



# GAZELLE

مجموعتنا روثي للتاريخ والطبيعي

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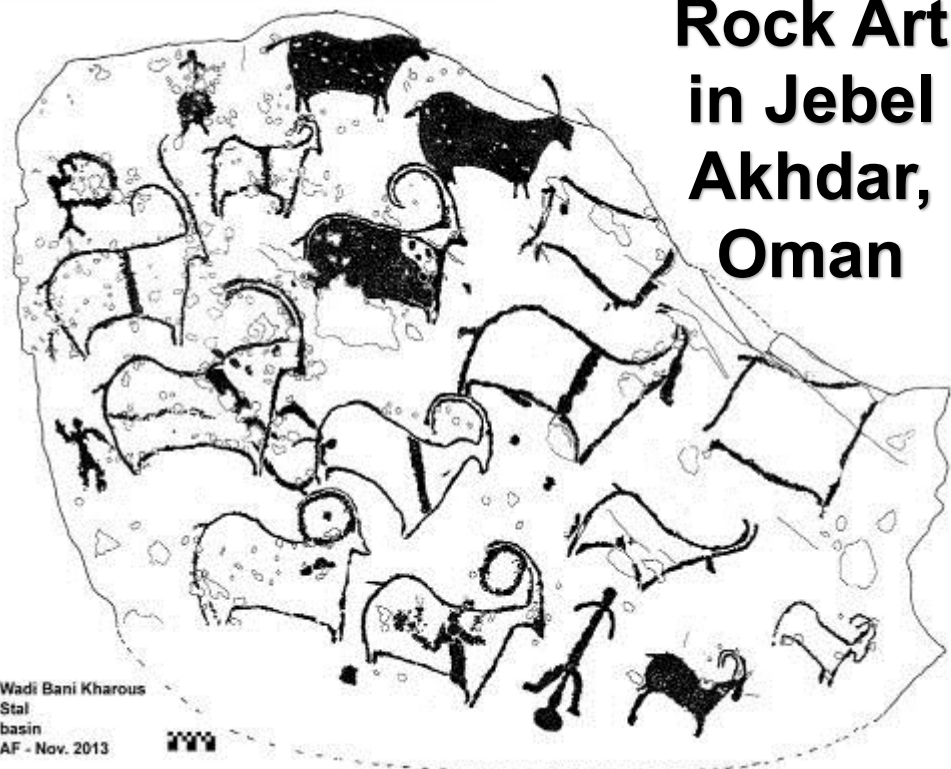
## Contributors—Thanks to the following for their reports and contributions:

Stephen Green, Gary Feulner, Binish Roobas and Evelyn Brey.



© Binish Roobas

The Small Copper, a widespread Holarctic butterfly, sighted on the DNHG trip to Kryrgyzstan (report on page 3)



## Rock Art in Jebel Akhdar, Oman

### A sketch from *Rock Art in Jebel Akhdar, Oman* by Angelo Fossati

Overseas DNHG member Stephen Green, who has himself studied sea-shells, snails and rock art in the UAE, has written to alert us to a recent publication on the rock art of the Jebel Akhdar area of Oman. The study represents the result of five years of field work by Italian researcher Angelo Fossati, under the auspices of the Omani Ministry of Heritage and Culture.

The study is noteworthy as one of the very first in Northern Oman to attempt to identify discrete phases of rock art (identified by style, subject matter and superposition) and to assign a rough chronology to them -- the earliest commencing as much as 6,000 years ago and the latest lasting into the modern era.

The full citation is: Fossati, A.F. 2015. Rock Art in Jebel Akhdar, Sultanate of Oman: An Overview. In Keyser, J.D. & Kaiser, D.A. (eds.), *American Indian Rock Art, ARARA*, vol. 41, pp. 1-8. The preliminary results – an overview and state of research – are also available online at TRACCE Online Rock Art Bulletin,

<http://www.rupestre.net/tracce/?p=10320>.

