EDITORIAL

This issue’s cover commemorates our recent illuminating talk by Tony van Harten of the UAE Arthropod Project, featuring a drawing of a species new to science revealed by that endeavour. See the rather complex story behind that discovery directly below.

Next, we feature an article prepared especially for our readers by returning presenter David Stanton (See p6), giving solid proof of the existence of Arabian Leopards and other endangered mammals in the mountains of Yemen, now revealed by the team of local researchers that his remarkable conservation-focused foundation has assembled, made possible, in part, by an ENHG grant.

Please note that David Stanton’s May 3rd talk, and the one that follows, on May 17th, will NOT be held in the usual venue. They will be held in classroom N-204 at NYU-AD—the silver/purple building on the site of the old central fish market. Coming from downtown on Hamdan St., cross Airport Rd. at the signal, take the first right, carry on to the end of the block, and then head left to the NYU parking lot entrance. We encourage everyone to catch Mr. Stanton’s eye-opening talk about arguably the most important conservation project in the region—not to be overshadowed by recent political events.

Information on other upcoming lectures & field trips is given on p8 of this issue. We welcome ENHG members to come along on the upcoming desert camping trip in April and the high-altitude camping trip in May—the last before this camping season draws to a close.

Keith Taylor

The Story Behind a New Species

The holotype of Dryinus tigarae Olmi, [depicted in the colour drawing on this cover] was collected before the UAE Insect Project started, in a malaise trap in 1995 at Sweihan by Barbara Tigar. Barbara worked at NARC for several years during the 1990s while she was working on her Ph.D. on the food choices of the Houbara Bustard. This specimen somehow found its way to the Canadian National Collection of Insects in Ottawa, Canada. It was described by Massimo Olmi of the University of Tuscia, Viterbo, Italy, in Volume 1 of ‘Arthropod fauna of the UAE’ in a chapter about Dryinidae, a family of small wasps that parasitise leafhoppers, plant hoppers and treehoppers (Hemiptera: Auchenorrhyncha). The females of most Dryinidae capture the hosts with their chelae (modified fore tarsi), sting them – causing temporary paralysis – and deposit eggs under two overlapping sclerites. These modified fore tarsi are typical for this family and can be seen in the drawing of D. tigarae on the cover.

Antonius (Tony) van Harten

Camera Trapping in the Hawf Protected Area: the First Six Months

“...few large mammals such as the Arabian leopard, ibex, gazelles, wolves, hyenas, foxes, wild cats and porcupines are expected to live in [Hawf]...” stated a recent report by a major international development agency. Such cut-and-paste conclusions are common in consultants’ reports, but in the absence of reliable field data, what is a consultant to do? In this case, he could have consulted the Foundation for the Protection of the Arabian Leopard in Yemen (FPALY). Our ongoing study at Hawf continues to yield data that shatters the conclusions of previous research.

In 2005, a GEF-funded study concluded: “The mammalian diversity...in Hawf forest was greatly impoverished ...” The researchers who conducted the study observed only two wild mammals: Black Rats and House Mice (the report neglects to mention whether the “study area” included staff accommodation!). A road-killed fox and porcupine scat were the only other mammal records resulting from the study.

With support from the Mohamed Bin Zayed Species Conservation Fund, FPALY started studying Hawf last September. Malini Pittet and Fadhl Al-Eryani initiated
the research, which has since been conducted by Yemeni biologists and foreign volunteers. The study’s objective is to document the existence of Arabian leopards with trail cameras in and around the protected area. We have, however, discovered much more than we bargained for. We have collected records of many wildlife species and have also gathered pieces of local folklore. For example, many people claim to have shot a leopard, and local Bedouin often state that leopards recently killed their camels and sucked out all their blood. By quizzing Hawf residents our team ‘learned’ that leopards use their long tails to anchor themselves to tree trunks so that when attacking a camel they won’t get swung round by the enraged beast. Some informants state that heating ghee produces an aroma that leopards find irresistible. Others insist that to see a leopard we must “wait by the beach on Thursday afternoon, because that’s when the animals come down to wash before Friday prayers.”

It didn’t take long for the team to start finding real evidence of wildlife. On October 1st Malini wrote, “Found pugmarks yesterday, three different sizes...looks promising.” A week later she sent a brilliant photo of an Arabian Wolf and a blurry shot of a small mammal that could have been a Small-spotted Genet. [Below is a quite recognisable shot of a Genet.] All of their traipsing around paid other dividends as they observed various bird, reptile, and arthropod species. Malini soon reported that she had seen a Caracal [see image below]. Photographs of these endangered cats and other species soon started pouring in.

