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Wildlife Middle East

NEWS

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Wildlife Middle East News is published quarterly. It contains papers, reports, letters and announcements submitted by veterinarians, biologists, conservationists, educators, and other animal care professionals working with captive and free-living wildlife in the Middle East region. Contributions are not refereed, although every effort is made to ensure the information contained within the newsletter is correct, the editors cannot be held responsible for the accuracy of contributions. Opinions expressed within are those of the individual and are not necessarily shared by the editors. Guidelines for authors can be downloaded from www.wmenews.com

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EDITORIAL

Putting together each issue of WME News is a little like assembling a story-mosaic from the disparate pieces of the environmental jigsaw puzzle scattered around the region. We may not know the full picture, but tied together in the newsletter the pieces help us to see the <bigger picture>. This issue sees us report issues as diverse as the illegal wildlife trade, the persecution of predators, the dangers of highly infectious diseases to animal collections and some positive reports just to stop us getting too depressed - the potential for environmentally friendly tourism, environmental education for marine animals and an inspiring journey to reconnect National youth with their traditions and environment.

Sometimes putting the newsletter together can be a chore for the volunteer editors as we harass contributors, edit manuscripts, coordinate translations and proof-reading, pass drafts back and forth to designers and printers and finally see the end product stuffed into envelopes. But chore aside, there is always relief and pride in the final end product. We hope that these images and reports illustrating the good, the bad and the ugly sides of human interaction with the environment may in some small way contribute to a better understanding of Man's complicated relationship with wildlife in the Middle East.

In this issue we have stories that illustrate the best and worst of what humans can do for wildlife. Perhaps readers will be saddened when they read about the persecution of predators in Saudi Arabia. The images of wolves strung up from trees are brutal and depressing. As the parent of 2 children I cannot read such an account of pointless killing without thinking....what will be left for my children to see of this beautiful world. More than this what will be left for the children of Arabia to see in the future. Empty deserts strewn with bones and wrapped in a coating of discarded plastic bags. Worst case scenario perhaps. Glass half full? Perhaps? Within the realm of possibility? Definitely.

So a mosaic of environmental messages. We have contributions from Indyact, a citizen activist group who are bravely campaigning for Lebanon to ratify CITES. In the Arab region the fact that Lebanon, Bahrain and Iraq have not ratified CITES makes them hubs for laundering wildlife within the region. It is positive that in Lebanon Lebanese people feel passionately enough to campaign for environmental issues. Within the GCC we need more Nationals campaigning for their environment. Initiatives like the "In the footsteps of our forefathers" are therefore vitally important to reconnect local students with their traditions and with their environment. There needs to be more opportunities for Nationals to connect with nature. With this in mind the review of a recent publication from UNESCO on environmentally friendly tourism in biosphere reserves is a timely document promoting the benefits of sustainable and community based tourism. The full publication (available as a download) offers important information on how areas of natural beauty can be best developed sensitively and, adequately protected from the «beast of development».

Foot-and-mouth disease (FMD) is a highly contagious but usually nonlethal disease of ruminants and pigs characterized by ulceration of the oral mucosa and of the skin of the feet. The virus is present in domestic livestock populations in much of Africa and the Middle East and recent outbreaks in livestock have been reported in Iraq, Israel, Jordan, Syria, Kuwait and Bahrain. The report in this issue of two recent FMD outbreaks in the UAE demonstrates the importance of vaccination protocols – in one collection where the gazelles were unvaccinated the mortality was great and the majority of animals succumbed to infection and died. In a second collection where the majority of susceptible wildlife had been vaccinated the effects of the disease was slight and only a handful of animals died. Unfortunately, the lax veterinary controls in the region mean that viral diseases like FMD are endemic and wildlife collection managers need to be vigilant to protect their stock. We have heard unconfirmed reports that one wildlife collection lost thousands of gazelles to FMD recently. If only these animals had been vaccinated. There is no doubt that handling and restraining wild animals for vaccination is time-consuming and challenging. However with advent of handling systems it is possible to process large numbers of animals making the implementation of preventive medicine protocols realistic.

Finally we would like to recommend the publication *"Global Re-Introduction Perspectives - Reintroduction Case Studies From Around The World"*, edited by Pritpal Soorae and published by the IUCN Reintroduction Specialist Group.
A good proportion of projects from the Middle East were featured, including reviews of the reintroduction of houbara bustards, Arabian oryx, red-necked ostrich, and sand gazelle, making this a very useful resource for anyone in the region working in projects that may be involved with animal re-introductions.

WILDLIFE MIDDLE EAST NEWS OBJECTIVES

- Raising awareness of environmental and conservation issues affecting wildlife in the Middle East.
- Distributing information to enable better management healthcare and welfare of wildlife.
- Providing a central contact point for practical advice and information on wildlife management in the region.