See more trip photos on the

[DNHG facebook page](#)

## Announcements

### Next Month's Speaker

The DNHG are delighted to welcome:

Dr Steve Ross, who will be giving a talk entitled:

***“The Arabian Tahr: Habits, Habitat and Conservation.”***

**8pm on Sunday, 4 October**

Dr Steve Ross is a conservation biologist and a Research Associate of the University of Bristol. For the last three and a half years Steve has been based in Oman working with the government on field research and educational projects aiming to increase Oman's capacity to conserve the Arabian tahr. Steve is a member of the IUCN Caprinae Specialist Group and the Cat Specialist Group. His background is in applied field ecology and, in the last 20 years, his work has encompassed conservation projects of Sitka black tailed deer in Alaska, African lions in Botswana, and the first study of Pallas's cat in Mongolia.

### Mark the date!

The DNHG's **"End-of-Season" Function will be held this year at Dubai Offshore Sailing Club (DOSC) on**

**Thursday, 12 November.**

Cost will be Dh100/- per head which will include buffet supper and entrance to DOSC.

(Further details to be circulated)

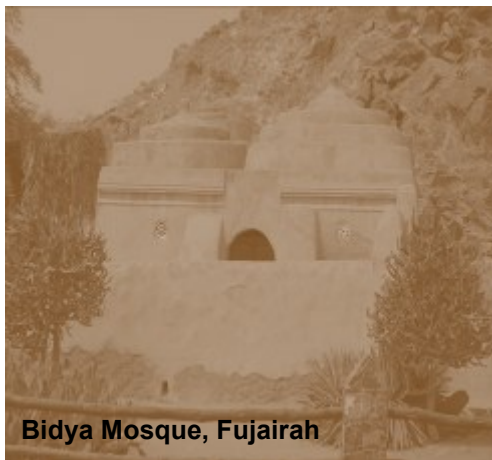
### REMINDER: DNHG Membership Renewal

It's that time of year again! DNHG membership is due for annual renewal this September 2015 for the 2015—2016 season.

If you would still like to be part of the DNHG and receive our monthly newsletter, notices on upcoming lectures and events and/or join our many field trips, then please make sure to renew your membership to be included on our mailing list.

Membership still remains a bargain at Dh50 for individuals and Dh100 for families, all of which contributes to hiring the lecture hall, incidental expenses of speakers, publications, additions to the library and occasional special projects.

Renewing is easy and can be done at September's meeting, or by making a bank transfer (details on page 8), or by contacting our Membership Secretary, Anindita, by emailing: [anin@emirates.net.ae](mailto:anin@emirates.net.ae)



**Bidya Mosque, Fujairah**



**A watchtower overlooking Bidya Mosque.**

### New Gazelle Editor

It's a pleasure to welcome Margaret Swan as the new editor of the DNHG's monthly newsletter, *Gazelle*. Margaret comes to the task experienced in both IT and editing skills, and with a number of years in Dubai.

Like many others, Margaret joined DNHG after observing the natural beauty of the United Arab Emirates during camping trips with her (then) young family, and wanted to learn more.

Hailing from the UK, Margaret taught ICT to students and teachers at a British Curriculum school in Dubai. Her editing skills developed over the ten-year period she led an after-school activity, where students authored the school newsletter.

Moving into the library to assist in developing online research skills, she noticed that students preferred using computers for research, rather than the traditional methods. This prompted her to study for a BSc (Econ) in Library and Information Science at the University of Wales, Aberystwyth.

Margaret emphasizes that her role is that of editor, not author, and that she will be depending on DNHG members to be alert and supply accounts and/or photos of news or observations of natural history interest. For those whose first language is not English, Margaret will be happy to smooth any rough edges, so all members should feel welcome to contribute.

*Contribution by Gary Feulner, Chairman*

## Field Trips



### Nomadic visitors

## Kyrgyzstan Trip

Kyrgyzstan is one of the smallest of the former Central Asian republics of the U.S.S.R. It is a mostly mountainous land – 71% of the country is above 2,000 metres (6,600 feet) elevation – and for that reason it has sometimes been referred to as the Switzerland of Central Asia.