Malini and Fadhl departed from Hawf in late November, frustrated that they had never photographed a leopard in spite of having obtained hundreds of images of other species. Before leaving, Malini trained Biology graduates Waleed Al-Ra’il and Murad Mohamed, who were both recruited by Dr. Mohamed Al-Doais, a graduate of the Oman leopard training funded by the ENHG. Six months into the project, FPALY’s cameras have captured more than 2,000 wildlife images. Three reptiles and at least 20 bird species have been photographed, and so far we have ‘caught’ 15 mammals including nine carnivores. We have obtained more than 300 images each of Arabian Wolves and Striped Hyenas and more than 200 shots of Caracals.

Honey badgers, White-tailed Mongooses, Genets, Arabian Red Foxes, and a Gordon’s Wildcat have all paraded in front of our cameras. We have captured almost 100 pictures of Indian Crested Porcupines and have photographed Cape Hares, Rock Hyrax, and at least two species of rodents, though no Black Rats or House Mice yet; maybe we should set up a camera in the project headquarters!

The first moment of truth came on January 18th when Murad called to say, “We have a picture of a nimr!” We were no less excited on February 28th, when he called again to say, “We have another nimr!” These photographs of two different individuals are the most recent proof from anywhere outside of Oman that the Arabian leopard still exists as a wild animal. The fact that one is male and the other female suggests that breeding in Hawf is possible.

It would be incorrect to say that mammals are common in Hawf. However, we now know, based on solid evidence, that mammal numbers and diversity are greater than previously reported. Without the support of the Emirates Natural History Group we might never have developed the capacity to conduct this research. Without the backing of the Mohamed Bin Zayed Species Conservation Fund, we might never have had the resources to do the work. Previous studies suggested that there is little wildlife worth protecting in Hawf. With help from our supporters, we have proven otherwise. Now comes the really hard part: using this information to ensure that Hawf receives the protection it needs.

David Stanton

All photographs: FPALY with CEDT equipment
IEW 2011: Introduction to West Liwa

On Friday, 18th February, during the Inter-Emirates Weekend, Andrew Bean and Gary Feulner led a full-day tour of various sites and environments in the west of the Liwa crescent. The crescent of oasis villages that makes up the Liwa area is now served by a divided highway, and many of the dune slopes are cloaked by nurseries – and in one case a lawn! Gesturing over the whole, Gary reminded the group that this was a dramatic change from even 25 years ago, when the only road was a graded track, gatched in places and overblown by sand in the extreme west, where there were no oases.

The restored fort at Khannur, Liwa
Photo: Valerie Chalmers

Early stops focused on cultural sites. The restored fort at Khannur was impressive in size for a remote area without sophisticated construction materials. An adjacent plantation featured not only palms but also the *sidr* tree *Ziziphus spina-christi* and the large tamarisk *Tamarix aphylla*, both found naturally only in mountain wadis and adjacent gravel plains. We also puzzled (as do many professionals!) over the species identification of several flowering *Tribulus* growing as weeds within the plantation. *Eruca sativa*, sometimes cultivated, was found on adjacent waste ground.

An enigmatic *Tribulus* sp. in a Liwa plantation
Photo: Valerie Chalmers

At the nearby fish farm, tilapia, bulti, carp and catfish were said to be raised for local consumption, although we saw only tilapia. Several members also watched numerous small digger wasps painstakingly excavating burrows in the low sand berms, obviously following an ingrained template for construction.

We had lunch among the expanded plantations at 'Aradah, the most westerly modern oasis, and climbed part way up the dunes for a view of the overall setting. On stable dune sands the most common vegetation by far was the succulent *Zygophyllum mandavillei* (a close match for its sister species *Z. qatarense*, common in Dubai and adjacent coastal areas. An added benefit for some was the opportunity to observe some unusual insects at the plantation and to photograph resting examples of the migratory Vagrant Emperor dragonfly *Anax ephippiger*, present throughout the UAE at the moment, but normally seen only on the wing.

We continued south-west towards the border road, to an overlook of the "ghost town" of Al Brair (Librair), the former border station, from where it was possible (for the young and young at heart) to climb to a dune peak with a commanding view of the mosaic of remote mega-dunes and sabkha flats that characterizes the Liwa area. On the dune slopes we saw the two plants most characteristic of mobile dune sands: the large, wispy *Calligonum crinitum* and the sedge *Cyperus conglomeratus*.

