

Arabian Leopard, *Panthera pardus nimr*, status and habitat assessment in northwest Dhofar, Oman

(Mammalia: Felidae)

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Abstract. The Arabian Leopard *Panthera pardus nimr* is considered Critically Endangered by the IUCN and published information about this subspecies is scarce. We assessed the status of the species on the border of one of the most important remnants of its current range, the Dhofar mountain range. In this border area, the relative abundance of leopards (0.067 scats per kilometre) was found to be seven times lower than that reported from prime habitat areas in Dhofar. This result suggests that the leopard occurs in this border area in low numbers or uses it only intermittently. This is compatible with expected sub-optimal conditions found along the borders of the species' ranges. Furthermore, herders have reported that leopards used to be encountered more frequently in earlier times, which is also supportive evidence of higher vulnerability of this big cat along the edge of its distribution area. However, the habitat of the study area was found to be in relatively good condition, harbouring the leopard's main prey species and a number of regionally threatened large mammalian fauna, including the Nubian Ibex *Capra nubiana*, Arabian Gazelle *Gazella gazella*, Rock Hyrax *Procapra capensis*, Striped Hyaena *Hyaena hyaena sultana*, Caracal *Caracal caracal schmitzi* and Arabian Wolf *Canis lupus arabs*. Causes of the leopard decline in the area remain unclear, but given the availability of prey it is possible that human interference may have led to the retraction of the leopard's range.

Key words. Arabian Leopard, *Panthera pardus nimr*, prey availability, distribution range, population density, habitat, Middle East.

Introduction

The Arabian Leopard *Panthera pardus nimr* (Hemprich & Ehrenberg, 1833) is a subspecies of the leopard that inhabits the Arabian Peninsula. It is adapted to live in arid and semi-arid regions, so it has small body size and a pale coat. The range of the leopard in the Middle East has been severely reduced (e.g. Arabian Peninsula - BREITENMOSER et al. 2006, SPALTON et al. 2006, AL-JOHANY 2007, Caucasus - KHOROZYAN & ABRAMOV 2007), and the quality of their habitats is known to have become impoverished in the Arabian Peninsula. The conservation status of this leopard subspecies is of global concern since recent estimates suggested that fewer than 250 individuals remain in the wild (BREITENMOSER et al. 2006). Consequently, the Arabian Leopard is ranked in the highest category of threats - Critically Endangered - by the 2008 IUCN Red List of Threatened Species (IUCN 2008), and in the highest level of concern regarding its trade (CITES Appendix 1).

The Arabian Leopard has disappeared from large areas of its historical range because of habitat modification, direct persecution and prey decline. QARQAZ & ABU BAKER (2006), for instance, reported the former use of stone traps to catch leopards in Jordan, and such traps were used in Yemen as recently as in 1999 to catch leopards alive for sale to zoos and private collections.