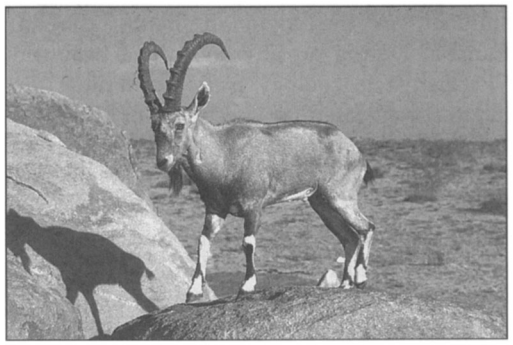
The ibex in Saudi Arabia



An ibex at the National Wildlife Research Center near Taif, Saudi Arabia (*Xavier Eichaker*).

When the National Commission for Wildlife Conservation and Development (NCWCD) was established by the government of the Kingdom of Saudi Arabia in May 1986, the status of the ibex *Capra nubiana* F. Cuvier, 1985, was virtually unknown.

As a long-time resident of Saudi Arabia and an avid student of the country's wildlife, I had long heard stories about this animal, known locally as the 'waal'. Bedouin friends, knowing of my interest, occasionally brought me ibex horns, always very old and weathered. Occasionally I would find 'blinds' or 'hides' near water-holes, which may have been erected with ibex in mind, or may have been built for shooting any one of a number of other animal species.

The first definite proof that the ibex was not extinct in Saudi Arabia occurred in October 1978, when John Kemp, a geologist working from a helicopter, saw four ibex in the mountains near Umm Lajj and was able to photograph them. Subsequently, when geological investigations on the Arabian shield and the use of helicopters increased, there were many more reports of ibex sightings from helicopter passengers and pilots; however, these reports were generally of questionable reliability.

The NCWCD engaged Kushal Habibi as a wildlife biologist in 1987 and from then until 1990 he participated in wildlife surveys. He located 15 viable populations of ibex, mainly in the northern Hijaz in the north-west of the country on the Jordanian border. One population is in the south-west, where the mountains rise from the Wadi Tayyah drainage system on the As Sarawat escarpment near Abha, and another population is in central Arabia, 200 km south of Riyadh at Hawtat Bani Tamim on the Jabal At Tuwayq escarpment, an area of 2369 sq km that NCWCD had selected as a wildlife protected area. All ibex populations identified, except the one at Wadi Tayyah, live in areas that have an average, annual precipitation of less than 100 mm.

Habibi started his studies at the Bani Tamim when it was established as a protected area in 1988 and estimated an ibex population of 50–100 animals. By 1992 he was able to report a population of 250 with a high proportion of juveniles, indicating that the management activities of the NCWCD at Bani Tamim had been successful.

Habibi's *The Desert Ibex*, details his meticulous biological studies and the methods used to determine the ibex's feeding ecology, population density and composition, social behaviour including courtship, aggression, agonistic behaviour, breeding and reproductive activities, and the mother–young relationship.

Habibi's conservation and management recommendations emphasize the desirability of responsible involvement of local pastoralists: 'Whilst the Bedouin probably have a better rapport with nature and understanding of conservation issues than any other sector of the community, and in some cases have played important roles in wildlife management programmes, the fact remains that many who continue their pastoral lifestyle consider restrictions on land use an infringement of their traditional rights'.

The Desert Ibex is a resounding endorsement of the conservation strategies adopted by the NCWCD, which culminated in an achievement to gladden the hearts of conservationists who, unfortunately, are more and more accustomed to bad news. The author's painstaking work was possible due to the astute leadership and management of His Royal Highness Prince Saud Al Faisal, Managing Director, NCWCD, to Professor Abdul Aziz Abu

https://doi.org/10.1017/S0030605300021335 Published online by Cambridge University Press

Zinada, Secretary General of NCWCD, and to Dr Habibi's colleagues and field workers.

There are many wildlife conservation problems in Saudi Arabia. The maintenance and, in some cases, recovery of the biodiversity and, indeed, all animal life, depend on healthy rangelands but nearly all are overgrazed to a greater or lesser extent and much has become desert. The demand for red meat and animal produce continues to increase. The most optimistic carrying capacity of the rangeland of Saudi Arabia, which covers *c.* 1.9 million sq km, is 3.89 million LSUs (livestock units; one LSU = one camel or 10 sheep or 10 goats); the red meat demand in Saudi Arabia is estimated as 15.23 LSUs, nearly four times the carrying capacity of the land.