It sits astride the western end of the Tien Shan range (the "Celestial Mountains" of the Chinese) at the northwest edge of the Tibetan plateau and China's remote Sinkiang region, and north of the fabled Karakoram and Pamir ranges. The tallest peak is Mt. Pobedy (7,439 metres) on the border with China. The west-flowing rivers drain ultimately to the Syr Dar'ya, which feeds the shrinking Aral Sea.

Traditionally, the Kyrgyz people were mostly seasonally nomadic pastoralists, and some remain so, living in portable circular tents called yurts. They have been ruled over the years by many different Central Asian and Sino-Mongolian empires, and more recently by the Soviet empire, but without losing their distinctive culture, and there is evidence among the modern Kyrgyz population of a determination to preserve the distinctive aspects of Kyrgyz culture.

The capital, Bishkek, sits on the edge of the vast Central Asian plain that stretches westwards to the Caspian and beyond. We found it a peaceful, clean and orderly city, laid out on a grid, with disciplined, courteous and mostly light vehicle traffic (except in the market area). Parks and gardens are scattered throughout the city, often featuring statuary of local heroes (and at least one heroine), as well as museums, theaters and an opera house. Bishkek is home to 1 million of Kyrgyzstan's nearly 6 million people, which includes approximately 1 million ethnic Russians and a diverse mix of other ethnic groups. As part of our tour we strolled the fashionable Sovietskaya and visited the National Historical Museum, the Fine Arts Museum and the Osh Market.

Outside Bishkek, we toured and hiked in the countryside to the east, in the mountains surrounding Lake Issuk-Kul ("Warm Lake", elev. ca. 1,600 metres), the second largest Alpine lake (by volume) in the world. There the geography seemed to be a blend of the rugged Himalaya and the Central Asian plains. The mountains stepped down, not to rocky ravines, but to

broad, flat-bottomed valleys with winding streams watering lush riparian vegetation, of which the most characteristic feature is the stands of tall, thin poplars.

Kyrgyzstan's publicity advertises 300 sunny days a year, but we noticed that the mountain ridges often attracted cloud cover. Our own first hike, to a remote waterfall in rugged Ala Archa National Park, saw us return in fog and drizzle. It's also worth noting that, at those elevations, our late August visit was considered somewhat 'late' in the season.

Outside Bishkek, our accommodation in yurts and a local home were clean and comfortable. Mealtimes were almost an embarrassment of riches – fruit, melons, tomatoes, bread, jams, stews, pasta, grilled meats, stuffed peppers, potatoes, cabbage, beets, omelets, pastries and tea – invariably in quantities greater than our DNHG appetites could do justice to.

Our DNHG visit was hosted by Ecotours, a small Kyrgyz tour company and owner of the very welcoming Umai Guest House in Bishkek. They and our charming guide Birmet did an excellent job, but special thanks are due to our own Binish Roobas for conceiving this adventure and bringing it to fruition. (Participants had a nervous moment on the very eve of the trip, when it remained uncertain whether Binish would be able to secure his own visa from a seemingly reluctant Kyrgyz consulate in Dubai.) *Contribution by Gary Feulner*

### Key to spotlight photos on page 4 (left to right):

#### Top row)

Our meals in yurts were feasts

A view across Lake Issuk-Kul

*Eresus kollari*, a famously attractive male velvet spider

#### Row 2) Home entertainment, Kyrgyz-style

Our first yurt camp: a welcome home away from home

A 'typical' agricultural valley

#### Row 3) The decorative façade of a soviet-era building

Kyrgyz old-timers with a friendly new arrival

A rugged valley within Ala Archa National Park

#### Row 4) Kurmanjan Datka, a Kyrgyz heroine

The Opera House, Bishkek

A hunter with a Golden Eagle

A typical view in the countryside around Lake Issuk-Kul

#### Bottom row)

A roadside fruit and vegetable market

Kyrgyz horsemen return from a day's work

Burana Tower, a remnant of a major urban center of the 8th-9th centuries

A walk in the sunshine

# Spotlight on Kyrgyzstan



## Biosphere Expeditions DDCR Report 2015

For four consecutive years since 2012, the Dubai Desert Conservation Reserve has partnered with Biosphere Expeditions to host an annual, week-long "citizen science" program of intensive, supervised scientific research by a small group of volunteers. At least one DNHG member, Evelyn Brey, has participated (and had the opportunity to take prize-winning photos in the bargain).