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LEBANON - BACK ON THE ILLEGAL WILD ANIMALS TRADE MAP

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Introduction

The international law governing trade in endangered species, the Convention of International Trade in Endangered Species of Flora and Fauna (CITES) focuses on a single cause of species loss, and contains a generally clearer, stronger and more straight forward targets and corresponding regulations in contrast to broader biodiversity regimes.[1]
International trade in exotic wildlife is a large money-spinning business. Hundreds of millions of individual plants and animals, their parts and derivatives, are bought and sold each year.[2] CITES categorizes species into three Appendixes according to how trade is affecting their existence, and has created various levels of control. Appendix I includes the most threatened species. Appendix II are species that are not yet endangered, but are considered to be affected by trade if left unregulated and a scientific authority must determine that the proposed export quota will not be detrimental to the survival to the species. Appendix III species are listed voluntarily by range states[1].

Case Study - Lebanon

Lebanon, a non-party to CITES, is a hub for international, and sometimes illegal, wild animal trade. Tens of thousands of animals are imported, exported or re-exported from Lebanon each year. Animals that enter its ports officially must have CITES certificates and those being exported also need to have CITES entry certificates to other party countries. Therefore, Lebanon has two focal CITES personnel based in the Ministry of Agriculture, who issue the required certificates.

Even though the law in Lebanon demands that CITES certificates are necessary when wild animals are traded, various species enter and leave the country illegally or with questionable CITES certificates. Cases of chimpanzees entering the country with no CITES certificates have been reported. Some wildlife breeding centers are purporting to be breeding owls *Tyto alba* for export.. There is little transparency and considerable corruption involved in the wild animal trade in Lebanon. What has captured the attention of the international community' is the Lebanese trade in the Spur thighed tortoise (*Testudo graeca*). CITES receives conflicting reports which adds to the uncertainty of the trade in this species. Two reports showed two different gross exports amounts for this species for the years 1996 – 2002. For some years the difference exceeds 7,000 individuals.[3,4]

In 2008, the CITES Animals Committee engaged IUCN to compile information about the biology and management of and the trade in Spur thighed tortoises in Lebanon. This species is widely spread in northern Africa, southern Europe and South-west Asia, inhabiting over 25 countries in total.[4] The Lebanese CITES Management Authority reported that no population status studies had been carried out and therefore the status of the species in the wild is not known and that although captive breeding facilities exist in Lebanon, it is not clear whether they have the capacity to produce the number exported.[3]

Testudo graeca are popular in the pet trade.[3] In Lebanon local demand is not significant, but the large numbers of wild and captive bred specimens exported has raised concerns by biologists in Lebanon and this lead to an export ban in 2004. The Lebanese Management Authority reported to CITES Secretariat that since there are no export quotas, no export is permitted, and that this ban will remain in place and will not be lifted until appropriate regulations are in place. In view of this statement, trade in this species from the Lebanon was decided by CITES to be of Least Concern.[3]

However, last November, IndyACT learned that despite the ban a shipment of 'claimed' captive-bred Spur thighed tortoises was being exported, and started to investigate the issue. The organization visited the breeding centre that has previously been questioned on its production capacity and found it to be well below standard. Dead tortoises were found all over the farm. The farm appeared to be abandoned. After documenting the situation, IndyACT filed a complaint to the Ministry of Agriculture and requested answers to the questionable practices. No answers were given and the export process continued, therefore IndyACT campaigned and succeeded in stopping the shipment at the airport prior to export. Later on, an independent scientist from the American University of Beirut investigated the breeding centre in question again and confirmed that most of the tortoises maintained there were at least five years of age, and thus most probably were caught from the wild and not bred in this facility. Furthermore, it was found that the exporting quotas for the species were not determined on sound scientific basis, and that no national study has been conducted to detail population data on Spur thighed tortoise, which was one of the commitments of the Lebanese CITES Authority.

Fig1. Charlie: An illegally smuggling chimpanzee in Lebanon (©IndyACT/Hmaidan)

Fig2. A tortoise more than ten years old in a farm in Lebanon (©IndyACT/Hmaidan)

Recommendations

IndyACT suspects that Lebanon is being used as a hub for wild animal 'laundering', where some species are being imported illegally, and then tagged with a legal stamp before being re-exported. In the Arab region, only Lebanon, Iraq and Bahrain are the countries that have not ratified CITES, making them international loopholes. Therefore, IndyACT is requesting that the Lebanese authority ratify CITES, and conduct research at a National level to scientifically assess the situation of each species being exported, and accordingly determine sustainable export quotas. Also all wildlife breeding centers need to be strictly monitored by an independent committee that includes stakeholders from different sectors. Additionally the process of certification should be more transparent and accessible to general public. Until then all trade in wild animals should be put on hold.

References:

A complete and fully referenced version is available for download in pdf format at the website.

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AN ENVIRONMENTAL INFORMATION CENTER FOR THE TURTLES IN MASIRAH ISLAND

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Keywords: Sea Turtles, Environmental Information Centre, Masirah Island

Masirah Island is situated off the eastern shore of Oman and is the largest island of the Sultanate. Its perimeter hosts a number of sandy beaches where four species of sea turtles nest every year; over 400 species of birds live in its mudflats, beaches and wadis; fossils are encountered in some of its hills; a large number of mollusks exist in the sea; and a pristine coral reef is present in the south of the island.

