

WORLD HERITAGE NOMINATION - IUCN SUMMARY

654: JIDDAT AL HARASIS AND ADJOINING AREAS (SULTANATE OF OMAN)

Summary prepared by WCMC (February 1993) based on the original nomination submitted by the Government of the Sultanate of Oman. This original and all documents presented in support of this nomination will be available for consultation at the meetings of the Bureau and the Committee.

1. LOCATION

Within the central region of Oman. The nearest large settlement is Haima to the west. To the southwest are the Rima and Marmul centres of oil extraction.

2. JURIDICAL DATA

Existing legislation includes Decree No. 26 providing authority to establish national parks and nature reserves; and ministerial decision No. 40 of 1976 declaring the protection of selected species. Additional legislation relevant to the site includes laws requiring that all development programmes should be preceded by environmental impact studies for the approval of the Ministry of Regional Municipalities and Environment.

3. IDENTIFICATION

Covering approximately 27,000 km², the Jiddat al Harasis is a plateau at 100-150m. Throughout the region there are some slightly sloping drainage plains, coastal escarpments and alluvial plains. The plateau is bounded on the east by a 100m escarpment, the adjacent Huqf depression is separated from the sea coast by the Janabah Hills which rise to 300m. The geology consists mainly of karst limestone, effectively forming the plains of Jiddat al Harasis. Rainfall is monsoonal, occurs from June to October, at very low levels of approximately 10mm. Localised fog raises the humidity in some areas. The greater part of the area is sparsely vegetated.

4. STATE OF PRESERVATION/CONSERVATION:

The fauna of the region is typical of the Arabian peninsula. Notable species include the caracal, the wild cat and the ratel. Hares are found throughout the Jidda'. Hedgehogs are widespread but rarely seen and Arabian wolf (V) is occasionally reported. The Arabian oryx (E) has been reintroduced into the region, and is the largest indigenous mammal species inhabiting the Jidda'.

The birds recorded over a six year period on the Jidda' total 168 species, including houbara bustard (V). The small saline and brackish springs act as important vegetated oasis areas, attracting a variety of birds and mammals. They are also habitat for a small indigenous fish species.

5. JUSTIFICATION FOR INCLUSION ON THE WORLD HERITAGE LIST:

The nomination, as presented by the government of the Sultanate of Oman, provides the following justification for designation as a World Heritage property:

Natural property

- (i) **Outstanding examples representing the major stages of the earth's evolutionary history** It is a complex of physical formations and processes and biological communities which are of outstanding universal value from both the aesthetic and scientific points of view.
- (ii) **Outstanding examples representing ongoing geological processes and biological evolution.** The four land units included in the area together provide a complex of outstanding highly exposed geological formations and geomorphological processes.
- (iii) **Contains unique, rare or superlative natural phenomena, formations or features of exceptional natural beauty** The property contains the only surviving free-ranging and viable oryx population in the world.
- (iv) **Contains the most important and significant habitats where threatened species of plants and animals still survive.** The property includes geological and physiographical formations which precisely delineate the natural habitat of the endangered oryx.

WORLD HERITAGE NOMINATION - IUCN TECHNICAL EVALUATION

654: JIDDAT AL HARASIS AND ADJOINING AREAS (SULTANATE OF OMAN)

1. DOCUMENTATION

- i) IUCN/WCMC Data Sheet (7 references).
- ii) Additional Literature Consulted: Stanley Price, M. 1989, **Animal Reintroductions: The Arabian Oryx in Oman**; Anon. 1989, Arabian Oryx Workshop Proceedings; Tear T.H. 1992, Range Use Patterns and the Development of a Natural Grazing System in Reintroducing Arabian Oryx in Oman, M.Sc. thesis, University of Idaho; Spalton, A. in press, A brief History of the Reintroduction of the Arabian Oryx, International Zoo Yearbook, 1993; Jungius, H. The Arabian Oryx. J. Oman Studies, 8 (1).
- iii) Consultations: 7 outside reviewers, Government of Oman officials, Project Oryx staff.
- iv) Field Visit: March 25 - 2 April. J. Thorsell.

2. COMPARISON WITH OTHER AREAS

Within the entire Arabian Desert Biogeographical Province there are just over 100 established protected areas, none of which, however, are categorized as national parks in the United Nations List of National Parks and Protected Areas. The nominated area itself is not an established protected area, it is a legally undefined zone with the Arabian Oryx reintroduction site at its centre. Although the site has been nominated on the basis of all 4 natural criteria, the existence of the only free-ranging herd of oryx in the wild is the main basis of the nomination.

