

THE BADIA CENTER FOR ECOLOGICAL EDUCATION, IN THE EASTERN DESERT OF JORDAN

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Introduction

Although Jordan has nature reserves and protected areas, the Badia Center for Ecological Education (BCEE) is the first centre in Jordan established to promote public awareness through exhibiting live, local animals in a zoological garden. There are two main objectives of the BCEE; the first is to encourage the local community to preserve their own natural heritage and ecosystems through the concept of sustainable development. In particular, the BCEE creates job opportunities through ecotourism, which supports the livelihood of local people and replaces their dependence on grazing, or low-scale agriculture, that impacts negatively on natural ecosystems. The second main objective of the BCEE, is to display important representatives of the fauna and flora of the eastern Jordanian desert, so that they can be used to promote public awareness (amongst local people in general and students in particular) about Jordan's wealth of natural heritage. Public awareness is also conducted from the Centre through lectures and educational material. In the future, the Centre hopes to provide facilities for eco and ethological research.

Background

Due to the increasing negative human impact on the natural habitats of the eastern Jordanian desert, the need to establish a centre to encourage the preservation of the diverse and unique natural heritage, especially of Badia region, was deemed necessary. In 1999, it was proposed that the Badia Center for Ecological Educational (BCEE) be established and in 2000, funding was received from the International Arid Land Consortium. Today, the Center is affiliated with the Badia Research and Development Programme (BRDP), a non-governmental organization linked to the Higher Council of Science and Technology.



Fig. 1. Visitors in the day-time room that exhibits day time animals including reptiles and the Spiny Mouse (©Z. Amr).

Animals exhibited at the BCEE

Animals collected from different representative habitats in the Badia area have been placed in several displays. One room exhibits nocturnal animals such as; the three-toed jerboa (*Jaculus jaculus*), the false desert viper (*Pseudocerastes persicus fieldi*), Cheeseman's gerbil (*Gerbillus cheesmani*), Wagner's gerbil (*Gerbillus dasyurus*), Sundevall's jird (*Meriones crassus*), the bushy-tailed jird (*Sekeetamys calurus*), as well as the Southwest Asian garden dormouse (*Eliomys melanurus*) and the Cairo spiny mouse (*Acomys cahirinus*). Diurnal animals exhibited in another room include; several species of reptiles such as the desert monitor (*Varanus griseus*), the spiny mouse (*Acomys lewisi*) and the golden spiny mouse (*Acomys russatus*). Two open enclosures exhibit larger animals, such as the Ruppell's sand fox (*Vulpus ruppelli*), the Indian crested porcupine (*Hystrix indica*) and several species of desert birds.

Economic benefit to the local community

As Badia is a rural area where job opportunities are scarce, the main intention of BCEE's ecotourism project is to generate economic benefits for the local community. The benefits of ecotourism can be categorized in three ways: direct, indirect, and induced. Already direct benefit has come to the area from the Center because during its construction, labour was hired exclusively from the village and its surrounding area, bringing an estimated US\$ 25,000 into the local economy. Now the Center is complete, direct benefits are resulting from employment and visitors spending on services associated with the site itself, such as restaurants, transport and handicrafts. It is estimated that when it is running at full capacity, the number of direct beneficiaries (i.e. those employed full time) from this project will be about 18 people; five people as permanent staff, 8 who will be involved with handicraft and souvenir manufacturing and 5 others who will act as local guides. Currently, the BCEE employs three local people, a director, technician and a janitor. Indirect beneficiaries will be the businesses that hire people and buy raw materials and induced beneficiaries will be as a result of increased economic prosperity in the local community where earnings will be spent.



Fig. 2. Al Hazim desert, dominated by *Nitraria retusa* shrubs (©Z. Amr).

Some projects currently being worked on

- Training and capacity building of local people to manage the animal collection of the Center. This will be in collaboration with several zoological gardens in Europe.
- Training locals to undertake field tours on camel back or vehicles in the wilderness of the eastern desert, covering various unique sites (e.g. Hazim, Burqu and Azraq).
- Integrating historical and nature tourism in the area, especially to the historic city of Um-Al Jemmal, and parts of the desert .
- Encouraging the locals to produce Bedouin rugs and other traditional handicrafts for sale in the exhibition Center.
- Encouraging the local community to provide services for visitors (e.g. restaurants and coffee shop serving local food).
- Restoring some old houses that can be rented by visitors intending to stay overnight in the village.