Inspired by all this ecological wealth and the need for better knowledge and protection in view of forthcoming development, the Masirah Turtle Conservation Project (MTCP) began. Sponsored by the TOTAL Corporate Foundation for biodiversity and the sea and TOTAL Oman and carried out with the expertise of IPEDEX Productions L.L.C. under the auspices of the Directorate-General of the Ministry of Environment and Climate Affairs, MTCP has been present on the island with a group of researchers from different parts of the world for almost four years. It was the first time that a private company cooperated with the Omani government on such an environmental project. For three years, experts on marine turtles, birds, reefs, mollusks, environmental education, environmental institutions, legislation and sustainable development came to Masirah and contributed to its protection and conservation, following the Omani government's strict policies on sustainable development.

Along with developing environmental education packages for local schools, finding out interesting scientific data about sea turtles and avifauna and a creating a management plan for sustainable development, the TOTAL/IPEDEX team delivered something else to Masirah as well: The first ever Environmental Information Center in Oman, inspired by sea turtles, describing Masirah's particular ecological wealth for everyone to see: locals, school children and visitors to the island.

Environmental Information Centers (EICs) are present in several countries, especially in remote areas where setting up and maintaining big museums is not easy. Their purpose is to provide a constant, easily understandable and informative set of panels, in order to present the particular environmental and cultural assets of the area, thus contributing to understanding, appreciation and conservation. Designed by an international team of experts, the EIC of Masirah includes information on sea turtles at an international, national and local level, the birds and coral reef of Masirah, the whales and dolphins, as well as a display of 250 molluscs found on Masirah beaches, including the endemic "Eloise" shell, named after the wife of Dr Donald Bosch

Set in the new Masirah Municipality building, the EIC provides information on the environment of the island. Its panels comprise photos selected from those taken by project photographers. Text boxes and graphics have also been produced in order to explain the movements of sea turtles in the region.

The visitor of the EIC begins by getting to know Masirah and its people from the first introductory panel on the left after they enter through the door. "Masirah: a welcoming wonder of nature" is the title of the panel, and the impressive photos describe it all. The text provides some details about economic activities, ecology and a tribute to the amazing hospitality of the population on the island. Walking clockwise, the whales and dolphins encountered offshore Masirah are identified and briefly described. Cetaceans have been the object of long-term studies around the island by researchers from all over the world and some of them have formed resident populations present there for many years. Continuing to the left, the visitor is greeted by a "flying" crab plover over a beach and a greater flamingo "flying" over a mudflat. Under these "flying" birds, three tables describing the avifauna on the island per category prepare the visitor for what he is about to see during his explorations, binoculars and camera in hand.

Dominating the EIC, turtles occupy the wall and by-walls facing the entrance. Three-dimensional, almost life-size figurines of the leatherback, the loggerhead, the green, the Olive Ridley and the hawksbill turtle are "floating" in a light blue background alluding to the sea, so the visitor can admire their looks and notice their similarities and differences. Information on all five species is available on five individual wall panels including maps with their main nesting sites, while two tables describe the life cycles, dangers and crucial role of the sea turtle for the world's oceans. After the turtles, visitor find themselves "immersed" in a panel imitating the waters hosting the coral reef of Masirah Island. The importance of coral reefs worldwide and the description of the pristine reef of Masirah dominate this panel and before continuing with the visit, the guest can't help but take their time exploring all the creatures situated in the panel: Turtles, anemone fish, corals, cuttlefish and many more. Five showcases of seashells follow. Some 250 species of both bivalves and gastropods collected on the island and donated to the museum by a long-time Masirah resident, Mr Martyn Day, are displayed. A panel on the wall describes mollusks and the importance of the summer monsoon's influence for them in Oman.

Fig1. Loggerhead turtle on Dahriya beach, Masirah (©Martin Gaethlich/MTCP).

Fig2. Loggerhead turtle panel in EIC (©Martin Gaethlich/MTCP).

Masirah Island is there for everyone to discover. Should you visit, make sure you pass by the EIC first. It will turn your visit into a more knowledgeable and interesting one.

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Fig3. Loggerhead hatchlings heading to the sea, Biyadh Beach, Masirah (©Martin Gaethlich/MTCP).

OBSERVATIONS ON FOOT AND MOUTH DISEASE IN VACCINATED AND UNVACCINATED WILDLIFE IN THE UNITED ARAB EMIRATES

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Foot-and-mouth disease (FMD) is a highly contagious, but usually nonlethal disease of ruminants, characterized by vesiculation of the oral mucosa and of the skin of the feet (Thompson et al, 2001). The virus is endemic in domestic livestock populations in the Middle East (serotype O and A) (Knowles et al 2005). There are few reports of FMD in wildlife in the region, although FMD was reported in gazelles in Israel in 2007 (Promed, 2009) and Shimshony et al (1986) described a FMD outbreak in mountain gazelles that caused severe mortality.

Our article summarises the features of two outbreaks of FMD in one unvaccinated collection and a second vaccinated collection of wild ungulates and highlights the importance of vaccination protocols to protect wildlife in a region where infectious viral diseases, including FMD, are endemic.

Site 1 (unvaccinated) was a collection of dorcas gazelles (~100) (*Gazella dorcas*) and sika deer (~25) (*Cervus nippon*) living within a large walled garden within Dubai. A dairy farm was located within the grounds. The week before the investigation many gazelles had died. On 29/12/2008 it was noted that the majority of deer and gazelles were lame (see Figures). Many young gazelles died. Although most of the deer were observed to be lame, none died. Four immobile gazelle were euthanased and submitted to the CVRL. Approximately 50% of the gazelle died over a 6 week period. Tongue erosions were observed, but foot lesions were not observed. FMD virus type O was isolated from tongue lesions, and organs.

