

**An ecological study of reintroduced Arabian oryx in the 'Uruq Bani
Ma'arid Protected Area of the Kingdom of Saudi Arabia**

By

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ABSTRACT

This study was conducted in the 'Uruq Bani Ma'arid Protected Area, on the western edge of the 'Rub al Khali of the Kingdom of Saudi Arabia. The dispersal of different groups of Arabian oryx *Oryx leucoryx* (Pallas, 1777) was investigated, along with the seasonal range use patterns of the animals. The dispersal distances from the release site stabilised after a period of one year. The animals show seasonal differences in their range use patterns, associated with changes in their mobility. The dynamics of the relationship between the oryxes and their habitat were investigated. The structure and the condition of the vegetation, as well as some climatic variables were important determinants of seasonal habitat use. The diurnal activity patterns of the animals correspond with that characteristic of ungulates generally and the animals showed seasonal changes in their feeding preferences. The productivity of the population was high during the study period, with 34 live births, while six of the reintroduced animals died. Population viability analysis, however, shows that the population is vulnerable over the medium term (100 years) and that management should target the juvenile and especially adult females as they are keys to population growth and recovery.

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