The historic range of the Arabian Oryx recently extended from Sinai to Iraq and virtually all through the Arabian peninsula. Intense hunting pressure over the past hundred years (where as many as 300 vehicles were used to chase the animals) resulted in their extirpation throughout this range by 1972 and only zoo populations remained. In 1980, a reintroduction project began in the Jiddat which has now successfully resulted in an expanding herd of some 150 oryx which came from captive stock. Worldwide there are a total of some 1,100 Arabian Oryx, all in captive environments (USA (320), Europe (60), Asia (20), Morocco (12), Middle East (700)) except for this wild population in the Jiddat. Two other significant sites with reintroduction programs are in the Shaumari Reserve in Jordan (100 animals) and in a fenced sanctuary near Taif in Saudi Arabia. There are plans to have a second wild population at Harrat al Harrah in Saudi Arabia. In terms of oryx, then, the site is unique in having an unfenced population, though one or two others may eventually complement it.

In comparison to other desert habitats in the region the Jiddat is noted for several features. One is for a particularly healthy population of Arabian Gazelle, another herbivore in the region that has been much reduced by hunting. Its diversity of avifauna is high (168 species) and includes the endangered houbara bustard. It also contains evidence of glacial activity (300 million years ago) with two well preserved glacial pavements. There are many other areas of desert landscape in Arabia that are more dramatic (e.g. Wadi Rum Biosphere Reserve in Jordan) and other desert sites

that display a range of desert ecological features (e.g. Wahiba sands). There are also many other areas that experience the same occult precipitation phenomenon. There are other sites within Oman (e.g. Jabal Samhan in Dhofar) that some reviewers considered more outstanding. Other World Heritage sites in desert areas are: Ayer Rock (Australia), Aïr Ténéré (Niger), Tassili (Algeria), and Banc d'Arguin (Mauritania).

Culturally, the Harasis people who live in the area are distinct from other nomadic Bedu in some ways but here, as elsewhere, traditional practices are gradually being replaced. Cultural criteria were not a feature of the nomination.

In summary, along with the Northern Wildlife Management Area in Saudi Arabia, the Jiddat area would be one of the two largest protected areas in the region and one of the only two that would have wild populations of Arabian Oryx. It has a range of other natural values that also add to the variety of attractions in the site but most of these are matched elsewhere in the region. It is clearly important on a national scale and has the potential to be one of the most important sites for conservation in the region. (There are also several other sites in Oman for which the same could be said).

3. INTEGRITY

Although the wildlife of the Jiddat are in part protected and managed under the Arabian Oryx Reintroduction Project which enforces Oman's existing wildlife laws, no protection exists for the deteriorating vegetation of the area. As the nomination itself notes: "there must be some doubt as to whether the Jidda ecosystem can continue to survive in its present form under the current severe ecological impact of human exploitation and livestock damage". Further, "the integrity of the oryx habitat may be threatened in the future unless the perennial vegetation of the Jidda is managed to reduce the impact of livestock and to allow adequate regeneration".

Unfortunately, since the nomination was submitted, no progress has been made to provide statutory protection to the area and no government agency has yet been directed to enact or implement laws to protect the region's resources. The important woodlands of the southern Wadis of the Jidda are deteriorating rapidly through lack of regeneration and should be the target for urgent conservation management.

Another concern relates to the size of the population of the oryx herd which biologists have suggested needs to rise to at least 300 individuals before a viable population can be assured. The next 3-5 years will give an indication of the prospects for reaching this minimum size.

There are a number of other related issues such as the impact of oil exploration and the possibility of sand extraction from the area (for the manufacture of glass) and the use of part of the coastal area for military training purposes, but these are management issues that are subordinate to the general problem relating to the lack of legislative status and a management structure.

In conclusion, the site does not satisfy the condition of integrity (vi) of the Operational Guidelines which requires adequate long-term legislative, regulatory or institutional protection.

4. ADDITIONAL COMMENTS

The boundaries as presented are only approximate but do cover the current maximum range of the oryx plus a liberal buffer zone. Some of the obvious developed areas along the coast and the settlement of Al Ajaiz have been wisely excluded from the nomination. Further areas in the southwestern corner that have been excessively modified by oil production should also be excluded.

5. EVALUATION

The Jiddat is an important region in the context of Arabia as it combines a cold water, coastal area with an unusual Acacia-wooded desert landscape which merge into the southern dunes of the central Arabian sand-sea. All these exist in close proximity and are still functioning as a diverse and productive ecosystem. Also present are two important species - the reintroduced oryx and large numbers of gazelle. The site certainly has potential to meet natural criteria (iii) and (iv). It should also be clear that the oryx reintroduction here is part of a process to rehabilitate an entire desert ecosystem. The combination of the Jiddat, the oryx and the cooperation of the Harasis people have been successful to date to the benefit of all. The process, however, will require a long period of time.

