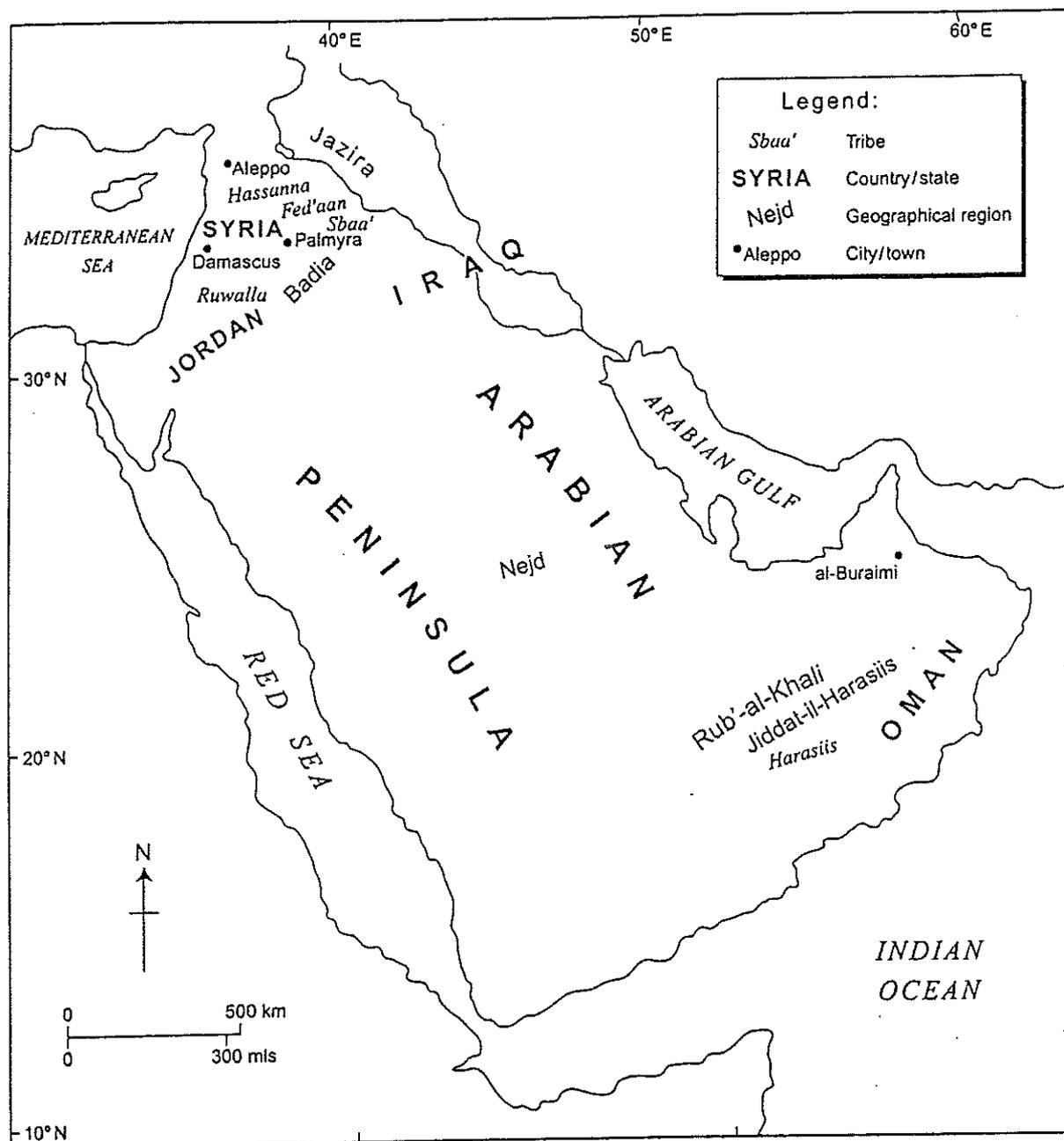


PASTORAL TRIBES IN THE MIDDLE EAST AND WILDLIFE CONSERVATION SCHEMES: THE ENDANGERED SPECIES?

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Wildlife conservation schemes, which by design set out to protect endangered fauna and flora, have a relatively recent history in northern Arabia. Their philosophical underpinnings, though, stem from a long African colonial and post-independence tradition. In East Africa and elsewhere, pastoral populations were long ago forced off their grazing lands, in order to create parks and sanctuaries for wildlife and tourists (Howell 1987, McCabe et al. 1992, Turton 1987). The assumption then was that local populations overstocked and overgrazed the natural environment and were thereby obstacles to effective natural resource management. 'Scientific' management of these areas required the removal of the indigenous population for the long-term benefit of these wildlife preserves. Over the past decade however, there appears to have been a change of heart, and some conservationist circles do now hold conceptual discussions of 'conservation with a human face' (Bell 1987), and the need for community participation (Cernea 1991, IIED 1994). Studies based on a few promising examples of African conservation efforts are now emerging, where indigenous human populations appear to be effectively integrated into conservation and development projects (IIED 1994).

When transposed to the Middle East, Africa's new-found conservation wisdom loses something in the translation (Figure 1). As I shall demonstrate, using a case study of an internationally-supported, wildlife reintroduction project in Oman, conservation schemes in Arabia have continued to regard local populations as obstacles to be overcome – either with monetary compensation or with special terms of local employment – instead of partners in sustainable conservation and development. Without partnership, these conservation efforts are doomed either to ultimate failure or, at the least, to costly programmes which 'guard' the wildlife from the human element. Syria is now developing its own protected wildlife reintroduction area in a part of the desert that provides crucial winter and spring grazing for the herds of a number of Bedouin tribes. The current well-being and subsistence of these communities is at stake. If the Bedouin can be drawn into the planning and implementation of an efficient land-use and water management system, which incorporates them and their livestock into the equation, there is a chance that the wildlife reintroduction project will succeed. On the other hand, if the final design and implementation of the wildlife project ignore the human element, then the outcome will be very costly and unsatisfactory.