Site 2 was a private collection comprising blackbuck (~80) (*Antelope cervicapra*), sand gazelle (~20) (*Gazella subgutturosa marica*), Arabian oryx (~45) (*Oryx leucoryx*), mountain gazelle (~8) (*Gazella gazella*), impala (~48) (*Aepyceros melampus*) and Speke's gazelle (~36) (*Gazella spekei*) held at a collection outside Dubai. Most ungulates had been vaccinated annually against FMD since 2006. The Arabian oryx, mountain gazelle and Speke's gazelle and a group of 10 sand gazelle were kept in fenced enclosures and every adult animal in these groups had been vaccinated within the previous 3 months. The blackbuck, impala and the remaining sand gazelle population lived within the 350 hectares of the walled grounds of the collection. Although many of these animals were captured and vaccinated annually by herding them into a raceway system (O'Donovan and Bailey 2006), it was not possible to catch all of them. We estimate that 75 % of these animals were vaccinated 10-12 months previously. On 29/01/2009 a post parturient female blackbuck was found depressed and unable to stand next to a dead calf that she had delivered. The female was euthanased and submitted to CVRL. Lesions observed in the female included tongue erosions, focal ulceration of the lip and white stripes on the myocardium. FMD virus type O was isolated from tissues. During February, FMD was confirmed in one stillborn oryx calf, one juvenile blackbuck, and 2 sand gazelle calves. Other than the first euthanased female blackbuck, FMD has not been confirmed in other dead adult animals at site 2 from the first case until the current time (June 2009).

Viral isolates from both outbreaks were sent to the World Reference Laboratory at the Institute for Animal Health (UK). The O virus was closely related to FMD strains from India (Ind-2001) and Iran (Irn-2001).

The source of infection was not confirmed for either outbreak. At site 1, the infection may have originated from recently imported livestock or from cow dung compost, both originating from adjacent countries where FMD is known to be endemic. At site 2, the authors were informed by local veterinarians that a sheep farm adjacent to the collection had FMD immediately prior to the outbreak in the wildlife.

Fig1. Gazelle walking on tip-toe (©Tom Bailey).

Fig2. Gazelle showing unilateral lameness (©Tom Bailey).

These outbreaks demonstrate how FMD has the potential to wreak havoc upon a susceptible population of unvaccinated exotic ungulates managed in captivity. Few wildlife collections in the Middle East routinely vaccinate their animals against infectious diseases. An important reason is that large numbers of semi-free living exotic ungulates such as gazelles and oryx are challenging to catch and safely handle. Handling systems for exotic ungulates are becoming more commonly used (Tamer, Fauna Research, USA). Since 2006 an annual vaccination programme was initiated for all ungulates at Site 2.

The abstract of a study by Kilgalon et al (2008) assessing the immunological response of Arabian oryx to FMD vaccine is presented in this newsletter. Kilgalon et al (2008) concluded that a single dose of FMD vaccine may not elicit a sufficient antibody response in Arabian oryx to confer lasting protection and recommended as a standard prophylactic regimen, follow up doses as in domestic livestock. However, from a practical perspective, capturing exotic hoofstock for booster injections one month after primary vaccination, or even biannually is practically impossible in most collections. Our observations indicate that, although most animals at site 2 were only vaccinated annually, they were afforded good protection when exposed to the same FMD strain that caused high mortality in unvaccinated gazelle at site 1. Clearly, further research is required in this area.

References

A complete and fully referenced version is available for download on the WME News website.

Fig3. Mouth lesions in gazelle with Foot and Mouth Disease (©CVRL, Dubai).

IN THE FOOTSTEPS OF OUR ANCESTORS – ESTABLISHING A SENSE OF PLACE

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Introduction

When I first arrived in the UAE, as an instructor at the HIgher Colleges of Technology in Al Ain in 1996, I became fascinated by the desert and the world of the bedou, the nomads that roamed the vast seas of sand by camel before the arrival of the car. However, with the discovery of oil in the region and the onset of modernization, many of the traditions and heritage activities have been lost to today's youth who are caught up with the exponential growth of an oil rich country, wholeheartedly keen to embrace 21st century values. Many of the young men and women of todays GCC are in danger of losing their connection with their natural environment and from traditions such as riding camels.

The UAE has diverse natural terrain that spans from fjord like coasts, spectacular mountains, savannahs and great sands seas that is synonymous with the region. These areas were once abundant with predators including Arabian wolves and leopards, and hares, gazelles, bustards and eagles. The rate of construction and development has been so extensive, vast areas have been consumed by the beast of progress. Many of the youth remain in these smart cities somehow cocooned from the natural world situated a few kilometres away from the urban sprawl.

While working at Sharjah Higher College of Technology I devised a programme that attempted to promote national identity, re-establish contact with local heritage and to expose young Nationals to the diverse and outstanding natural beauty of the UAE. By September I had received approval to start planning to lead traditional camel expedition or "Qafilah" across the country. Aptly titled "In The Footsteps of Our Ancestors" the journey retraces a traditional camel caravan from an ancient harbor nestled amongst the Fjords of the Hajar Mountains to Sharjah one of the earliest settlements in the Northern Emirates.