Due to the lack of requisite protective legislation and that there is no administrative structure in place to manage the area, IUCN considers the nomination premature. Protection of vegetation is a major concern and this is directly related to the increase in oryx numbers to a level where viability can be assured. Additional work on fine-tuning boundaries to exclude oil exploration sites also needs to be done. Existing legislation and policy recommendations have been prepared in the 1986 report on **Proposals for a System of Nature Conservation Areas** (IUCN Report prepared for Sultanate of Oman) and follow-up on these is still awaited.

Finally, the mix of natural areas and human activities in the Jiddat suggest that it would be an ideal area in which to apply the biosphere reserve concept. The Bureau should suggest that such a designation be considered by the Omani authorities.

6. RECOMMENDATIONS

A decision on this site should be deferred. The Government of Oman should be urged to enact legislation, implement a management regime for the area and define more precisely what the boundaries of a potential World Heritage site would be. The potential for Biosphere Reserve status for the area should also be suggested.

SULTANATE OF OMAN

NAME Jiddat al Harasis, Huquf, Janaba Hills, Sahil al Jazir and Ra's Madrasah.

IUCN MANAGEMENT CATEGORY X (World Heritage)

BIOGEOGRAPHICAL PROVINCE 2.19.07 (Arabian Desert)

GEOGRAPHICAL LOCATION Jiddat al Harasis, is located within the central region of Oman. The nearest large settlement is Haima to the west. In the southwest are the Rima and Marmul centres of oil extraction. The eastern and southern borders of the property lie on the shoreline of the Arabian sea, which is part of the Indian Ocean. The site is surrounded to the north by the Hajjar mountains and to the south by the Dhofar mountains. Jiddat al Harasis is located at 19°50'N and 57°00'E, to the east of this is Huquf which is separated from the sea by the Janaba Hills. To the south of Jiddat al Harasis is Sahil al Jazir, and to the south east is Ra's Madrasah.

The property occupies an approximate rectangle, the corners of which have the following coordinates: NW corner 56°30'E and 20°55'N; NE corner 57°50'E and 20°35'N; SW corner 56°06'E and 18°45'N; SE corner 57°50'E and 19°00'N.

DATE AND HISTORY OF ESTABLISHMENT The site is not legally protected. Royal Decree No. 26 of 1979 provides authority to establish national parks and nature reserves, but has never been implemented (MNHC, 1992).

AREA Approximately 2,750,000ha.

LAND TENURE Owned by the Government of the Sultanate of Oman, and administered from Haima, a nearby town.

ALTITUDE The altitude varies from sea level to 300m.

PHYSICAL FEATURES Jiddat al Harasis is a plateau at an altitude of 100-150m. Throughout the region there are some slightly sloping internal drainage plains, coastal escarpments and alluvial plains (IUCN, 1986).

The plateau, consisting mainly of Miocene karst limestone, is bounded on the east by an escarpment of 100m. This falls into the Huquf depression, separated from the coast by the Janabah Hills which rise to 300m. The southern boundary of the Jiddat al Harasis plateau is the escarpment of Sahil al Jazir. In the south east of the property the headland of Ra's Madrasah rises to 205m above sea level. The Janabah Hills are dissected Cretaceous sandstone, whilst the soils are mostly rocky or shallow sands on rock (IUCN, 1986). Areas of fossil wood occur on limestone surfaces of the Jidda', and escarpments are locally highly fossiliferous.

CLIMATE An unusual desert climate with thick fog banks occurs. Temperatures in the summer months (May to October), rise to over 30°C. The hottest month is July with a mean temperature of 34°C. In the winter months, January and February, the temperature can drop

to 15°C. Mean annual rainfall is less than 50mm, with the possibility of several consecutive rainless years. However, considerable precipitation at night and early morning occurs, from fog moisture and dew on the Jiddat al Harasis, periodically throughout the year and particularly during the months October to April. This fog results from a combination of circumstances which result in cold water at the coast, and the very high temperatures inland. This remarkable air temperature gradient causes very strong sea breezes every afternoon between spring and autumn. As air temperatures equilibrate in the evening, the moist air condenses into fog, if wind velocity drops, this sinks to ground level, resulting in very considerable volumes of condensed, sweet water. This precipitation helps significantly to sustain the vegetation and wildlife between the unpredictable rains.