Recent Historical Precursors to Current Conservation Paradigms

Government organised parks and protected areas first made their appearance in America and Europe during the last century. Significant areas of land were set aside as wilderness, to be preserved 'untouched by humans', for the good of man. In 1872 a tract of hot springs and geysers in northwestern Wyoming was set aside to establish Yellowstone National Park. The inhabitants of the area, mainly Crow and Shoshone native American Indians, were driven out by the army, which took over management of the area (Morrison 1993). In the United Kingdom, conservationists were mainly foresters whose philosophy stressed that the public good was best served through the protection of forests and water resources, even

if this meant the displacement of local communities (McCracken 1987: 190). This expertise and philosophy was transferred abroad to all of Great Britain's colonial holdings. Now, a century later, most national parks in the developing world have been and, to a certain extent, continue to be, created on the model pioneered at Yellowstone and built upon by the early British colonial conservationists. The fundamental principal of operation remains to protect the park or reserve from the damage which the indigenous local communities inflict.

In Africa problems like soil erosion, degradation of rangelands, desertification, and the destruction of wildlife have been viewed as principally due to local, indigenous misuse of resources. Recent studies have clearly shown that models of intervention developed in the West, in its particular historical context, have been transferred to the developing world with no regard for the specific contexts of the actual receiving environment or peoples (e.g. Anderson and Grove 1987, Behnke and Scoones 1991, Manning 1989, Sanford 1983). For example, the common Western, urban notion of wilderness as untouched or untamed land has pervaded conservation thinking. Many policies are based on the assumption that such areas can only be maintained without people. They do not recognise the importance of local management and land-use practices in sustaining and protecting biodiversity. Nearly every part of the world has been inhabited and modified by people in the past and apparent wildernesses have often supported high densities of people (Pimbert and Pretty 1995). In Kenya, for example, the rich Serengeti grassland ecosystem was, in part, maintained by the presence of the Maasai and their cattle (Adams and McShane 1992). There is good evidence from many parts of the world that local people do value, utilise and efficiently manage their environments (Nabhan et al. 1991, Oldfield and Alcorn 1991, Scoones et al. 1992). These findings suggest, in complete reversal of recent conservation philosophy, that it is when local or indigenous people are excluded that degradation is more likely to occur: 'It suggests that the mythical pristine environment exists only in our imagination' (Pimbert and Pretty 1995: 3).

Rangeland management has had a similar history of Western conceptualised philosophies and technologies being transposed onto the developing world. The concept of sustainable yield and the goal of improved productivity originated in North America and were rapidly adopted in Australia, both territories organised on a system of privately-owned land. For the last fifty years, policy makers have defined the major concern of pastoral regions of the developing world to be overstocking that leads to certain ecological disaster. In this view the problem (too many livestock) has a technical solution (destocking). However the central assumption being made is that pastoral ecosystems were potentially stable and balanced, and become destabilised by overstocking and overgrazing. This bias led to the establishment of a multitude of development projects that promoted group ranching, grazing blocks and livestock associations. But these schemes have failed, leading to fundamental questioning of the basic assumptions underlying this tradition of range management. As has been so admirably shown by Behnke et al.

(1993), pastoral systems are not equilibrium systems. Instead they are continuously adapting to changeable conditions and their very survival depends upon this capacity to adapt. It is, in fact, the 'conventional development practices themselves that are the destabilizing influences on pastoral systems, as they have prevented traditional adaptive systems from being used' (Pimbert and Pretty 1995: 5).

Colonial Policy Towards Indigenous People

As has been briefly summarised above, in the late 19th century and throughout the first half of this century, conservation meant the preservation of flora and fauna and the exclusion of people. As was the case in the formation of Yellowstone National Park, the army or colonial police force in the developing world has been employed to expropriate and exclude local communities from areas designated as 'protected' often at great social and ecological costs. Forced removal and compulsory resettlement, often to environments totally inadequate for sustainable livelihood, was not uncommon. Accompanying this forced removal was the view that indigenous people who rely on wild resources were 'backward' and so need help to be developed. Occasionally the 'primitive' or 'backward' habits of the indigenous people were regarded as attractive for tourism and in carefully regulated circumstances, a limited number of groups were allowed to remain in or near traditional lands. The situation of the Maasai in Kenya and Tanzania is one such example (Jacobs 1975, Lindsay 1987). In 1904, in an effort to pacify the Maasai and to clear preferred land for European settlers, the British government created the Northern and Southern Maasai Reserves. Then, over the next ten years, the Northern Reserve was abolished and its resident population was forced to move, effectively denying them access to much productive rangeland. All hunting of wild animals was prohibited on the reserve, although many authorities apparently felt that the Maasai could continue to coexist with the wildlife population. These reserves served the purpose of preserving primitive Africa where 'native and game alike have wandered happily and freely since the Flood' (Cranworth 1912: 310 in Lindsay 1989: 152).