This is a pay-to-volunteer program that provides motivated manpower (not excluding woman power) to conduct labor-intensive observations, trapping or other investigations that might be difficult for reserve staff or individual researchers to accomplish in the normal course.

Each year the program has published a report, edited jointly by DDCR and Biosphere. The successive reports have built up a good picture of many aspects of the reserve, although they have not surprisingly concentrated on the larger and more charismatic species of mammals and birds, particularly the Arabian Oryx (*Oryx leucoryx*) and Houbara Bustard (*Chlamydotis macqueenii*).

The latest report was published in September, based on a week-long survey in mid-January 2015 and edited by Stephen Bell of DDCR and Dr. Matthias Hammer of Biosphere Expeditions. It presents a number of interesting results, a few of which are highlighted below.

- The number of Arabian Oryx in the reserve has proliferated and is now estimated to exceed 400, of which ~258 were independently counted in 2015. This is acknowledged to be too many to permit the desired discontinuance of artificial feeding and achieve the DDCR's goal of establishing a viable, self-sufficient population. The 2015 study announces for the first time that, in order to move towards this goal, the decision has been taken and approved to introduce a top-tier predator within the reserve, probably the Arabian Wolf *Canis lupus arabs*. However, introduction will be implemented only once the perimeter fence has been upgraded.

- The Arabian Wolf is generally considered to have been extinct in the UAE and Northern Oman for more than 20 years. Proposals to re-introduce top tier predators have been controversial elsewhere and there is no reason to expect the DDCR decision to be any different.

- The DDCR is now recognized as the best place in the UAE to see the once-rare Lappet-Faced Vultures (*Torgos tra-*

relative drought, as well as possible predation by Red Foxes (which are abundant) on nest sites. The Pharaoh Eagle Owl is said in the report to nest on the ground, usually within a fire bush (the large milkweed *Leptadenia pyrotechnica*). However, the Pharaoh Eagle Owl is also known to nest in *ghaf* trees (*Prosopis cineraria*), of which groves are common in a number of areas of the DDCR. An impressionistic association between the owls and *ghaf* groves was confirmed statistically during breeding season using



Oryx. (Photo by Evelyn Brey) [repeat from cover page of June 2013 Gazelle]

*cheliotos*), which are said to be fairly common there. This is presumably due to the availability of carcasses of larger mammals due to the natural attrition of

the thriving and concentrated populations of Arabian Oryx as well as Mountain Gazelle (*Gazella gazella*) and Sand Gazelle (now *Gazella leptoceros*). Optimism is expressed that the vultures might nest in undisturbed treed areas of the DDCR, but records of known sites suggest that the rugged crags and open treed plains of the nearby mountain front along the Mahdhah road, now further insulated from disturbance by the border fence, are likely to remain the preferred residential options.

- A decline in the number of Pharaoh Eagle Owls (a/k/a Desert Eagle Owl, *Bubo ascalaphus*) over the past several years is noted. This is tentatively attributed to a decline in the number of rodents, owing to

GIS mapping (Aspinall & Glidden in *Tribulus* vol. 7.2, Winter 1997), although it was left unresolved whether the exact choice of nest site was determined by the size of the *ghaf* grove, the lack of disturbance or other factors.

The full 2015 report is available online at the Biosphere Expeditions website, [www.biosphere-expeditions.org](http://www.biosphere-expeditions.org). (The direct link is exceptionally long and is not copied here.)



Sand dunes and vegetated flats at DDCR. (Photo by Gary Feulner)

## Field Clips

### Two Toads' Tales Re-Told

Two kinds of toads are found in the UAE – the Arabian toad and the Dhofar toad. Both are widespread in the Hajar Mountains of the UAE and Northern Oman, although only the Arabian toad is commonly seen. The Dhofar toad is primarily nocturnal and may live far from permanent water. Both species can burrow and aestivate for up to two years or more, if necessary, to survive prolonged dry conditions.