VEGETATION Plant biomass is very low, plant growth being largely dependant upon localised sand accumulation and rock fissures and the shallow drainage patterns of the surface, and nourished by fog moisture and dew. The greater part of the Jiddat al Harasis is sparsely vegetated, with small trees and dwarf shrubs growing in *haylah* depressions. The most common vegetation of this type is *Acacia tortilis* and *A.ehrenbergiana*, along with *Prosopis cineraria*. There is a sparse cover of low shrubs and ephemeral grasses, which develop after rain. This semi desert vegetation is utilised by the wildlife especially after rains and in the cool season.

The most commonly occurring shrubs are *Tephrosia apollinea*, *Crotalaria aegyptiaca* and the endemic *Ochradenus harsuticus*. There is a relatively high local abundance of *Lycium shawii* and *Zygophyllum sp.* Several species of gramineae occur. *Stipagrostis sp.*, an annual which can persist as a perennial if conditions allow, is the commonest grass found on the plain (IUCN, 1986). Very extensive woodlands of *Acacia tortilis* and *Prosopis cineraria* can be found growing near the large wadis on the southern borders of Jiddat al Harasis. Many of these trees which evidently extend their rooting system down to the water table, are very old; a significant number of the trees are dead or dying and very few young trees exist to replace them. Lichen (mainly *Ramalina duriaei*) grow on dead tree branches, sustained by the mist or fog moisture. The high humidity caused by the fog probably also accounts for the abundance of trees.

FAUNA The fauna of the region is typical of the Arabian peninsula. Some of the most frequent predators are the red fox *Vulpes vulpes arabica* and Ruppell's sand fox *V. rueppellii*. Red fox *V. vulpes fulva*, which used to be found in fewer numbers than Ruppell's sand fox, now displace the latter species by taking advantage of food resources obtained from the expanding numbers of Bedu farigs (temporary human settlements). The other main carnivores which live on the Jidda' include caracal *Felis caracal* and Arabian wolf *Canis lupus arabs* (V) which is occasionally reported. The wolf was formerly a serious predator of livestock in the region, but was hunted out by motorised herdsmen. They now survive in the broken country of the Huquf, the southern wadis and the Janabah Hills. Wild cat *Felis sylvestris* and ratel *Mellivora capensis* have been reported but may no longer exist. Hares *Lepus capensis* are found throughout the Jidda'. Hedgehogs *Paraechinus aethiopicus* are widespread but are rarely seen. Common rodents are gerbil *Gerbillus dasyurus* and the Sundevall's jird *Meriones crassus*. Lesser jerboa and spiny mouse *Acomys dimidiatus* are less common.

The most numerous large herbivores are the Arabian mountain gazelle *Gazella gazella gazella* (V) which inhabits the whole nominated area and Sand gazelle *G. subgutturosa*

marica (E). A small but viable population of Nubian ibex *Capra ibex nubiana* live on the huquf escarpment, the Janabah Hills and the headlands between Ra's Duqm and Ra's Madrasah.

The Arabian oryx *Oryx leucoryx* (E), which has been reintroduced into the region, is the largest indigenous mammal species inhabiting the Jidda'. The last wild individuals in Arabia were killed and captured on the Jidda' in 1972 and the species was thought to be extinct. Since the reintroduction in 1980 of 10 individuals from captive USA breeding stocks, the freeranging herd has risen from 33 in 1986 to 161 in 1993.

Indigenous reptiles include grey monitor lizard and spiny-tailed lizard, two smaller species of the genus *Uromastix*, venomous horned and carpet vipers, hooded malpolon, sandsnake and cat snake. Smaller reptiles include several skinks, agamids and geckos. Burrowing reptiles and rodents live in the sand-mounds which build up around *Acacia eherenbergiana*.

Birds recorded over a six year period on the Jidda' total 168 species. There are twenty two breeding species including golden eagle *Aquila chrysaetos*, houbara bustard *Chlamydotis undulata* (V), spotted thick-knee, coronetted sandgrouse *Pterocles coronatus* and chestnut-bellied sandgrouse *P. exustus*, cream-coloured courser *Cursorius cursor*, black-crowned finch-lark *Eremopterix nigriceps*, hoopoe lark *Alaemon alaudipes* and crested lark *Galerida cristata*, desert wheatear *Oenanthe deserti*, great grey shrike *Lanius excubitor*, little owl *Athene noctua* and brown-necked raven *Corvus ruficollis*. A further fifteen species are known to visit the area in winter, and 104 species are seen as passage migrants in spring and autumn. The coastal beaches and lagoons are the habitat of flocks of resident and migrating waders including gulls *Larus sp.*, terns, flamingoes *Phoenicopterus sp.*, herons and several species of ducks winter on the lagoons.