Post Colonial Policy

By the 1940s and 1950s late colonial policies and early independent government policies began to alter. The image of the harmless, pristine native was replaced by that of a dangerous and uncivilised local. Meanwhile indigenous populations, already highly constrained if not prohibited from pursuing their livelihoods as they had in previous centuries, became more often regarded as backward primitives and as impediments not only to the state's conservation policy, but also to its general desire to modernise and develop. Subsistence systems were denigrated, and

policies were adopted aimed at sedentarising the Maasai and shifting their livestock economy from a subsistence to a market basis. As Lindsay summarises (1987 :152 – 55), the government constructed dams and boreholes, and tapped watering holes. Livestock numbers appeared to increase rapidly over subsequent decades until by the 1960s, when conservationists began to perceive that wildlife in the reserves was being threatened by the Maasai herders and their livestock. The reserve boundaries were redrawn and talk began to centre on the possible exclusion of Maasai livestock from the reserve. With growing tourist revenues, the government declared a livestock free area in the middle of the reserve to protect wildlife. Local Maasai elders began to demand formal ownership of all the land in the region. A confrontation between resident pastoralists and government/conservationists was inevitable. Maasai began killing wildlife such as rhinoceroses and elephants in protest against the threatened loss of more grazing land. More recently there has been evidence of collaboration with poachers in response to the trade in ivory and horn (Douglas-Hamilton 1979).

Recent Alternatives to the Traditional Conservation Paradigm

The near universal model of protected areas and natural parks, which was derived from a Western, positivist approach to science, has lately shown signs of accepting alternative paradigms. Until quite recently scientific investigation was dominated by the Cartesian positivist or rationalist paradigm. This assumes there exists only one reality, and that the aim of science is to discover, predict, and control that reality. This is achieved by breaking down the complex aspects of that reality into discrete parts that can be analysed, so that predictions can be made on these discrete parts. It is then assumed that knowledge can be summarised into universal laws or generalisations. Conservation science is firmly set within this paradigm, and so too are the inherently ethnocentric basic values and assumptions of its professionals.¹ This has produced a body of work based on a top-down, transfer of technology model of conservation that has consistently missed the complexity of ecological and social relationships at the local level (Buege 1996: 76, Pimbert and Pretty 1995: 13).

However, for several decades now, a minority opinion has grown that argues for a more pluralistic way of thinking about the world and how to change it (e.g. Checkland 1981, Kuhn 1962, Pretty 1994, Vickers 1981). It is becoming increasingly clear that ecological systems of plants and animals exist as a function of their unique pasts. Understanding a particular history of a community or ecosystem is critical for its current management. The old, conventional view of ecosystems as a function of their current operating mechanisms, and the assumption that human interference caused depletion of biological diversity, formerly justified the removal of people from national parks and reserves. But as ecosystems are now more clearly regarded as dynamic and continuously changing,

the importance of people in their development is being acknowledged. Recent studies, for example, indicate that Amerindians played a far greater role in manipulating scrub savannas than had previously been believed (Anderson and Posy 1989). In Africa, conservationists have come to realise that some biodiversity loss in protected areas actually stems from the restrictions placed on the activities of local communities. For example, the Serengeti grassland ecosystem is now coming to be understood as having been maintained in the past by the presence of the Maasai and their cattle. With their expulsion, the Serengeti is increasingly being taken over by scrub and woodland, leaving less grazing for antelope (Adams and McShane 1992). Similar lessons have been learned in Tsavo National Park (Botkin 1990) where resource management to protect and control the elephants has resulted in severe deterioration of the land within the park, while the inhabited area outside the park has remained forested.

At the end of the 20th century, the central concern of conservation science should be focussing on finding ways to put people back into conservation, or as Bell argues, to give conservation a human face (Bell 1987). This concern should be based upon the new, more sophisticated understanding of human populations as managers and nurturers rather than simply destroyers of their own environments.² Although there have been spectacular losses of biological diversity in history (Bronze age civilisations of Crete, Mycenaean Greece, Cyprus, Greece and Rome) most indigenous pastoralists are acutely aware of their close cultural ties with nature, and of how necessary it is to conserve this resource for their continued well-being (Hobbs 1989).

'Participation' has by now become part of the normal language of development theory. It has become so fashionable that almost everyone claims participation to be part of their work. In the world of conservation, the term has been used to justify the extension of control by the state, or to justify external decision-making. In the 1970s the term 'participation' was employed to describe what was, in fact, nothing more than the submission of indigenous people to protected area schemes. Often it was no more than a public relations exercise in which local people were passive actors. In the 1980s it was defined as local interest in natural resource protection. By the 1990s, it was being seen by some as a means of involving people in protected area management. At last there is a growing recognition that without local involvement there is little real chance of protecting wildlife.

Omani Case Study

Unlike Africa, the Arabian Peninsula does not have a long history of interest in conservation. Its neo-colonial period was very short, and only lasted a few decades in the middle of the last century. Its land mass is, in the main, arid and not suitable as a wooded reserve. It has limited large mammal species, making it unattractive for wildlife or tourist reserves. The earliest expression of interest in conservation

Table 1: A Typology of Participation

TYOLOGY	COMPONENTS OF EACH TYPE
Passive participation	People participate by being told what is going to happen or what has already happened. It is a unilateral announcement by project management; people's responses are not taken into account.
Participation in information giving	People participate by answering questions posed by extractive researchers. People do not have the opportunity to influence proceedings.
Participation by consultation	People participate by being consulted, and external agents listen to views. Professionals are under no obligation to take on board people's views.
Participation for material incentives	People participate by providing resources, for example labour, in return for food, cash or other material incentives. It is very common to see this called 'participation', yet people have no stake in prolonging activities when incentives end.
Functional participation	People participate by forming groups to meet predetermined objectives. Such involvement tends to be after major decisions have been made. These institutions tend to be dependent on external initiators and facilitators.
Interactive participation	People participate in joint analysis, which leads to actions plans. It tends to involve interdisciplinary methodologies that seek multiple perspectives. These groups take control over local decisions, and so people have a stake in maintaining structures or practices.
Self-mobilisation	People participate by taking initiatives independent of external institutions to change systems.