So, as the sun broke on the morning of Saturday 22nd November, along with nine students and twelve camels, dressed in traditional kandorah and gutrah, we rode out of Dibba Al Hisn to embark on our historic journey. Prior to the start of the expedition, quite remarkably, only one of the students had experience of riding a camel. By day one all had become competent in riding and had been given lessons in navigation and basic campcraft. With camels it is important that, where possible, the caravan is single file, as soon as more than two ride abreast a race tends to break out, subtly at first which then leads to a full gallop and chaos. We learnt this very early on in the first day and we were very keen not to repeat it involuntary. We headed along a wide floodplain into the intimidating Hajar Mountains, lunch was egg noodles cooked under the welcoming shade of an acacia. Although considered winter, temperatures still could hit over twenty five degrees celcius during the hottest part of the day.

Thirty five kilometers and seven agonizing hours of riding, we reached our first campsite, a plateau in the Hajar overlooking the plains thousands of feet below. We set about hobbling the camels, striking camp and preparing food. Over dinner around the "majlis" we discussed our achievements and what we had learnt from this experience. In the tradition of the forefathers, life revolved around the rhythm of the day, breaking camp before sunrise and traveling across the desert through the day pitching camp as the sunsets.

Fig 1. Dawn in the Savannah (©Brad Moody).

Fig2.Author discussing the next day's journey (©Brad Moody).

On the sixth days we reached the University City, our final destination, to a procession of thousands of students from the various college campuses. They had been kept updated by GPS transponders uploaded onto the expedition webpage and by the students daily blog uploaded by a satellite modem stowed on one of the camels. The expedition had covered over 160km of the most challenging terrain in the world and had left only footprints behind, similar to those of our ancestors….

Programmes such as these have created a debate within the local community on the importance of maintaining connections with the past. The students that participated gained a great deal by experiencing the hardships endured by their families, but it also gave them insights to the diversity and beauty of Arabia.

David Jenns has been developing and managing Physical Education Programs in United Arab Emirates for almost twelve years. In 2004, David was elected as a Fellow of The Royal Geographical Society, for his efforts in developing a wilderness education and outdoor leadership programme with UAE National Students in The Abu Dhabi Emirate. He is currently Managing Director of Libra and Director of Education for Absolute Adventure Education.

Fig3. Campfire in the high dunes (©Brad Moody).

PREDATORS PERSECUTED IN THE ASIR REGION, WESTERN SAUDI ARABIA

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Keywords (predators, persecuted, Asir Region, Saudi Arabia)

Introduction

Predators are never popular in rural farming areas where they are viewed as actual or potential stock raiders and consequently actively persecuted where encountered. As a result of this human- predator conflict numbers of especially the bigger predators such as leopard, wolf and hyena have declined dramatically throughout their natural range in Saudi Arabia.

Globally Wolves (*Canis lupus*) are classified as Least Concern (*Mech & Boitani 2008*) while striped hyena (*Hyaena hyaena*) is classified as Near Threatened (Arumugam, Wagner & Mills 2008) by the IUCN. According to Mech & Boitani (2004) 500 to 600 Arabian wolves (*C. l. pallipes Sykes 1831*) are estimated from the Arabian Peninsula while Nader (1996) views wolves with more or less stable populations in Saudi Arabia although still considered rare. Striped hyena, with populations estimated between 300 to 400 animals, is steadily declining in Saudi Arabia (Nader 1996) and expected at lower densities than wolves.

Methods & Results

Wadi Tarj is approximately 66 km northeast of An Namas (between Abha and Al Baha) in the Asir Region in western Saudi Arabia accessible along a gravel access route through extremely rugged terrain (Figure 1).
On 23 February 2009 during a recent field survey to Wadi Tarj we came across 7 wolves and 1 striped hyena killed at 3 different locations. The wolves were displayed hanging from *Acacia tortilis* trees (6 individuals) and an electricity pylon (1 individual) and hyena from an *A. tortilis* tree (Figure 2). This equates to 0.02 hyenas and 0.12 wolves per km travelled probably indicative of their general densities in suitable habitat throughout the area. Skin samples were taken for genetic analyses and to determine the level of hybridisation, if any, of the wolves with domestic dogs.

These predators were hunted at night from a vehicle using a spotlight as they were held responsible for the loss of sheep in the area. Except for the skin and scull, the entire carcass of the hyena was removed. It is known that carcasses are used for medicinal purposes – e.g. to regulate blood pressure (Faisl Saeed Ashary pers com).
Other predators having been reported killed in the Wadi Tarj area include caracal (*Felis caracal*) and ratel (*Mellivora capensis*) while leopard (*Panthera pardus nimr*) do not occur in the area anymore although 2 individuals have recently been killed northwest of An Namas (Al Aqiqah area) in the Jebel Saker area (Faisl Saeed Ashary pers com).

Fig1. Wolves (male and female) shot and displayed as warning to other predators in the Wadi Tarj area (©Peter Cunningham).

Fig2. Location of Wadi Tarj and predator remains in south western Saudi Arabia.

