadi some distance from Saiq, but now accessible by a good road, there was not only lush cultivation (mulberries, apricots, walnuts, peaches and even apples!), but large pools and waterfalls. In them was an apparently thriving population of the same new *Garra*.

These rapid successes freed me to tour the Saiq Plateau more extensively and enjoy the beautiful scenery and the distinctive high altitude flora, including olives, *boot* and juniper trees. I looked for additional permanent water and saw none, but I took note unexpectedly of some Hafit tombs at the NW of the plateau.

On the morning of my departure, I made an impromptu decision to visit an isolated village towards the east of the plateau. I arrived in the middle of funeral ceremonies for a local dignitary, apparently a military man, which caused major parking problems in the small vil-

lage. An Omani visitor engaged me in conversation and by and by I mentioned my interest in fish. He summoned a local boy. Were there any fish in the village wadis? (I have always thought that it helps to have a white beard when you ask these questions.) "No," said the local lad, "-- only the usual little wadi fish(!), in pools below the village." "Hmmm," said I. Might he be willing to take me there? He was, and we picked up some friends along the way. I learned that it is easier to travel through brush and over rocks and fences if you are only 1-1/2 metres high. While most of the kids went for a swim at the first pool we encountered, the oldest and most serious took me a short ways on where I could watch the fish more peacefully. They were the same as I had seen near Saiq.

Caught up in the spirit of the enterprise, I made another detour on my way home, in the area of Al-Hamra some 40km to the north, where sunset saw me lying over a boulder, straining to study hundreds of fish in a mountain falaj near the point where it emerged from a spring. The very same, I thought. If so, this *Garra*, whether it is a separate species or a subspecies of *G. barreimiae*, extends throughout the wadis draining the entire southeastern Jebel Akhdar. These results have been reported in more detail to the experts who participated in the CAMP conference.

One bit of practical advice for other would-be "fishermen": If you are carrying extra pond water to refresh captive fish, do not keep it in empty Masafi bottles. This will avoid the risk of inadvertent misuse. *Report by Gary Feulner.*

Hotel wildlife

Many interesting things turned up on the June Saiq Plateau trip. Dozens of fossils identified by Valerie Chalmers, a *Caralluma* as yet not identified, and a couple of specimens with hotel habitats. The first of the latter was a small pale



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camel spider. Gary Feulner photographed it for identification and wrote, "I noticed leafing through some papers that the little camel spider Peter found in the sink at the Ibri Hotel is a very good match for one that is depicted in the camel spider part of the natural history section on the Ministry of Information's "uaeinteract" website (maintained by Peter Vine). I compared it with my photos of yours. There is no scale, however, so I do not know if yours was full grown or not."

The second was a scorpion which Gary bagged at dinner at the Jebel Akhdar Hotel. It was walking across the diningroom floor. He asked a waiter to keep an eye on it for him while he got his forceps and a container. It turned out Graeme Lowe in Philadelphia is very excited. From its photo and Gary's examination on his instruc-

tions, it is one so far known only from high on Jebel Shams, which Graeme named a few years ago after collecting it with Michael Gallagher.

Thanks to Gary Feulner for this material.

Book Review

Tribulus 12.1

The latest *Tribulus*, vol.12.1, will be available at our September 15 meeting. Its feature article and photos describing a large cave recently discovered and explored at the summit of Jebel Hafeet is sure to make this one of the best selling *Tribulus* issues. Also in this one are a review of considerations for and against the establishment of a protected nature area in the Ru'us al-Jibal area of Ras al-Khaimah, a study of sea grass

distribution in offshore Abu Dhabi, an analysis of the association between desert wheatear and desert warbler in the UAE, reports on the distribution of the false horned viper, two new butterflies, the ocellated garden skink, the large mangrove mud crab found at RAK and Khor Kalba, and gerbils feeding on camel dung, and a review of recent archeological research projects and UAE environmental news.

Tribulus 12.1 and back issues of *Tribulus* are available at DNHG meetings at Dh. 15 each (older issues are discounted). See our book sales officer, Jo Raynor, who is usually ably assisted by her daughter Rachel. They try to read most of the publications we sell, so you may be able to get them to give you a second opinion.

Dubai Natural History Group Programme

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

- | | |
|--------|--|
| Sep 15 | Mimicry in Insects – Dr. Brigitte Howarth |
| Oct 6 | Recent Discoveries in Archeology in the Al Ain Region: Ancient Irrigation Systems – Dr. Waleed Yassin al Tikriti |
| Nov 3 | Herbal Medicine – Dr. Graham Pinn |

Field Trips (DNHG members only, please).

- | | |
|----------|---|
| Sept 27 | Birding at Dubai sites with Gary Feulner & David Snelling |
| Late Oct | Qatar |
| Nov 22 | Wadi Bih with Peter van Amsterdam and Anne Millen |