Source: Adapted from Pretty et al. 1994

in Arabia came about a decade or so just after World War II as the alarming rate at which gazelle, oryx and other 'sporting' animals were being caught or killed became clear. In the south east corner of Arabia, the Sultan of Oman issued a decree in 1964 banning the use of vehicles for hunting gazelles and oryx.³ He also commanded the setting up of a 'gazelle patrol' to protect these graceful mammals in the central Omani desert which borders Saudi Arabia and the Trucial States. Hunting parties from outside Oman were most probably taking advantage of its wide open and indefensible borders to enter the country for sport hunting outings. Despite the Sultan's ban, the oryx was declared extinct from Oman and the rest of Arabia in 1972. The loss was lamented by the only human population to inhabit this region, the Harasiis tribe. Nearly two hundred years earlier the Harasiis tribe had been pushed into the remote and desolate region which came to be known

early in the twentieth century as the Jiddat-il-Harasiis. This was the habitat of only a few large mammals, notably the oryx and the gazelle which they occasionally hunted for food. As Stanley Price makes clear, it was unlikely that sporadic Harasiis hunting pressure – in open country with only ancient rifles and camels to hide behind – could ever have eliminated the population (Stanley Price 1989: 42). It was the motorised hunting parties with automatic weapons from outside the area that succeeded in doing so, despite the indigenous tribe's wishes to preserve the animal in its vast shared arid environment. In 1976 Sultan Qaboos bin Saiid put into effect a ban on the hunting or capture of all large mammals – specifically oryx and gazelle. The following year a second decree was issued clarifying this ban. It unequivocally stated that no permission would be given to foreign hunting parties to enter and operate in Oman.

For several decades before the extermination of the world's last herd of wild oryx in 1972, plans had been implemented to create a World Herd in captivity, at a number of zoos around the world, for eventual reintroduction into the wild. In 1974 Sultan Qaboos bin Saiid gave the green light to his expatriate advisor on the conservation of the environment to explore the potential for restoring the oryx to Oman as part of its natural heritage. In 1977 and 1978 a consultant attached to the International Union for the Conservation of Nature (IUCN) toured extensively throughout the interior of Oman, with a Harasiis guide, searching for the best location to set up the reintroduction effort. Two unpublished reports were produced for the IUCN (Jungius 1985) both concluding that the ideal habitat for the oryx reintroduction project should be in the Jiddat-il-Harasiis, and concentrated in an area known as Yalooni, as it had 'the best vegetated pan on the Jiddat, with resources of grazing, shrub and tree browse' (Stanley Price 1989: 60). The reports also recommended that the whole of the Jiddat-il-Harasiis should be proclaimed a wildlife reserve or sanctuary. These recommendations were accepted, and in 1980, the first oryx from the World Herd were flown back into the country and released into the main oryx enclosure at Yalooni. Ten Harasiis tribesmen were hired to serve as oryx rangers, tracking these animals and generally keeping accurate daily records of their movements.

The project experienced a prolonged 'honeymoon' period, and for the first three years there were no conflicts between the indigenous population, the growing expatriate conservation management team, and other Omani employees. Gradually, however, difficulties began to appear. The first of these difficulties manifested themselves in terms of competition over grazing between the herds of domestic goat and camel and the reintroduced oryx during prolonged drought (Stanley Price 1989: 212–13). That was followed by conflict between the lineages of the Harasiis tribe over access to employment and special benefits, and later between the Harasiis and neighbouring tribes sharing borders with the Harasiis who had been ignored in this conservation effort.⁴ Although the goodwill with which the project was initially accepted remained evident among the older generation who had grown up with the oryx, others began to express their lack of commitment. The appearance of

poaching (first reported for gazelle in 1986), and its yearly increasing level by rival tribesmen pointed to the flaws in planning, design and implementation which top-down conservation projects all too often contain.

The Harasiis were greatly saddened by the extermination of the oryx. They had shared the same ecological niche for centuries. The tribe had been pushed into the remote, waterless plain of the Jiddat nearly 200 years earlier by stronger pastoral tribes (Chatty 1996: 81); the oryx, which had once graced the whole of the arid desert regions of south Arabia, had been pursued and hunted until, by the middle of this century, it too was found only in the Jiddat (Stanley Price 1989: 37). The Harasiis had seen the progressive decline in numbers take place and had recognised the looming tragedy. Their stories and campfire tales spoke about this decline. But they had been unable to stop the motorised hunting parties that descended upon them in their search for oryx herds. The idea of setting up an oryx sanctuary in their traditional territory had never been discussed with them, nor had they been consulted on the most suitable area to place such a sanctuary.⁵ The aims of the project, its goals, the implied restrictions on infrastructural development, and even the importance of their cooperation were never put forward to the tribal community. Once this internationally supported project had actually commenced, however, the Harasiis went along with the spirit of the enterprise; they were sincerely pleased to see the oryx returned to the Jiddat-il Harasiis. And for a limited number of men there was the opportunity of paid employment as 'oryx rangers', tracking and generally keeping an eye on the reintroduced animals.⁶