Discussion

The persecution of predators throughout Saudi Arabia continues to be disconcerting. These sightings of dead wolves and hyena, which are not restricted to the Wadi Tarj area (Ernest Robinson pers com), indicate their persistence in the rugged mountainous western regions albeit presumably at low densities. Increased farming activities and the bulldozing of new routes to facilitate easier access to these farms will undoubtedly result in further human-predator conflict and the decimation of the remaining predators in these areas previously protected by their remoteness. Dogs used to protect free roaming goat herds pose an additional threat to the genetic integrity of the remaining wolves (Wronski & Macasero 2008). It is imperative to both protect wildlife; including predators in situ by employing local community rangers or capture and initiate an ex situ breeding programme to ensure the future survival of predators whose existence is on a knife's edge in Saudi Arabia.

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NEW PUBLICATION: "TOWARDS ENVIRONMENTALLY FRIENDLY TOURISM IN ARABIAN BIOSPHERE RESERVES"

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Introduction

The UNESCO Office in Doha, Qatar, has published a new book called "Towards Environmentally Friendly Tourism in Arabian Biosphere Reserves". The objective of this document is to raise awareness about out-door recreational tourism opportunities in the Arab Region. It further focuses on the need to encourage tourists, tour-operators, tourism-planners, developers and concerned authorities to develop and demonstrate environmentally compatible tourism practices in the Arab Region with a special view to outdoor learning laboratories: UNESCO's global network of Biosphere Reserves.
An international team of experts contributed to this publication, looking into environmentally friendly tourism in general and providing best practice examples for sustainable tourism development and environmental education. Further, a case study covers the Qatari Al Reem Biosphere Reserve.

The Benefit of Environmentally Friendly Tourism in Arabian Biosphere Reserves

Travel and tourism have a long tradition which may explain why the tourism industry is the world´s fastest growing economic sector. Tourism has grown over the past few years in the Gulf region. International tourists, as well as migrant workers and professionals, of all economic classes, contribute towards tourism and economic growth, when they decide to spend their holidays within the Arab countries. Consequently, the tourism sector is a promising economic activity to develop to help maintian the growing prosperity of the Gulf region. Tourism also promotes a good international image of the region as has been shown by the development of tourism in Dubai and Oman.

Most Arab States, especially the Gulf States, are economically dependent on their natural resources. One of them, the State of Qatar, located between the Kingdom of Saudi Arabia and the United Arab Emirates, has the highest per capita income in the world, mainly resulting from its oil and gas reserves. With regard to shrinking energy resources, as well as based on the lack of freshwater, especially in the Arabian Peninsula, it is tremendously important to raise environmental awareness and to promote a sustainable use of natural resources.

The objective of this work was to develop a proposal which provides an informative guideline to establish sustainable, environmental compatible tourism in established or prospective Arabian Biosphere Reserves and other designated areas, in order to conserve the diversity and beauty of nature, as well as to highlight alternatives to mono-structured economies.

As an introduction, the first chapter of the new UNESCO publication focuses on Environmentally Friendly Tourism (EFT) in general, as well as on the importance of community based tourism, local involvement and its contribution to environmental education. The articles provide elementary information about different forms of environmental tourism, like sustainable tourism, cultural tourism, nature based tourism, wildlife tourism and ecotourism.
The second chapter deals with the investigation area, the Qatari Al Reem Biosphere Reserve. This chapter provides information about the reserve, its natural characteristics, recent usage, tourism potentials and current conflicts and problems. Furthermore, the background and development of the declaration as a UNESCO Biosphere Reserve is explained. One main finding of the case study concerning the Al Reem Biosphere Reserve is that it is a unique example of Arabian habitat and culture, and offers significant EFT opportunities and potentials, linked to development and conservation challenges. The diversity of fauna, flora and landscape, as well as the archaeological heritage and traditional architecture can be very attractive to domestic, regional and international tourists.

In the third chapter a variety of recommendations for EFT opportunities in Arabian Biosphere Reserves are highlighted. This includes general tourism activities, like recreational out-door activities, bird watching and camel riding, but also GPS-guided interactive tourist and educational tours, environmentally friendly buildings, innovative camel farms, the traditional Hima system, as well as options for Quranic Botanical Gardens.

Fig1. Spiny tailed lizard in the Al Reem Biosphere Reserve, Qatar (by Henning Schwarze, 2004)

Fig2. Arabian village in the Al Reem BR (by M. Richtzenhain)

Finally the fourth chapter provides concrete recommendations for sustainable tourism project development in the Al Reem Biosphere Reserve and expected benefits to the regional economy.

The establishment of EFT is one possible solution to attract quality tourists and also to adher to the rules and regulations of the Biosphere Reserves. Therefore, the new publication offers important information about different conservation and development opportunities for protected areas in the Arab Region. Furthermore, next to conceptional information about environmentally friendly tourism, the document develops innovative trends and ideas for future planning.

Distribution

The e-Book is available as a PDF document and can be downloaded free of charge (http://www.unesco.org/mab/doc/brs/BRs_Doha.pdf). For further information please contact Dr. Benno Böer, UNESCO Doha, Qatar (E-Mail: b.boer@unesco.org).