The small saline and brackish springs act as important vegetated oasis areas, attracting a variety of birds and mammals. They are also habitat for a small indigenous fish species *Aphanus dispar*.

CULTURAL HERITAGE Very little is known about the history of the Jiddat al Harasis and its adjoining areas, nor of the Harasis tribe that occupies most of the area. The Harasis, a Bedu tribe of 2500 people, with a traditional language that belongs to a pre-Islamic south Arabian group, are presumed to have lived in the Jidda' for several centuries. Until 1970 the Harasis were nomadic pastoralists who followed the rain and the grazing over a large part of Oman. The Sahil al-Jazir, Janaba Hills and Ra's madrasah areas of the property are occupied mostly by the Bedu Janaba tribe.

LOCAL HUMAN POPULATION The only permanent settlements are the white oryx project headquarters at Yalooni and the PDO camps in the oil fields. There are numerous maintained roads and motorable tracks (IUCN, 1986).

There are no areas of cultivation, although pastoralism is practised widely by the nomadic Bedu. The Harasis are a small tribe of around 2500 people. The Bedu Janabah tribe are pastoralists and fishermen living in scattered settlements in the coastal regions, most of which are not included within the area nominated for World Heritage status.

Subsequent development of the oil industry has totally changed the economy of Oman,

including the lives of the Bedu.

With the advent of motorised transport the factor which limited exploitation and access through the Jidda' was removed. Water could be obtained easily as could food for livestock, thus more animals were raised and fewer slaughtered. In 1990 the cost of the supplementary food plus the vehicle running costs was barely covered by the generally low market value of the Harasis goats in the distant markets.

VISITORS AND VISITOR FACILITIES The oryx introduction project at Yalooni has limited accomodation for visitors and students and receives around 150 guests per year.

SCIENTIFIC RESEARCH AND FACILITIES The main area of scientific research has been, and continues to be, the reintroduction and monitoring of the Arabian oryx population.

CONSERVATION VALUE The Jiddat al Harasis, with it's adjoining areas, is now the most important sanctuary for free ranging wildlife in Arabia; including the only surviving free-ranging and viable Arabian Oryx population in the world. The property includes geological and physiographical formations (the Jidda'), which precisely delineate the natural habitat of the oryx.

The land units included in the nominated area together provide a complex of outstanding highly exposed geological formations and geomorphological processes which are of great scientific interest and also of striking scenic beauty.

The Jidda' is the only place in the Middle East where the houbara bustard receives total protection throughout the year.

CONSERVATION MANAGEMENT It has been possible to enforce the wildlife protection act within Jiddat al Harasis and adjoining areas with the help of some of the Harasis rangers. The indigenious animal life has recovered in recent years from the affects of hunting through the protection of the oryx reintroduction project.

From the 1950's, hunting parties came to shoot, capture and hunt the oryx, the gazelles and the houbara bustard. The last wild oryx were captured and killed on the Jidda' in 1972 and wildlife was greatly reduced throughout the region. From 1975 all hunting was forbidden. In 1980 the reintroduction of the oryx was started under the direction of the Diwan of Royal Court Affairs.

The animals were originally captured in Yeman PDR by a consortium of international conservation organisations (FPS & WWF) in 1962 and taken to the U.S.A. (Anon, 1982). Ten animals were brought over from the U.S.A. These, together with a small number brought from other captive herds, have increased to their present number of 161. The oryx is now fully protected and the protection provided by the oryx project has enabled the ibex and the houbara bustard to increase.

It is has also been a site of Arabian oryx reintroduction since 1980.

One of the most encouraging aspects of the oryx introduction scheme is that the Harasis people regard the oryx as their tribal property. They have indicated that they wish a return of the oryx, and are prepared to guard them (Oryx, 1978).

MANAGEMENT CONSTRAINTS Delay in the implementation of the IUCN 1986 report could result in the loss of major woodlands of the region. The Jiddat al Harasis is now heavily used by oil companies, vehicles and the native people. The perennial vegetation is heavily exploited by livestock. Serious problems are apparent for important *Prosopis cineraria* and *Acacia tortilis* woodlands, they are dying off due to a combination of old age and heavy browsing by livestock. The lack of regeneration is however more serious, there are few young trees to replace the mortality.

Near the centre of the Jidda', a small settlement of Al Ajaiz has arisen around a borehole which was drilled in 1955 by Petroleum Development Oman (PDO). A subsequent growth through vehicle repair workshops and small trading shops, together with accumulated scrap and rubbish, threatens the integrity of the property.