John Gasperetti
c/o Ghassan N. Pharaon Hospital, PO Box 4553
Jeddah 21412, Kingdom of Saudi Arabia

Sources

Child, G. and Grainger, J. 1990. *A Plan to Protect Areas in Saudi Arabia.* National Commission for Wildlife Conservation and Development, Riyadh.

Habibi, K. 1994. *The Desert Ibex.* National Commission for Wildlife Conservation and Development and Immel Publishing Ltd, London.

Tiger–human conflict in south-eastern Tibet

In recent years, Bengal tigers *Panthera tigris tigris* in northern Motuo (Medog) in south-eastern Tibet have come into increasing conflict with local people, especially at Gedang, Jaresa and Bangxin. In the past 3 years the situation has become desperate for both the tigers and the Tibetans who moved from the windswept Chamdo upland into the forested Chimdro Tsangpo valley on the southern slope of the Himalayas during the Tibet crisis in the 1950s.

Loss of lowland forest to agriculture, and unregulated hunting in the main Yarlung Tsangpo valley caused tigers to move up the tributaries in search of prey. The lack of prey has resulted in heavy losses of livestock in Tibetan villages. At Gedang, between 1 October 1993 and 31 July 1995, 302 horses, mules, cattle and yak were lost to tigers. Tigers have been driven to cover long distances in search of prey. For example, a solitary tiger tracked by myself and a colleague moved up a valley from a kill site at 2100 m, crossed the 4570-m Chimdro La pass and descended on to the northern slopes of the Himalayas, where no tigers had been reported previously and very few large prey could be found because of habitat deterioration. Within a few days the animal re-crossed the same pass and returned to its normal range.

Patterns of sequential and altitudinal occurrence and disappearance of tigers in the mountains in Motuo suggest that the tigers that prey on livestock are migrants from the lower valleys. Fifteen years ago tiger signs were considered common near lowland Beibeng and the town of Motuo but occur there no longer. Ten years ago, hunters living at 1500 m at the mouth of Chimdro Tsangpo, a major tributary of the Yarlung Tsangpo in northern Motuo, reported that the trails near their villages were 'full of tiger tracks'; today the tracks and livestock killed by tigers are mostly found between 1900 and 3500 m in the upper Chimdro Tsangpo, which was not frequented by tigers 10 years ago.

Despite the fact that some tigers come into villages, mauling of people is likely to occur only when someone walks at night and accidentally encounters a tiger. To date no man-eater has been produced, which is fortunate for both tigers and humans. Mauling or killing humans would undoubtedly increase the Tibetans' animosity towards the tiger. In the past 6 years, five tigers have been killed in Chimdro Tsangpo and adjacent valleys.

Conservation of this tiger population is going to be very difficult. Although Motuo has been officially declared a nature reserve, management of the forests and wildlife is still in its infancy. The remoteness of the area and lack of roads have helped to preserve the forests but have also made management extremely difficult. Predation occurs year-round and the tigers apparently live to a large extent on

cattle and yak, on which Tibetans depend for milk and butter, and on mules and horses, which Tibetans use to carry essential supplies across the Himalayas. A resource manager is faced with the reality of guarding a prey base for the tigers while protecting the lives and property of local people.

In order to reduce tiger–human conflicts, the Forestry Department of the Tibetan Autonomous Region is considering resettling some villages outside the tiger's range. This is believed to be essential if the tiger population is to survive. Once domestic livestock are removed tigers are going to find it hard to survive even if the population declines of the tigers' natural prey – takin, red goral and serow – are halted. The opinion is that they will have a chance but would have to spend a considerable amount of time hunting.

Ming Jiang Qiu
Kunming Institute of Zoology
Chinese Academy of Sciences
People's Republic of China

SSC Plants Programme news

The IUCN/SSC plant conservation subcommittee is stepping up the level of activity in order to make a real impact on plant conservation. Some plant specialist groups – for palms, Chinese plants, cacti and succulents, ferns and orchids are well on the way to publishing action plans but it has been agreed that the regional structure of the plant specialist groups needs to be strengthened and country plant action plans promoted to link the expertise of the various systematic groups. A 'Top 50' campaign has been adopted to raise the profile of plants, with each specialist group listing the 50 species in its area of concern that are in most danger of becoming extinct.