As long as the Harasiis were perceived to have no aspirations of their own, no desire to see an improvement in their access to water, no desire to have regular road grading, or infrastructural development in their traditional homeland, relations with the oryx reintroduction project remained untroubled. But the Harasiis, like people everywhere, are opportunistic. They wished to improve their lives, and had no special desire to remain in some sort of pristine traditional state just for the sake of not changing. Slowly, at first, and later with greater speed, the Harasiis came to realise what was being expected of them, and what constraints they were under. They came to understand that, in drought conditions, they were expected not to camp within the vicinity of an oryx herd, even when all other grazing areas were depleted.⁷ At about the same time, the tribe's long-standing campaign to have a water well dug by the Ministry of Water and Electricity in a promising area north of Yalooni, appeared to be blocked by the advisor responsible for the oryx reintroduction project. Furthermore, the Harasiis felt that efforts to get the national petroleum company to regularly grade roads in the vicinity were also being thwarted. At the same time, the long-standing rivalry between the Harasiis tribe and their neighbours, the Jeneba, found new expression. An old blood feud between the two tribes had been settled by the Sultan's representative in 1968, and relations between the two tribes cooled down. More numerous and better educated, and having had longer exposure to schooling, Jeneba tribesmen managed to get most of the skilled jobs available in the tribal

centre of Haima, the administrative capital of the Jiddat-il-Harasiis. Some wanted the better paying jobs at the oryx project, but discovered that these positions were restricted to Harasiis tribesmen.

Although the relationship cannot be proved, the fact that there has been a tremendous rise in the rate of poaching (by 1998 only 130 animals remained of a herd estimated at around 400 in 1996) and that those caught have all been Jeneba tribesmen, suggests that intertribal rivalry is on the rise.⁸ Furthermore, to these disaffected, largely unemployed youths and rival tribesmen, the oryx sanctuary makes no sense other than to put wild animals first, before people and domesticated herds. They see no benefit to themselves, their families or their community. The opportunity to make some money by illegal capture thus becomes a temptation difficult to resist, especially as they have no sense of ownership or participation in the animal sanctuary.

A significant part of the Jiddat-il-Harasiis was identified for a national nature reserve in 1986 as a preliminary step in turning the entire area into a UNESCO World Heritage Site. In 1994 this area of nearly 42,000 km², with a nomadic pastoral population of 3,000, was established by Royal Decree as the Arabian Oryx Sanctuary. The Harasiis tribe was not consulted nor educated as to the significance of this decree. Few, if any, Harasiis understood that the decree was the first step towards dividing the Jiddat into three land use zones: a core area with the strictest environmental protection; a buffer zone, with fairly strict protection, in which a limited number of activities would be permitted if they were compatible with conservation objectives; and a transition zone where most activities would be permitted unless clearly damaging to conservation objectives. Nor did they know that a land use and management plan was being prepared for the entire area.⁹ A cursory examination of the preliminary report clearly revealed that the Harasiis, were still not being consulted or integrated into the conservation scheme in any way other than as passive participants (Oman 1995). This lack of consultation with the indigenous population was defended by the expatriate advisors with the claim that the tribe would not have understood the 'sophisticated' issues involved.

Working quietly and consistently for the past ten years, the Harasiis tribe have begun to challenge this conservation zoning system. They have succeeded in overcoming strong expatriate resistance to having a reverse osmosis water plant built by the government in an area that is considered a buffer zone of the sanctuary. This has created major difficulties for the management team. A similar situation is likely to occur in respect to local roads. The management plan intends that a careful network of local roads be established 'in consultation with the stakeholders in the area'. These are, in the following order, wildlife conservation, tourist access, mobility of government staff, and finally the '*legitimate movements* of the indigenous pastoralists' (emphasis mine). The Harasiis and Jeneba tribes are unlikely to allow themselves to be the last considered, as though only an afterthought. Quietly and persistently, as in the past, they will work to achieve what they feel is necessary for the needs of their communities.

Fortunately, the goodwill of the Harasiis tribe remains largely intact. Being a small, marginal tribe, and for decades far removed from the seat of government, they are used to long protracted battles until their points of view are recognised. However, for the long term sustainability of conservation development, it is in the interest of the state and the conservation authorities to try to bring the Harasiis population and neighbouring tribes into a truly participatory relationship with the project. Otherwise, the project has no long-term future. With ever-increasing numbers of Harasiis youths attending the high school at Haima (the first class graduated in 1993), there is still the possibility that the local population could be drawn gradually into the conservation project – through concerted education, curriculum development, and skilled employment – in a more significant capacity than the ‘passive participation’ (Pretty et al. 1994) of the past. Truly interactive participation may prove to be the solution to the current predicament.

Pastoralists and Development and Conservation in Syria

The pastoral Bedouin tribes of Syria have for decades struggled with two opposing forces: one compelling them to settle on the edges of the desert and engage in marginal agricultural production; the other forcing them to move away to seek multi-resource livelihoods and pastoral subsistence across several national borders (Abu Jabber et al. 1978, Chatty 1986, 1990, Lancaster 1981). Some Bedouin communities – among them the Sbaa’, the Fed’aan, the Beni Khalid, the Mawali and the Ugaidat – have evolved a sustainable compromise whereby they maintain a fixed agrarian existence for a few months each year on the margins of cultivation, and then spend the winter and spring in the desert with their herds of sheep, goat and occasional camel (Chatty 1996, Leybourne et al. 1993).

The first half of the twentieth century – especially during the French Mandate and then later during the early decades of the independent nation-state in the late 1940s and 1950s – has been characterised by a sustained government effort to control and break down pastoral tribal organisation. During this period, much of the tribal leadership was co-opted into the elite urban political scene, and land holdings once held in common were increasingly registered in the names of tribal leaders and converted into farms. Some leaders entered into agreements with entrepreneurs and city merchants, and vast tracts of previously uncultivated land in tribal areas were opened up using mechanised equipment. Some Bedouin families settled on the margins of this agriculture. Many combined some farming with pastoralism, moving their herds out into the *Badia* (semi-arid steppeland) in late winter and early summer. Others moved away from these border areas, and began settling seasonally in small hamlets in the *Badia*, and keeping their herds on the move for much of the year in search of natural grazing and post-harvest stubble.