STAFF Harasis rangers are employed to enforce the protection of the Jidda'. The structure of staff protecting the area is: 1 Biology Project manager, 1 Operational/Administrative Project manager, 23 Rangers and 26 support staff.

BUDGET No information.

LOCAL ADDRESSES

Minister of National Heritage & Culture, P.O Box 668, Muscat, Sultanate of Oman.

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DESIGNATION POUR LA LISTE DU PATRIMOINE MONDIAL - RESUME UICN

654: JIDDAT AL HARASIS ET REGIONS ATTENANTES (SULTANAT D'OMAN)

Résumé préparé par le CMSC/UICN (février 1993) d'après la désignation d'origine soumise par le gouvernement du sultanat d'Oman. L'original et tous les documents présentés à l'appui de cette désignation seront disponibles pour consultation aux réunions du Bureau et du Comité.

1. SITUATION

Dans la région centrale d'Oman. Le grand établissement le plus proche est Haima, à l'ouest. Au sud-ouest se trouvent les centres d'exploitation pétrolière de Rima et Marmul.

2. DONNEES JURIDIQUES

La législation en vigueur comprend le décret no 26 qui confère le pouvoir d'établir des parcs nationaux et des réserves naturelles et la décision ministérielle no 40 de 1976 qui protège certaines espèces. Les autres textes pertinents sont notamment des lois exigeant que tout programme de développement soit précédé d'études d'impact sur l'environnement et approuvé par le ministère des Municipalités régionales et de l'Environnement.

3. IDENTIFICATION

Couvrant environ 27,000km², le Jiddat al Harasis est un plateau de 100 à 150m de haut. Dans la région, on trouve des plaines de drainage en pente douce, des escarpements côtiers et des plaines alluviales. A l'est, le plateau est borné par un escarpement de 100m; la dépression attenante de Huqf est séparée du littoral marin par les collines de Janaba d'une hauteur de 300m. Le sol est essentiellement du calcaire karstique qui forme les plaines de Jiddat al Harasis. La mousson apporte des pluies de juin à octobre, au niveau très faible de 10mm environ. Dans certaines zones, des brouillards localisés augmentent le taux d'humidité. Dans la majeure partie de la région, la végétation est rare.

4. ETAT DE PRESERVATION/CONSERVATION

La faune de la région est typique de la péninsule Arabique. Les espèces notables sont le caracal, le chat sauvage et le ratel. On trouve des lièvres dans le Jiddat. Les hérissons sont répandus mais rarement vus et le loup d'Arabie (V) est observé à l'occasion. L'oryx d'Arabie (E) a été réintroduit: c'est le plus grand mammifère indigène présent dans le Jiddat.

En six ans, on a répertorié 168 espèces d'oiseaux dans le Jiddat et, en particulier l'outarde houbara (V). Les petits ruisseaux salins et saumâtres forment d'importantes oasis couvertes de végétation qui attirent diverses espèces d'oiseaux et de mammifères. On y trouve aussi une petite espèce de poisson indigène.

5. RAISONS JUSTIFIANT L'INSCRIPTION A LA LISTE DU PATRIMOINE MONDIAL

Pour justifier la désignation pour la Liste du patrimoine mondial, le gouvernement du sultanat

d'Oman donne les raisons suivantes:

Bien naturel:

- (i) **Exemples éminemment représentatifs des grands stades de l'histoire de l'évolution de la Terre.** Il s'agit d'un complexe de formations et de processus physiques et de communautés biologiques qui ont une valeur universelle exceptionnelle tant du point de vue esthétique que scientifique.
- (ii) **Exemples éminemment représentatifs d'importants processus géologiques en cours et de l'évolution biologique.** Les quatre unités terrestres comprises dans le site forment ensemble un complexe exceptionnel de formations géologiques et de processus géomorphologiques hautement exposés.
- (iii) **Contient des phénomènes, formations ou particularités naturels uniques, rares ou éminemment remarquables ou de beauté exceptionnelle.** Le site contient la dernière population libre et viable d'oryx d'Arabie du monde.
- (iv) **Habitats naturels les plus importants et les plus représentatifs où survivent des espèces de plantes et d'animaux menacées.** Le site contient des formations géologiques et physiographiques qui correspondent précédemment à l'habitat naturel de l'oryx menacé d'extinction.