In recent years public attention has been focused successfully on the plight of tropical rain forests but the forests of the boreal and temperate regions have been neglected. The SSC already has a specialist group for conifers, which are mainly boreal and temperate, and is establishing a sister group for broadleaves (see p. 22 of this issue). In addition to problems in the field, the group will look at, among other things, the lack of genetic diversity in arboretum collections and nursery stock, and poor standards of documentation. One of the main objectives will be to continue work on the revision of a list of threatened temperate trees produced in 1990.

Southern Africa is one of three centres of endemism and diversity for the world's cycad flora and approximately one-fifth of the world's cycad species are restricted to this region. However, the massive illegal trade in wild-collected plants has devastated cycad populations. The problem has existed for several decades but, with ever declining numbers, each act of plunder has an increasingly harmful effect on remaining populations. *Encephalartos cerinus* has almost been wiped out; over 300 *E. altensteinii* plants – approximately 8 per cent of individuals remaining in the wild – were removed illegally by a dealer earlier this year; and *E. latifrons* is considered to be the most endangered cycad in South Africa, with fewer than 40 specimens in the wild. These latter have been implanted with microchips, which will identify them should they be discovered later in private collections.

In mid-1994, 45 delegates from provincial conservation departments, botanical gardens and research institutes in South Africa met to discuss cycad problems and, in collaboration with the IUCN/SSC Cycad Specialist Group, set up the Cycad Conservation Forum. This is badly needed because the different Nature Conservation Ordinances in each province have resulted in opportunities for laundering illegally removed cycads by moving them from one province to another. The problem of what to do with confiscated plants still exists. The National Botanical Institute in South Africa has taken on the responsibility of coordinating cycad conservation activities at a national level including planning further meetings of the forum.

Stephanie Pendry

Source: Plant Conservation News, No. 2, August 1995, 1 & 4–5.

https://doi.org/10.1017/S0030605300021335 Published online by Cambridge University Press

Trade in seahorses and sea moths booms

The trade in seahorses (*Hippocampus* spp.) for use in medicines and aphrodisiacs, as aquarium fishes and curios, and for foods, is increasing and is threatening wild populations globally. Seahorses are currently afforded no formal protection but they are very vulnerable to fishing pressure. Potential rates of reproduction are low: only males become pregnant and undertake the long period of care for the small broods. Strict monogamy means that the social structure is easily disrupted, their sparse distribution retards re-pairing and their low mobility and small home ranges restrict recolonization of depleted areas. Seahorses are also threatened by destruction of their coral, seagrass and mangrove habitats in temperate and tropical regions.

Seahorses are primarily destined for use in Traditional Chinese Medicine (TCM) to cure asthma, broken bones, incontinence, impotence, kidney disorders, skin ailments, thyroid disorders and excessive mucus production. A growing list of countries trade in seahorses, including Australia, Belize, Brazil, China, Dubai, Ecuador, India, Indonesia, Japan, Kuwait, Malaysia, Mexico, New Zealand, Pakistan, the Philippines, Singapore, Spain, Sri Lanka, Tanzania, Taiwan, Thailand, United Arab Emirates, USA and Vietnam. China is the biggest importer, taking about 6 million a year, followed by Taiwan (3 million), Hong Kong (2.5–3 million) and Singapore (2–3 million). It is estimated that, world-wide, *c.* 20 million seahorses are killed for the trade each year and that the aquarium trade may account for another million live individuals. Demand is likely to continue increasing as China's economic boom leads to greater wealth, fuelling greater consumption of animal products in medicines and tonics; sources in China report that seahorse sales are 10 times greater than 10 years ago.

Almost without exception, seahorse fishers in South East Asia report diminishing catches. Some conservation efforts have been started in parts of the Philippines and Vietnam. A community-based seahorse management project in the Philippines has attracted a high level of participation by seahorse fishers and other villagers. They have established exploitation-free zones, which they patrol effectively and are restocking with seahorses; they hold pregnant males in cages in the sea until they give birth; they participate in seahorse censuses and surveys; and they report daily catches, providing vital data about changing catch per unit-effort and seahorse growth and reproduction parameters. There are also captive-breeding initiatives under way in at least eight countries.

Given the difficulties in controlling the seahorse trade and the conservation threats to wild stocks, it is important that demand be reduced and seahorse populations be enhanced. The TCM community should seek and promote alternatives to seahorses that are both medically acceptable and ecologically sustainable. There is also a need to regulate the trade in seahorses for aquaria and souvenirs.