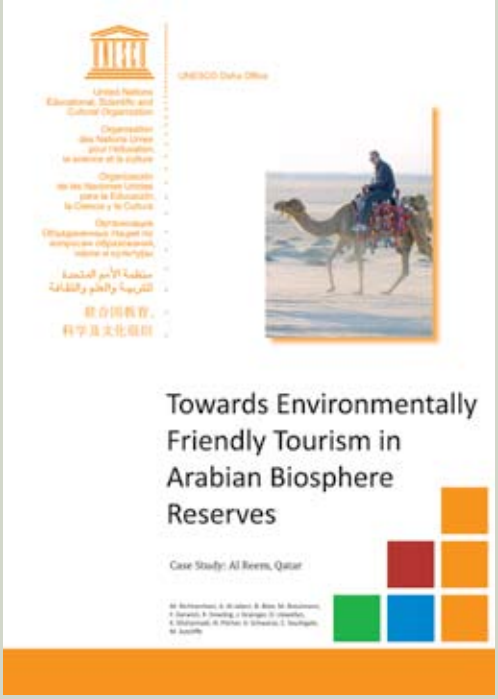

Fig3. Frontpage "Towards Environmentally Friendly Tourism in Arabian Biosphere Reserves" (UNESCO, 2009)

Global Re-Introduction Perspectives

Reintroduction Case Studies from around the world. Edited by Pritpal S. Soorae. Published by the IUCN Reintroduction Specialist Group. 2008. 284 pp

Reviewed by Tom Bailey

It was with great pleasure and interest that I write a short review of this new publication, edited by Pritpal Soorae, coordinator of the IUCN Reintroduction Specialist Group. This special issue of Global Re-Introduction Perspectives provides 62 case-studies covering invertebrates, fish, amphibians, reptiles, birds, mammals and plants. The case-studies are presented in an organised format in the following order: Introductions, Goals, Success Indicators, Project Summary, Major Difficulties Faced, Major Lessons Learned and Success of Project with reasons for success of failure.

This is an important document because it succinctly condenses complicated projects that have taken many years of planning into a short easily digestible format. This concise format means that just because my expertise is birds and warm furry animals, I can easily read about subjects outside my sphere of expertise. Having spent a year at the Zoological Society of London it was fascinating to read about the reintroduction of Field Crickets into Southern UK. Invertebrates may not be my forte, but as a vet I was able to appreciate the importance of the health screening-component of the project. Hameogregarine parasite infestations had prevented the release of captive bred crickets on a number of years. It was interesting to read how many (but not all I hasten to add) projects had health screening protocols.

A good proportion of projects from the Middle East were featured, including reviews of the reintroduction of houbara bustards, Arabian oryx, red-necked ostrich, and sand gazelle, making this a very useful resource for anyone in the region working in projects that may be involved with animal re-introductions. What was important, even if projects were partially successful was the apparent importance placed on getting cross community support, especially for release projects involving predators (e.g. eagles) and how single species re-introduction projects often help to raise awareness of conservation in the wider community which can lead to the initiation of other release projects.

It is positive to see the list of sponsoring organisations and note that Abu Dhabi was involved with funding projects within and outside of the UAE. It is this broader view on supporting conservation initiatives locally and regionally that are really helping to raise the international profile of organisations, such as the Environment Agency of Abu Dhabi. Congratulations to IUCN for putting this important document together.

The book can be downloaded as a PDF document on the RSG website downloads section at: (http://www.iucnsscrsg.org/rsg_book.html).
A second edition is planned for 2010 if you are interested to submit a re-introduction project article please contact the Editor at psoorae@ead.ae

Fig1. Arabian Oryx being vaccinated against FMD in a Tamer at Site 2 (© O'Donovan)

What's new in the literature

Kilgallon, C., Bailey, T.A., O'Donovan, D. Wernery, U. and Alexandersen, S. (2008). A Temporal Assessment of Seroconversion in Response to Inactivated Foot and Mouth Disease Vaccine in Arabian Oryx (*Oryx leucoryx*). Veterinary Record. 163: 717-720.

Emergency foot-and-mouth disease (FMD) vaccination has been considered to be a viable way of protecting endangered captive exotic ungulates in the face of an outbreak of this disease. In this study ten male Arabian oryx were vaccinated with a commercially available standard aqueous FMD vaccine with aluminium hydroxide as adjuvant. We present results of the antibody titers recorded against serotype O and A using solid phase blocking ELISA (SPBE) and virus neutralization techniques (VNT). Although mean SPBE antibody titers greater than 1.45 log10 were recorded for serotype A, low titers were recorded for VNT for both serotypes and for the SPBE titers for FMDV/O. On this evidence further doses such as a booster dose given at around 4-6 weeks after the initial vaccination are likely to be required to provide prophylactic protection against the disease in Arabian oryx. The standard commercial aluminium hydroxide adjuvanted vaccine used in this study appears unsuitable for use in emergency vaccination unless potentially incorporated into a combination strategy comprising an initial basal dose given without any particular risk for introduction of disease followed by a booster dose in the face of an outbreak.