The local and regional distribution patterns of the two toads have long prompted questions about their evolutionary histories and relationships. The Arabian toad has an obviously disjunctive range, with one population in the UAE and Northern Oman and another, larger one stretching the length of the mountains of Western Arabia. The Arabian toad is absent, however, from the Dhofar region and the Hadhramaut in South Arabia. Even in the UAE and Northern Oman, field work by UAE naturalists has shown that the Arabian toad is absent in the mountains of the Musandam peninsula, where only the Dhofar toad is present.

A decade ago, the Arabian toad (then *Bufo arabicus*) was considered most likely to be evolved from the Palaearctic Green toad *Bufo viridis*, found in Jordan, and the possibility was mooted that the populations in Eastern and Western Arabia might prove to have independent origins.

The distribution of the Dhofar toad (originally *Bufo dhufarensis*) is complementary and includes much more than just Dhofar. In fact, it is found throughout the mountains of Eastern, Southern and Southwestern Arabia (including Dhofar, the Hadhramaut and the Asir region northwards to Taif). In South Arabia, where it is the only toad present, it is routinely found at permanent water and is active by day, indicating that its ecology in the UAE and Northern Oman has been modified to accommodate the competing presence of the Arabian toad.

Researchers at the University of California, Berkeley, have been active for nearly two decades in trying to sort out evolutionary relationships of Arabian herptiles using DNA analysis. Prof. Ted Papenfuss, the Berkeley team's 'field man', has kept the DNHG abreast of this work over the years, including scientific results for groups such as spiny-tailed lizards, sand boas and semaphore lizards. As part of the process, Ted has given hotel bathtubs over to countless amphibians, lizards, snakes, turtles, etc., and has been a regular visitor to many areas best recognized as conflict zones.

One of the Berkeley team's latest papers (Portik & Papenfuss 2015) analyzes the relationship of Arabia's toad species within two broader contexts – (i) extensive sampling and analysis of many other toad species from sur-

(Continued on page 7)



- The Arabian toad, now *Amietophrynus arabicus*, a common denizen of Hajar Mountain wadis.



- The Dhofar toad, *Duttaphrynus dhufarensis*, photographed here during a breeding frenzy after rain in a tributary of Wadi Bih. The site, a rare spring in the Musandam, has since been destroyed by the massive road to Jebel Jais.



- The Asian common toad, *Duttaphrynus melanostictus*, photographed in the Kathmandu Valley.

## Field Clips and Announcements

(Continued from page 6)

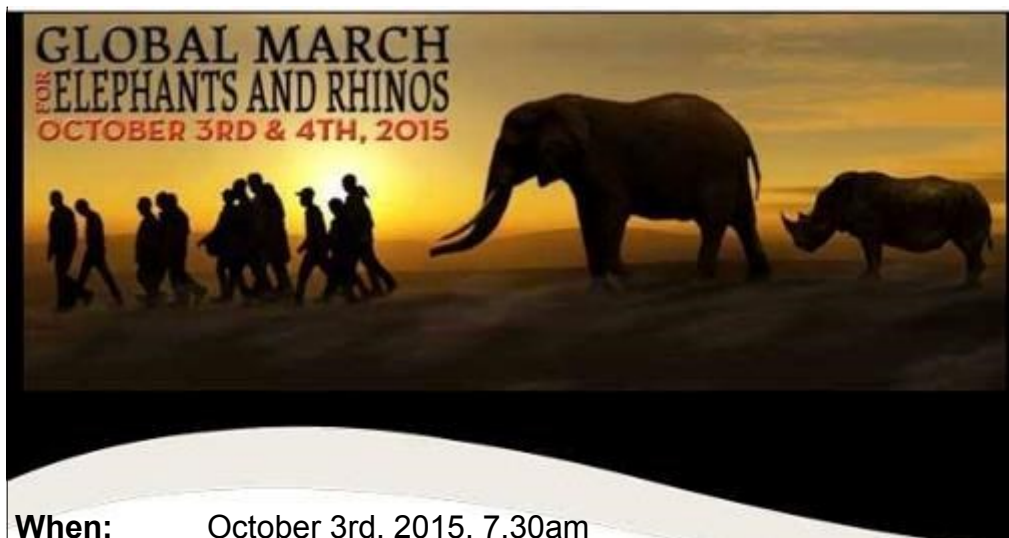
rounding areas of Eurasia, Africa and South Asia, and (ii) the geologic events relating to the separation of the Arabian peninsula from both Africa and South Asia. The paper concludes that the Arabian toad is most closely related to African ancestors and belongs in a new genus, *Amietophrynus* (becoming *Amietophrynus arabicus*) and that it developed its identity as a distinct species, in place in Arabia, by slow genetic change from its African cousins following the opening of the Red Sea in the early to mid-Miocene (27-23 m.y.a.). The populations in Eastern and Western Arabia are not genetically distinct.