Pegasids (sea moths, sea birds, sea swallows or sea sparrows) are small, benthic and well-camouflaged teleost fishes of the family Pegasidae. They are used in TCM to reduce coughing and mucus production, and to improve sexual and kidney function. Rumours also credit pegasids with curing throat and breast cancers. However, the use of sea moths in TCM has only developed recently; they are not mentioned in any of the classical herbals.

Most pegasids on sale in China and Hong Kong are caught in the Gulf of Tonkin, between China and Vietnam, by trawlers primarily seeking other fish foods. Millions are consumed every year in southern China and Hong Kong: one Hong Kong wholesaler alone reports selling 50,000 annually at prices as high as £65 a kg. There are no past or present data on population size or geographic ranges of sea moths, making it impossible to assess the impact of this trade. However, the only quantitative study of their biology found that they live at very low densities, with one monogamous pair per 325–477 sq m of suitable habitat. They move slowly and are easy to catch, even with hand-nets. The parallels with the seahorse trade are evident. China used to obtain most of its seahorses from

domestic waters where they, too, were primarily a by-catch of food fishing. Now 10 years later, China has virtually no domestic production and acknowledges that seahorses have been sufficiently overexploited to depress numbers and sizes dramatically. China must now import to meet the hugely increasing demand for seahorses in TCM. Pegasids should certainly be watched as yet another vulnerable group of species.

Stephanie Pendry

Sources: TRAFFIC Bulletin, **15** (3), 125–128; *Pegasid Fishes (Sea Moths) and Chinese Medicine,* FFI 100% Fund report, Amanda Vincent; *New Scientist,* 28 October 1995, 9; *BBC Wildlife,* October 1995, 60.

Kenya rethinks wildlife policy

A Kenya Wildlife Service (KWS) report on wildlife–human conflicts in Kenya was released on 5 July 1995. It was developed by an independent five-member panel, which interviewed conservationists, ranchers, farmers, tour operators, local and national government officials, and others as part of its investigation. In examining one of the most important issues facing the KWS and other wildlife authorities throughout Africa, the report highlighted an opportunity to encourage communities to conserve wildlife by increasing benefits and reducing conflicts. The report recommended a major shift in wildlife management policies, namely encouraging private and communal landowners to exercise greater tolerance of wildlife on their lands in exchange for a chance to gain economically from wildlife-based enterprises such as tourism and game ranching. Wildlife would ultimately benefit by having access to habitat that otherwise might be turned over to farming.

The report also indicated that the costs of living with wildlife must be diminished. Baboons and other monkeys are most frequently cited by farmers as crop invaders, followed closely by elephants. Lions, hyaenas, cheetahs, zebras, eland, buffalo, bushpigs, squirrels, mongoose and grain-eating birds also pose threats to crops, livestock and/or people. Among the solutions proposed to curb damage by wildlife were fencing to keep animals out of crops, eliminating problem animals and compensating for damage. The report pointed out that these methods needed to be used in combination.

Fencing, however, is prohibitively expensive, and would contain only the 30 per cent of Kenya's wildlife that occurs inside protected areas. The shooting of crop-raiding and other problem animals has been ineffective and inefficient, often providing only temporary relief. In 1990 the Kenya Government abolished compensation for wildlife damage other than loss of life. Claimants say payment has been inconsistent, slow to arrive and inadequate. The report suggests setting up an insurance programme to cover for human injury, death, hospitalization, livestock loss and crop damage.

The report also suggests that after an 18-year ban, game hunting should be reopened in Kenya but the KWS Director, David Western, stressed that the ban on hunting elephants, rhinos and other endangered species will continue. There is fairly broad agreement in Kenya that people sharing land with wildlife should receive some benefit from it but there is no similar consensus on how to achieve that goal. The report marks the entry of Kenya, the country with the highest international profile for wildlife preservation on the African continent, into a debate that started several years ago in Zimbabwe, about the efficacy of community-based conservation, benefit-sharing and wildlife use in conserving wildlife. In many countries, the solution to increasing wildlife and human populations and the increasing conflicts between them has been the elimination of most wildlife outside national parks, but Kenya is seeking a solution in which everyone gains – and in which people welcome the presence of wildlife on their land.

Stephanie Pendry

Source: African Wildlife News, **30** (5), 1 & 4.

https://doi.org/10.1017/S0030605300021335 Published online by Cambridge University Press