REVIEWS AND NEWS

10TH CONSERVATION WORKSHOP FOR THE FAUNA OF ARABIA: PROTECTED AREA SYSTEMS IN THE ARABIAN PENINSULA

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The Tenth Annual Conservation Workshop for the Fauna of Arabia was held at the Breeding Centre for Endangered Arabian Wildlife (BCEAW) in Sharjah, UAE, from the 10th - 11th of February 2009. This regional forum is hosted by the Environment and Protected Areas Authority (EPAA) of the Government of Sharjah, under the patronage of His Highness Dr Sheikh Sultan bin Mohammed al Qassimi.
In recent years the workshops have focused on protected areas in the recognition that the identification and protection of suitable habitats was a key conservation issue throughout the Arabian Peninsula. The 10th Workshop in 2009 sought to advance the theme of protected areas by setting three objectives: (1) to review the status of protected areas in the Arabian Peninsula; (2) to apply a management effectiveness tracking tool; and (3) to progress plans for the promotion of Trans Boundary Conservation Areas (TBCAs).

Review of regional protected area status

Country representatives provided a brief summary of the status of developments within their protected area networks. Reports were presented for 61 sites in Jordan, Saudi Arabia, Yemen, Oman, Bahrain, and the UAE. These highlighted the importance of current, active, integrated management plans for all sites within a given network; a general lack of adequate visitor facilities; continued impacts from recreational and harvesting uses, and a continued need for social research to balance the current good standard of biological research to inform area management.

Management Effectiveness Tracking Tool (METT)

An adaptation of the METT was used to explore management effectiveness in seven protected areas drawn from different ecoregions in the Peninsula. The analysis highlighted a need for better management plans with explicit links between monitoring indicators and protected areas objectives. Moreover, there was a general need for more socio-economic information and greater community involvement in protected area planning and management.
Plans are underway for the 2010 meeting; contact Mr Kevin Budd, BCEAW, Sharjah, UAE. Email: breeding@epaa-shj.gov.ae.
A full version of this report is available at the WME News website.

Fig1. Mr Abdula Aziz al Midfa introducing the Conservation Workshop.

PERSECUTION OF CARACALS IN THE UAE

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Despite being protected under federal law, the Arabian caracal (*Caracal caracal schmitzi*) continues to be persecuted in the UAE. Reports of dead animals put on display are frequent. But the sighting of nine animal corpses in a remote area of the Hajar Mountains is unusual considering the large number of animals involved. The incident calls for better enforcement of the existing laws.

The caracal is listed as Least Concern (Breitenmoser et al, 2008) by the IUCN but its numbers thought to be declining in the UAE. The caracal is listed in Appendix I of federal law 24 of 1999. This means that anyone destroying, killing or trafficking live and dead parts of the animal gets a prison sentence and a fine.

The corpses of the nine dead animals were seen hanging from a ghaf tree (*Prosopis cineraria*) along a gravel road in the vicinity of the Tawian Dam. Richard Hornby, the Abu Dhabi resident who discovered the corpses, said they were in various stages of decomposition. Some of the animals looked like they had been killed two years ago, while other corpses were fresher, belonging to animals which must have died as recently as January this year. Another sighting, this time of two dead caracals, has been reported by members of the Dubai Natural History Group.

"Predators like the caracal are seen as competitors by people and are therefore persecuted with little regard for their endangered status", said Dr Christophe Tourenq, manager for science and research at the Emirates Wildlife Society - World Wildlife Fund for Nature.

One solution is better enforcement of the law. "It is terribly sad that anyone would firstly kill these animals and then be so proud, ignorant and disdainful of the law as to want to hang them in a tree for public display," said Mr Hornby. "Certainly, there is an obligation on the government to investigate the matter and at least try to educate those involved, if not prosecute. Both would help to spread the word that such actions are unacceptable." Another necessary step is education. While there are no initiatives now, a good example exists from the past. Founded by a Dutch expatriate, Marijke Jongbloed, the Arabian Leopard Trust was functioning through the 1990s, educating city dwellers as well as local tribesmen about conservation. The initiative was so successful as to raise enough money for a leopard breeding programme, which later provided the foundation for the government-sponsored Sharjah Breeding Centre for Endangered Arabian Wildlife. "The Arabian Leopard Trust was an excellent initiative taken with the active support of the ruler of Sharjah," said Peter Hellyer, co-editor of the book The Emirates: A Natural History.

"It is time that there was a resumption of serious efforts by both local and federal agencies to educate the population of the mountains and to promote further research and active conservation related to species such as the Arabian Leopard, caracal and others," said Mr Hellyer.

Fig2. Dead caracal removed from a ghaf tree in the UAE (© Richard Hornby).

References

Breitenmoser, C., Henschel, P. & Sogbohossou, E. 2008. Caracal caracal. In: IUCN 2008. 2008 IUCN Red List of Threatened Species, www.iucnredlist.org The Emirates: A Natural History.

Acknowledgements

I thank Dr Tourenq from the Emirates Wildlife Society - World Wildlife Fund for Nature, for sharing a copy of federal law 24 of 1999. Thanks to Mr Hornby and Mr Hellyer for alerting me about recent sightings and to Dr Wernery, (CVRL, Dubai) for providing information on the Arabian Leopard Trust. For a copy of the original article published in The National newspaper see: http://thenational.ae/article/20090318/NATIONAL/855511822