As to the Dhofar toad, it has often been tacitly inferred to have the Afrotropical affinities associated with the flora and fauna of its eponymous region. However, molecular analysis confirms that it is most closely related to South and South-west Asian toads of the genus *Duttaphrynus*.<sup>\*</sup> In fact, the Berkeley study makes *Duttaphrynus* an exclusively South Asian–Arabian genus, by moving the one purported African (Somali) representative to the genus *Amietophrynus*. [<sup>\*</sup>The genus *Duttaphrynus* is best represented by the large Asian common toad (Black-Spined toad) *Duttaphrynus melanostictus*, which DNHG members may have encountered on one or another of our field trips to Kerala, Nepal, Sri Lanka or the Andaman Islands.]

The Berkeley study also includes information on toad taxonomy generally, which is instructive. But despite its extensive sampling and molecular work, it does not resolve all relationships and expressly reserves a number of taxonomic problems for future study.

The full paper has been published in *BMC Evolutionary Biology* in Open Access format, available at DOI 10.1186/s12862-015-0417-y. (NB: This is a professional research paper and most lay readers will find the bulk of the discussion extremely technical.)

Contribution and photos by Gary Feulner



**When:** October 3rd, 2015, 7.30am

**Where:** [Kings' School, Al Barsha](#)

**Wear:** Black and White

**More information on their [facebook page](#)**

### Speakers Wanted for Members Night

Our December 6 lecture will be our annual Members Night, featuring three to short presentations by DNHG members. These have always been well received and have often revealed hitherto unrecognized talent and interest.

Subjects have included ongoing personal research or projects, unusual natural history observations, discussion of particular natural history phenomena, and accounts of travel to places that are likely to be of particular interest to our members. Presentations should be 10-20 minutes, including time for a short Q&A.

Members who might be interested in speaking should contact Chairman Gary Feulner, Vice Chairman Valerie Chalmers, or Speaker Coordinators Martina Fel-la and Michelle Sinclair. Please consider this opportunity, sooner rather than later -- December is not so far away!

### Scheduled Field Trips (Members Only)

**October 9:** Arabia's Wildlife Centre.

**October 24:** Khor Kalba.

**November 7:** Sharjah Planetarium.

Further field trips, details or changes to trips will be announced/confirmed by email circular

## Dubai Natural History Group Programme

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

October 4: Dr. Steve Ross: The Arabian Tahr in Oman.

November 1: Dr. Ghaffar Attaelaman: The use of modern physics techniques in archaeological research.

December 6: Members Night.

### DNHG COMMITTEE 2015

When possible, please contact committee members outside office hours

	<b>Name</b>	<b>tel</b>	<b>email</b>
Chairman	<b>Gary Feulner</b>	04 3065570	grfeulner@gmail.com
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Treasurer	<b>Rakesh Rungta</b>	050 558 2435	rakesh99@emirates.net.ae
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Postal Address: DNHG, PO Box 9234, Dubai, UAE

## Contributions

Do you have a field report, unusual finding, interesting news article, book review, amazing photograph, or community news to share?

If so, email your contributions to:

margar8s1@gmail.com

(Arial 10 justified)

## DNHG Membership

Membership remains one of Dubai's best bargains at Dh100 for families and Dh50 for singles. Membership is valid from September 2015 to September, 2016. 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 10024001. However, this process does not identify you as the payer. If you wish to pay by cash, please also scan and e-mail a copy of your payment confirmation 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.