The second half of the twentieth century was a period of strenuous government land reform, including the complete seizure of all common tribal land and the

confiscation of the large tracts of land owned by tribal leaders. It was also a period of experimentation to soften the effects of socialist rule on the national economy. Following a three-year drought in the early 1960s, in which over two million sheep died, the government instituted a programme to alleviate the problems caused by this ecological disaster. An internationally sponsored project was set up to revitalise the pastoral sector of the Syrian economy. Its foremost goal was to stabilise the mainly pastoral livestock population. This proved very difficult, mainly because the officials running the project did not understand Bedouin methods of animal husbandry.¹⁰ In turn, the Bedouin had no trust in the government, especially in light of the recent confiscation of grazing land, and the explosive expansion of agricultural development over nearly a third of the best rangelands of the *Badia* (Al-Sammame 1981: 32).¹¹ After a number of years of poor project results, a handful of specialists, lead by Omar Draz, launched a campaign to convince the agencies which were concerned with rangeland of the importance of studying the human factor. They argued that unless development programmes were in harmony with the customs and ways of life of the pastoral populations, the whole rangeland development scheme would fail. Both Bedouin and government cooperation was required to solve the problem. In 1967 Draz recommended that the best means of repairing the damage cause by overgrazing in the desert, and improving the Bedouin economy, was by reviving the early Islamic tradition of *hema*.¹² Draz was calling for a return of control over range conservation and management of grazing lands back to the Bedouin. His position was interpreted as a demand for a return to a system of communal ownership. This appealed to the Syrian government's socialist orientation and the proposal was accepted. After several years of trial and error, a programme of cooperatives was implemented whereby block applications by tribal units for control over their former traditional grazing lands were generally granted by the government. Each tribal subgroup petitioned the government for permission to form a *hema* cooperative, demarcating, in detail, the area to be set aside, its physical features, and the proposed management and preservation system to be implemented (Draz 1980: 13). Once registered, cooperative members elected their own board of directors (usually the tribal leadership) to work alongside the government technicians. This board regulated the use of land and monitored the number of livestock owned by each of its members, taxing excess numbers and punishing non-cooperative members. Power and responsibility within a cooperative thus remained within a tribe, giving its members a participatory role of sorts in the programme. Between 1969 and 1972 only eight tribal groups registered as *hema* cooperatives, but this measured, careful Bedouin response was gradually overcome and by the mid 1980s the number of *hema* cooperatives was over two-hundred, with more than 4 million head of sheep. Today perhaps two thirds of Syria's Bedouin population belongs to *hema* cooperatives and associated schemes, although government reports (Al-Sammame 1981) suggest that number is nearly 90 per cent. As membership has never been mandatory, but the individual choice

as a tribesman within a lineage group, the majority of Syria's Bedouin are joining because they perceive a benefit from doing so. The benefits, for both the individual herd owner and the tribesman, are mainly in terms of preferential prices for feed, potential access to managed grazing, and occasionally some credit facilities.

Despite numerous ups and downs caused by changing legislation and inadequate restraint on the spread of agriculture into the *Badia*, the current situation which allows Bedouin a participatory voice in the running of cooperatives that were set up to accommodate traditional Bedouin land use patterns, is an improvement over the uncontrolled grazing of the 1950s and the rigid government regulatory schemes of the 1960s. Flexibility and an acceptance of traditional Bedouin systems of exploitation and marketing have resulted in a national programme of some success at both national and local levels.

Conservation of Wildlife in the *Badia*

Throughout the past thirty years of qualified success in the operation of *hema* cooperatives, the government has continued to experiment with protecting and conserving flora in the *Badia*. The rationale behind these measures and pilot projects has been to attempt to rehabilitate rangelands, protect threatened plant and shrub species, and stop the incursion of thorny bush. The hope has always been that the Bedouin would appreciate the benefit of fencing and exclusion and be inspired to do the same on traditional land holdings. This has not happened. Instead, the Bedouin express resentment at traditional common lands being confiscated for government experiments from which they derive no perceived benefit (Chatty 1995, Roeder 1996).

In 1992 Syria attended meetings of the Commission for Natural Parks and Protected Areas of the IUCN in Sicily, and negotiated funding for a project to rehabilitate rangeland and to establish a wildlife reserve in the Palmyra *Badia*. This project was approved, and the Food and Agriculture Organization (FAO) was drawn into the operation of the project as it appeared to have a developmental focus of improving indigenous food security. The project proposed to address three interrelated issues: diminishing grazing land, disappearing wildlife, and increasing requirements for supplementary feeding of domestic herds. It also proposed to incorporate some of the land holdings of three *hema* cooperatives into protected ranges, to set up restrictions on access by Bedouin and their domestic herds, and to run a programme to introduce new plant species. After two years of this three-year project, it was expected that 'higher forage production from the *Al Badia* Rangelands [would be obtained] to enable domesticated animals and wildlife to live in harmony on the land' (FAO 1995: 7). In the third year of this project, physical boundaries were to be established, and 'the reserve [would] only be devoted to wildlife grazing' (FAO 1995: 7). In other words at the close of the project, the Bedouin and their herds would actually be excluded from an important area of traditional grazing land.

The project has now completed its first three-years, its chief technical advisor is firmly in place and a number of international wildlife experts have also joined the team. Although the project will need the cooperation of the Bedouin communities that have used these grazing lands for the past few decades, there is nowhere in the project document any requirement for a social scientist. The project document recognises that the 'integration and effective collaboration of the beneficiaries to the programme' is required for sustainability, however, nowhere in the technical description of the project is there any mention of incorporating the Bedouin in its planning, development, or implementation. Instead, or in addition, the project document specifies that the successes of similar schemes in Saudi Arabia and Jordan¹³ will be studied in order to increase the likelihood of success in Syria. The indigenous Bedouin population, however, are only to be involved peripherally in the analysis of field data. Representatives from the grazing cooperatives will be involved in the data recording process and in the discussion of results in order to further 'develop their awareness on environmental protection' (FAO 1995: 11).