DESIGNATION POUR LE PATRIMOINE MONDIAL - EVALUATION TECHNIQUE UICN

654: JIDDAT AL HARASIS ET REGIONS ATTENANTES (SULTANAT D'OMAN)

1. DOCUMENTATION

- i) Fiches de données UICN/CMSC (7 références)
- ii) Littérature consultée: Stanley Price, M. 1989, **Animal Reintroductions: The Arabian Oryx in Oman**; Anon. 1989, Arabian Oryx Workshop Proceedings; Tear T.H. 1992, Range Use Patterns and the Development of a Natural Grazing System in Reintroducing Arabian Oryx in Oman, M.Sc. thesis, Université de l'Idaho; Spalton, A. in press, A Brief History of the Reintroduction of the Arabian Oryx, International Zoo Yearbook, 1993; Jungius, H. The Arabian Oryx, J. Oman Studies, 8 (1).
- iii) Consultations: 7 examinateurs indépendants; représentants du gouvernement de l'Oman, personnel du projet Oryx.
- iv) Visite du site: 25 mars - 2 avril 1993. Jim Thorsell.

2. COMPARAISON AVEC D'AUTRES AIRES

Dans toute la Province biogéographique du désert Arabique, il y a un peu plus de 100 aires protégées mais aucune n'est classée parc national dans la Liste des Nations Unies des Parcs nationaux et des Aires protégées. La région désignée n'est pas non plus une aire protégée établie. C'est une zone sans définition juridique avec, au centre, le site de réintroduction de l'oryx d'Arabie. Bien que le site ait été désigné sur la base des quatre critères naturels, la principale raison de la désignation est la présence du seul troupeau d'oryx libre et sauvage.

L'aire de répartition historique de l'oryx d'Arabie s'étendait, récemment encore, du Sinaï à l'Irak et à travers pratiquement toute la péninsule Arabique. Les intenses pressions de la chasse dans les derniers 100 ans (jusqu'à 300 véhicules étaient utilisés pour chasser les oryx) ont conduit à son extinction en 1972. Il ne restait plus de populations en dehors des zoos. En 1980, un projet de réintroduction a été entamé dans le Jiddat et a été couronné de succès avec un troupeau prospère de 150 oryx issus de l'élevage en captivité. Dans le monde, il y a environ 1,100 oryx d'Arabie, tous - à l'exception de la population du Jiddat - vivent en captivité, aux Etats-Unis (320), en Europe (60), en Asie (20), au Maroc (12) et au Moyen-Orient (700). Il existe deux autres sites importants de réintroduction, dans la Réserve de Shaumari, en Jordanie (100 animaux) et dans un sanctuaire clôturé, près de Taif, en Arabie saoudite. On projette de réintroduire une deuxième population à Harrat al Harrah, en Arabie saoudite. Du point de vue de l'oryx, le site est unique car la population n'est enfermée dans aucune clôture mais un ou deux autres sites pourraient le compléter.

Si on le compare à d'autres habitats désertiques de la région, le Jiddat est remarquable pour plusieurs raisons. L'une est que l'on y trouve une population particulièrement saine de gazelles d'Arabie, autre herbivore qui a beaucoup souffert de la chasse dans la région. La diversité de l'avifaune est élevée (168 espèces) et comprend l'outarde houbara menacée d'extinction. La région présente aussi les traces d'une activité glaciaire (il y a 300 millions d'années) avec deux chausses glaciaires bien préservées. Il y a beaucoup d'autres régions de paysage désertique en Arabie qui sont plus spectaculaires (par ex. la Réserve de la biosphère de Wadi Rum, en Jordanie) et d'autres sites désertiques qui présentent un ensemble de caractéristiques écologiques désertiques (par ex.

les sables de Wahiba). Il y a aussi beaucoup d'autres régions qui connaissent le même phénomène de précipitations. Il y a d'autres sites à Oman (par ex. Jabal Samhan dans le Dhofar) que certains examinateurs jugent plus exceptionnels. Autres biens du patrimoine mondial dans des sites désertiques: Ayers Rock (Australie), Aïr Ténéré (Niger), Tassili (Algérie) et Banc d'Arguin (Mauritanie).

Sur le plan culturel, le peuple des Harasis qui vit dans la région se distingue des autres bédouins nomades mais, là comme ailleurs, les pratiques traditionnelles sont progressivement remplacées. Le facteur culturel n'était pas mentionné dans la désignation.

En résumé, avec la Zone de gestion septentrionale de la faune sauvage d'Arabie saoudite, le Jiddat serait une des deux plus grandes aires protégées de la région et une des deux seules possédant une population sauvage et libre d'oryx d'Arabie. Il possède d'autres valeurs naturelles qui ajoutent aux attraits du site mais la plupart se retrouvent ailleurs dans la région. De toute évidence, le Jiddat est important au plan national et a le potentiel de devenir l'un des sites de la région les plus importants pour la conservation. (Il existe plusieurs autres sites omanais pour lesquels on pourrait en dire autant).