A few members watched a Yellow Toad-Headed Agama *Phrynocephalus arabicus* try to conceal himself by vibrating and burying most of his body in the sand. Insects seen on the dunes were a small Sand Swimmer beetle with a characteristic gold "necklace" and a jewel beetle, perhaps the Desert Knotweed Beetle *Capnotis excisa*, which frequents *Calligonum*. A number of our visitors were also struck by the very dark brown breed of camels that can be found in Liwa and the Western Region generally.

Yellow Toad-Headed Agama, half-buried: 'camouflage'
Photo: Binish Roobas

Some saline ponds created by excavation demonstrated the relatively shallow depth of the water table and were home to extensive reed beds of *Phragmites australis* and an unidentified *Tamarix* species. They also provided an convenient opportunity to look for sand roses. We saw relatively little natural wildlife there (although the parasitic Desert Hyacinth *Cistanche tubulosa* was common) but were treated to an impressive display of dune buggy driving by young local residents out for the weekend.

We closed the day with a visit to Tal Moreb, which is billed as the tallest dune in the UAE. While that is debatable, in its present artificially maintained form it may in fact be the largest uninterrupted slip face, now devoted to dune buggy riding. The road to Tal Moreb snakes for some 20+ km into the north central Liwa area, making accessible not only Tal Moreb but also much of the region that could otherwise be reached safely only by a well-prepared expedition. (Of course, even now, a foray off-road into the high dunes or sabkha flats should not be undertaken casually and should include precautions for self-rescue.)
The trip ended very happily with a sighting and photographs of sand gazelle *Gazella subgutturosa* on the way back to the hotel.

**Gary Feulner and Valerie Chalmers**

### IEW Return Journey: Shoreline Route from Tarif to Abu Dhabi

Three Saturday afternoon return trip tours were on offer on Saturday 19th February as part of Inter-Emirates Weekend. Several of us opted for the Shoreline Route from Tarif to Abu Dhabi (or Dubai). We set out from the Tilal Liwa Hotel at 1.45 p.m. with trip leaders Drew Gardner and Feng Weng and drove back to the E-11, turning right near Tarif. We stopped about 15 km past the junction on the right hand side to look at the sabkha and then the prominent sandstone outcropping in the distance.

Donatella Astratti gave the group an explanation of the processes involved in sabkha formation and their significance. (*Sabkha is an Arabic term which refers to flat salt-encrusted desert that is usually devoid of any significant plant cover. The high concentration of salts on the sabkha surface prevents the growth of most plant species and, as a consequence, landscape dominated by sabkha appears distinctly barren. The accumulation of salts is possible in areas where the water table lies close to the surface*). Reference to the Geology and Terrestrial Habitats Sections of “The Emirates: A Natural History”). We examined the hexagonal/polygonal patterning of the sabkha which is “created by expansion due to the crystallization of salts”. On the other hand, “polygonal mud cracks may be created by shrinkage due to desiccation.”

The sandstone outcropping which the group examined is likely to be an example of Miocene sediments capped with the remnants of more extensive layers of calcite/gypsum-cemented sand from the Quaternary period which unconformably overlie them. Exposed fossil rhizoliths (bush roots), possibly of a mangrove tree, from the Miocene period were seen on a large piece of the outcrop.
We did not go to Dhabbiyaa, as originally intended, to see the coastal waders and do some beach-combing, as we ran out of time. Therefore, before returning home, we went on to the turn-off near Musaffah [the track starts just opposite the turnoff to Hameem] to look at the small offshore island known as ICAD 6 where there is a large flamingo-breeding site. Drew produced a telescope which gave us excellent views of the flamingoes.

Thank you to Drew Gardner, Feng Weng and Donatella Astratti for a most interesting tour.

**Valerie Chalmers**

### Upcoming Speakers

**Sabrina RIGHETTI**, a French PhD candidate in Archaeology at the University of Paris 1 Panthéon-Sorbonne, is working on the Wadi Suq period (2000-1600 BC) and Late Bronze Age (1600-1300 BC) in the Oman peninsula. She has been part of the French Archaeological Mission in Adam oasis in Oman since 2007 (both surveys and excavations) and has made a detailed typological study of pottery from the Wadi Suq period found on several excavations such as Hill 8 (U.A.E.). She has co-authored a number of articles.

In October 2009, Ms. Righetti was a recipient of an ENHG Research and Conservation grant, which has helped fund the four-week research trip to the UAE she is just now completing. While here, she has been doing a thorough study of Wadi Suq period pottery collected during excavations in the UAE, now stored in the collections of the Ras al Khaimah museum, by invitation of Dr. Christian Velde, the museum director. Following the completion of this survey, she will give a preliminary presentation of her findings at the ENHG’s 19th April lecture meeting, presenting an overview of Bronze Age culture in the UAE and Oman, with a special focus on the Middle and Late Bronze Age pottery and funerary structures. Sometime after her talk, Ms. Righetti will also be contributing an article on her findings to a forthcoming issue of *Tribulus*.