In an effort to secure a second, three year period of funding, the conservationist management team agreed to make an effort to seek Bedouin ideas and knowledge as well as to mediate the land use conflict which the project was embroiled in. Thus in 1997 two, three-day participatory workshops organised by the FAO were held in which Bedouin representatives, conservation managers and government officials met to work through a number of difficulties regarding the use of the protected area by domestic herds, access to water within the protected area, and potential employment within the project. A third workshop was held in 1999 and a fourth one was planned for 2000 to focus on conflict management. These efforts represented a small step in the direction of sustainable community conservation. But it remains to be seen whether the advances made during these workshops will lead to true community participation in conservation and sustainable development.

More than anything, this conservation effort reveals that the lessons learned in the 1960s have simply been forgotten. Pastoralists cannot be separated from their animals or from their common grazing land. Furthermore, the underlying assumption of this project seems to be again turning back to the now stale assumption that it is pastoralists who are overgrazing, or overstocking, and that the solution is to reduce herd numbers and restrict their access to land in order to protect its carrying capacity. These assumptions are not only wrong (see, for example, Behnke et al. 1993, Pimbert and Pretty 1995: 5), but simply provide a scapegoat for a problem rather than look for sustainable solutions. Such a search requires the inclusion of the affected population. The Bedouin need to be part of the conservation scheme. Their perceptions of the problems, their causes, and their possible solutions need to be taken into account. Their needs for their own herds, their access to grazing land, water and supplemental feed need to be considered as well. For without accommodation of their needs, Bedouin will not support the project, rendering the international wildlife reintroduction effort unsustainable in the long-term.

Conclusions

Sustainable conservation requires, above all else, the good will of indigenous populations. As McCabe (1992: 353–66) and others have demonstrated, linking conservation with human development offers the most promising course of action for long-term sustainability of nature and human life. McCabe argues that nature reserves and other protected areas must be placed into a regional context. If the economy of the human population is in a serious state of decline, the establishment of a wildlife reserve in their midst does not auger well for long-term sustainability. The population is unlikely to see any benefit from such a scheme and cooperation is unlikely. If, on the other hand, the problems of the human population are addressed and the community envisages benefit from a combined conservation/development scheme, then cooperation and long-term sustainability is possible. Measures which address the needs of wild and domesticated animals as well as the human group, such as land use mediation workshops, a veterinary care prophylactic health campaign for animals and humans, water wells and water distribution, seed distribution and extension of fodder crop growing, are part of an array of programmes that can draw wildlife conservation programmes closer to sustainable community development efforts.

Notes

1. See Angl s Grande (1999) for similar associations in an excellent article.
2. In a seminal piece of research, Rutten and Mulder (1999) attempt to unravel the concept of the ecologically noble savage. They pose the question of how to identify conservationist behaviour. Applying a game-theoretical approach to the analysis of pastoralist grazing reserves, they demonstrate that resource use and 'conservation' may be the outcome of narrow self-interest as well as political considerations.
3. There are only three species allocated to the genus *Oryx* in contemporary taxonomy, although there are commonly believed to be five forms: *Oryx gazella gazella* (gemsbok); *O.g. beisa*; *O.g. callotis*; *O. dammah*; and *O. leucoryx* (Arabian oryx or white oryx).
4. The Harasiis are one of five major nomadic pastoral tribes in Oman. The other four are the Mahra, the Jeneba, the Duru and the Wahiba. They are locked into an extreme and harsh landscape which, until the 1960s, had no source of water. To the west of this area lies the Empty Quarter (the *Rub'a-il-Khali*), to the south are the Mahra, to the east the Jeneba and to the north the Duru and Wahiba tribes.
5. One Harasiis tribesman was consulted. He was known to the expatriate advisor through his work for the national oil company. But he was not part of the political leadership of the tribe, who were not consulted, in fact, until the handover of Yalooni was a fait accompli (see Chatty 1996: 136).
6. Ten Harasiis men were given jobs as rangers in 1980 and the number grew to 17 by 1986 (Stanley Price 1989: 203). These jobs were well paid by local standards. But