3. INTEGRITE

Bien que la faune sauvage du Jiddat soit en partie protégée et gérée dans le cadre du Projet de réintroduction de l'oryx d'Arabie qui applique les lois en vigueur à Oman, il n'existe aucune protection pour la végétation de la région qui se dégrade. Comme le dit le texte de la désignation: "Il faut se demander si l'écosystème du Jiddat peut survivre dans sa forme actuelle, au vu des graves impacts écologiques de l'exploitation par l'homme et des dégâts causés par le bétail domestique". En outre "l'intégrité de l'habitat de l'oryx pourrait être menacée à moins que l'on ne gère la végétation pérenne du Jiddat pour réduire l'impact des troupeaux et permettre une régénération appropriée".

Malheureusement, depuis que la désignation a été soumise, aucun progrès n'a été fait pour accorder une protection légale à la région et aucun organisme public n'a reçu instruction pour agir ou appliquer les lois de protection des ressources de la région. Les importantes régions boisées des oueds méridionaux du Jiddat se détériorent rapidement faute de se régénérer et devraient faire, de toute urgence, l'objet de mesures de gestion pour la conservation.

La taille du troupeau d'oryx est aussi préoccupante. Les biologistes estiment que la population doit atteindre le chiffre de 300 avant d'être viable. Les 3 à 5 prochaines années démontreront s'il y a quelque chance d'atteindre cette taille minimale.

Il existe d'autres problèmes tels que l'impact de l'exploration pétrolière, le projet d'extraction de sable (pour la fabrication du verre) et l'utilisation d'une partie de la région côtière pour les besoins de l'entraînement militaire mais tous ces problèmes sont subordonnés au problème général du manque de statut juridique et de structure de gestion.

En conclusion, le site ne satisfait pas aux conditions d'intégrité (vi) des Directives opérationnelles qui exigent une protection juridique, réglementaire ou institutionnelle à long terme.

4. COMMENTAIRES ADDITIONNELS

Les limites décrites sont approximatives mais couvrent l'aire de répartition maximale actuelle de l'oryx et une vague zone tampon. A juste titre, certaines zones développées de la côte et l'établissement d'Al Ajaiz ont été exclus de la désignation. D'autres régions, à l'extrémité sud-ouest, qui ont été par trop modifiées par la production de pétrole devraient aussi être exclues.

5. EVALUATION

Le Jiddat est une région importante dans le contexte de l'Arabie car il associe une zone côtière aux eaux froides avec - chose inhabituelle - un paysage désertique boisé d'acacias qui s'enfonce au sud dans les dunes de la mer de sable d'Arabie centrale. Tout cela se trouve en étroite proximité et fonctionne encore comme un écosystème divers et productif. On y trouve aussi deux espèces importantes: l'oryx réintroduit et de nombreuses gazelles. Le site a certainement la capacité de satisfaire aux critères naturels (iii) et (iv). Il convient aussi de souligner que la réintroduction de l'oryx fait ici partie d'un processus de restauration de tout un écosystème désertique. A ce jour, l'association entre le Jiddat, l'oryx et la population Harasis qui collabore au projet est une réussite qui bénéficie à chacun mais le processus lui-même prendra encore beaucoup de temps.

Etant donné l'absence de législation protectrice contraignante et de structure administrative chargée de gérer la région, l'UICN considère la désignation prématurée. La protection de la végétation est un problème important, directement lié à l'augmentation du nombre d'oryx jusqu'à ce que la population devienne viable. Il convient aussi d'affiner le tracé des limites pour exclure les sites de prospection pétrolière. La législation existe et des recommandations de politique ont été préparées dans le rapport de 1986 intitulé **Proposals for a System of Nature Conservation Areas** (Propositions pour un réseau d'aires de conservation de la nature) préparé par l'UICN pour le Sultanat d'Oman mais aucune mesure de suivi n'a encore été prise.

Enfin, le mélange de région naturelle et activités humaines dans le Jiddat suggère que ce serait un lieu idéal pour appliquer le concept de réserve de la biosphère. Le Bureau devrait suggérer aux autorités d'Oman d'envisager cette possibilité.

6. RECOMMANDATIONS

La décision concernant ce site devrait être réservée. Le gouvernement d'Oman devrait être invité à appliquer la législation, mettre en oeuvre un régime de gestion dans la région et définir plus précisément les limites d'un éventuel bien du patrimoine mondial. Il faudrait aussi souligner la possibilité de conférer à la région le statut de réserve de la biosphère.