**David Stanton** is the founder and executive director of the Foundation for the Protection of the Arabian Leopard in Yemen, an NGO and the only organization consistently promoting the conservation of the Arabian Leopard in Yemen. A 20-year resident of Yemen, Mr. Stanton was until 2009 a full-time teacher at the Sana’a International School, where he involved his students in an annual fund-raising walk for nature conservation, which led to the development of the Yemeni Leopard Recovery Program (FPALY’s precursor organization) in 2007 and to the declaration of the Arabian Leopard as Yemen’s national animal in 2008. In June 2009 he took a break from teaching to devote himself to the coordination of the YLRP, and then the FPALY, on a full-time basis.

On 3rd May David Stanton will be updating us on the now-completed phase of the project to recruit and train Yemeni biologists to independently conduct field research designed to clarify the size of the Arabian Leopard population in Yemen. In October-November 2010, partially funded by an ENHG Research & Conservation grant, seven field researchers, including five Yemenis, went through a two-week intensive training program in Yemen and Oman, home to the most viable population of Arabian Leopards in the wild. One of the graduates of the program went on to recruit two more Yemenis, who were subsequently trained by another graduate.

Through this undertaking, the FPALY has initiated ground-breaking cross-border cooperation between the governments of Oman and Yemen on this conservation issue of mutual importance and built up real capacity amongst Yemeni field researchers to study and promote the conservation of this elusive animal. In fact, directly resulting from this training, camera traps have for the first time captured images of Arabian Leopards in Yemen, as well as caracals and other endangered mammals (see Mr. Stanton’s write-up on p. 5, “Mammal Sightings in Wadi Hawf”).

David Stanton first spoke to us in October 2009 to introduce us to his organization’s work and brief us on his plans for the field research training session in Oman. The ENHG is happy to have him back to update us on the success of that training session and give us a view of the way forward for FPALY’s important and exciting conservation work in Yemen.

*The Editor thanks the above speakers for providing autobiographical information & photo for Focus.*

### In the Local News Media

- **Yemen Times, February 24:** *Refuge in Al-Mahwit to protect Yemen’s wildlife*
- **Gulf News, March 5:** *Re-stocking Arabian Gulf with fish*
- **The National, March 6:** *A sea without sharks?*
- **The National, March 16:** *Record toll of turtles wash up in reptile rehab*
- **Gulf News, March 17:** *Offbeat track to conservation in Arabian Peninsula*
- **The National, March 20:** *Camel discovery explains pneumonia resistance*
- **Gulf News, March 20:** *Marine ecosystem suffers huge blow after 45 baby sharks found dead*
- **The National, March 31:** *Ancient sites reveal new insights*
- **The National, March 31:** *A cute little lion grows into a monster of a problem*
- **The National, April 2:** *Scientists in Dubai plan frozen zoo for cloning*
- **The National, April 2:** *Potato seed could raise crop yield for Liwa farmers*
ITEMS ON SALE
AT THE ENHG BOOK STALL
All prices are in dirhams.

- The Emirates – A Natural History, 350.
  The first complete referencing guide to the wildlife of the UAE. 580 colour photos.
- Jebel Haft – A Natural History, 100.
  An attractive, encyclopaedic presentation of the natural resources of this local landmark.
  (Free copies available to schools. Ask Chairman.)
- Wild about Mammals, 40.
- Wild about Reptiles, 40.
- Snakes of Arabia, 50.
- Breeding Birds of the United Arab Emirates, 100.
- Abu Dhabi Bird checklist, 10.
- NEW: Sandgrouse checklist of the birds of the United Arab Emirates, 25.
- Common Birds in Oman, 2nd ed, Dhs 120.
- Butterflies of Saudi Arabia & its neighbours 90.
- Trucial States, 120.
- UAE in Focus, 100.
- Oman 1965, 120.
- Natural History of Oman, 50.
- Feast of Dates, 100.
- NEW: Field Guide to the Geology of Oman, 75.
- Abu Dhabi 8 Million Years ago, 15.
- Arabian Wildlife Encyclopedia, 120.
- Sulphur, Camels and Gunpowder, 100.
- NEW: Native Plants of Oman, 80
- Little O in Oman, 25.
- Heritage Vol. 1, 60.
- Arabic coffee, 130.
- Arabian Dhows, 120.
- Windtower, 180.