- more significantly they were meaningful, and involved using skills already honed after a lifetime in the desert tracking animals, cars and people.
7. A confrontation over grazing competition in the mid 1980s should have raised the alarm with conservationists. Several oryx calves had been frightened either by the Harasiis camps or the presence of their goats, and the oryx reintroduction manager requested that the Harasiis move away. Some refused. They simply could not understand that the survival of their herds of goats was less important than a few wild oryx.
 8. The estimated number of oryx poached in 1996 is drawn from several informants, both on the Jiddat itself and in the capital, Muscat. In 1997, poaching of mainly female oryx increased dramatically, and in 1998 only 30 female oryx were reported to remain in the wild. The project management team has since (1999) brought all the thirty female oryx back into the camp enclosure, while it reconsiders how to keep the project alive. Poaching for live oryx has been spurred on by the large purses (sometimes exceeding US \$30,000), which the wealthy elite in neighbouring countries offer for wild oryx to add to their private zoos. The pattern of poaching in the Jiddat is suggestive of traditional tribal raiding. The Jeneba obviously see the oryx as 'belonging' to the Harasiis. So the act of poaching is an expression of economic and political rivalry.
 9. See the report *Preliminary Land Use and Management Plan: The Arabian Oryx Sanctuary* commissioned by the Ministry of Regional Municipalities and Environment (1995), Sultanate of Oman. It has since been superseded by further studies, none of which are available to the general public. Further information is available periodically on the UNESCO World Heritage Sites' web pages.
 10. Bedouin animal husbandry is based on risk minimisation, rather than on the more common Western market profit motivation. See Shoup (1990: 200).
 11. The Bedouin 'dry farmed' cereal crops during years of good rain, but large scale cultivation in this arid zone had never occurred before.
 12. *Hema* is derived from the Arabic word 'to protect'. In its simplest form, it is associated with the Islamic concept of setting aside fields and pastures for domesticated livestock – horses, camel and sheep – belonging to the military units involved in the expansion of the young Islamic Empire.
 13. This is a reference to the Jordanian Wildlands Nature Reserve and the oryx reintroduction scheme at Shawmary. In its initial phase, the indigenous population of goat and sheep herders was not integrated into the planning and implementation of the project. There had been no consultation about the establishment of the protected area, and many were openly hostile towards the concept of the reserve. The local population perceived the reserve as 'depriving them of their traditional rights and of opportunities to exploit its resources for their own social and economic needs' (Irani and Johnson 1998: 2). Initial management efforts relied on a combination of passive participation (limited employment as wardens) and a programme of monetary compensation to secure the promise of the indigenous population not to use the grazing areas earmarked solely for protected wildlife (personal communications from A. Swene). In the last couple of years, the project management has made efforts to integrate the local community in the development of in-country tourism to protected areas. As a first step in true community participation, local elders are being consulted in the planning for a release of oryx into the Wadi Rum, as part of an eco-tourism scheme run locally with the assistance of the Royal Society for the Conservation of Nature in Jordan.

Information on the Saudi oryx reintroduction schemes has been limited to specialist journals, with occasional fleeting reference in more general publications (IUCN Bulletin, no. 3, 1993). These reports suggest that indigenous camel and sheep herders in Saudi Arabia are mainly excluded from any active part in the planning or implementation of oryx management. The Mahazet-as-Said Oryx Reserve is a fenced area of 2,244 km², and domesticated herds of sheep and camel are totally excluded (S. Ostowski et al. 1998: 212). The resentment and general lack of cooperation by the indigenous herders which this exclusion aroused has contributed to a softening of policy in other parts of Saudi Arabia (personal communication, T. Wachter). With the controlled release of oryx at Uruq Bani Ma'arid, some effort has been made to inform the local population of the conservation plan, and to seek their cooperation. As further national efforts and reintroduction schemes are planned in Saudi Arabia, it will be become even more important that the indigenous population is systematically drawn into the planning and management of these efforts, otherwise the lessons being learned in Oman will have been of no avail.

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Résumé

Tribus pastorales au Moyen-Orient et projets de conservation de la faune: les espèces en danger.

Les projets de conservation qui ont été conçus pour protéger la faune et la flore, ont une histoire relativement récente dans la partie nord de la péninsule arabique. Leur approche philosophique, cependant, trouve son origine dans une longue tradition remontant à l'époque coloniale Africaine et à la période post-indépendance. En Afrique de l'Est et ailleurs, les populations pastorales furent forcées, il y a longtemps déjà, d'abandonner leurs pâturages pour créer des parcs et des sanctuaires pour la faune et pour le tourisme.

Au cours des dix dernières années, cependant, il semble qu'il y ait eu un changement d'attitude et un effort pour promouvoir «une forme de conservation à visage humain» (Bell 1987). Quand fut transposée au Moyen Orient cette expérience nouvellement acquise en Afrique, elle perdit de sa vigueur. Comme je le démontrerai, en utilisant l'étude d'un projet de réintroduction d'une espèce animale soutenu internationalement en Oman, les projets de conservation dans la péninsule arabique continuent à considérer les populations locales comme des obstacles à surmonter, en leur offrant soit des compensations financières soit des possibilités d'emploi local, au lieu de les considérer comme des partenaires dans un projet de développement et de conservation soutenables. Sans cette relation de partenaire les efforts de conservation sont voués à l'échec à plus ou moins brève échéance, ou, tout au moins, au recours à des programmes coûteux visant à «protéger» la faune de l'élément humain.

Resumen

Tribus pastoriles en el Medio Oriente y proyectos de conservación de la fauna : las especies en peligro.

Los proyectos de conservación que han sido concebidos para proteger la fauna y la flora tienen una historia relativamente reciente en el Norte de la Península Árabe. Su enfoque filosófico, sin embargo, encuentra su origen en una larga tradición Africana que data de la época colonial y post-independiente. En África del Este y en otras partes, las poblaciones pastoriles fueron obligadas, ya hace mucho tiempo, a abandonar sus pastos para crear parques y santuarios para la fauna y los turistas.

Durante los diez últimos años, se ha producido sin embargo, un cambio de actitud y algún esfuerzo para promover una conservación con cara más humana, está surgiendo (Bell 1987). Cuando se quiere transponer este enfoque al Medio Oriente esta experiencia nuevamente adquirida en África pierde algo en el proceso de transposición. Como lo voy a demostrar, utilizando el estudio de un caso de proyecto de reintroducción de especies salvajes con apoyo internacional en Oman,

los proyectos de conservación en la Península Arábiga siguen considerando a las poblaciones locales como obstáculos por vencer – sea con la ayuda de compensación financiera o con ofertas específicas de empleos locales - en vez de considerarlas como agentes de un desarrollo y de una conservación viables.

Sin esta colaboración estos esfuerzos de conservación están condenados, o al fracaso, o al recurso de programas muy caros para proteger la fauna de los elementos humanos.

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