

Siberian Ibex (*Capra sibirica*) Neonatal Kid Survival and Morphometric Measurements in Ikh Nart Nature Reserve, Mongolia

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ABSTRACT

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Understanding the factors influencing survival of ungulate neonates facilitates successful management programs, particularly as they relate to population dynamics and adaptive species management. However, kid survival of near threatened Siberian ibex (*Capra sibirica*) remains poorly understood. During 2005-2013, we captured and collared 21 ibex kids in Ikh Nart Nature Reserve in southeastern Mongolia, to monitor their survival and cause-specific mortality. We found no differences in morphometric measurements between male and female kids, except body mass being males weighing more than females. A total of 11 mortalities were documented and predations by red foxes (n=5, *Vulpes vulpes*) and grey wolf (n=1, *Canis lupus*) was the leading cause of the mortalities. Known fate models indicate the monthly survival of kids best explained by body mass and first month of life (April-May + weight). Monthly survival estimates ranged from 0.077 (95% CI = 0.60-0.88) in April-May to 0.97 (95% CI = 0.90-0.99) in June-March, with an annual survival rate of 0.45 (95% CI = 0.24-0.68). We found little support for the hypotheses that body mass or birth date influenced survival; however, our small sample size limited the power of the analyses. Overall, our results indicated that predation and other factors led to high kid mortality during the period shortly after birth.

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Introduction

The Siberian ibex (*Capra sibirica* Pallas, 1776) is a sexually dimorphic, polygynous, and gregarious mountain ungulate inhabiting the mountains, mesas, canyons, areas of rocky outcrops and other rough terrain of Central Asia (Fedosenko & Blank 2001; Singh *et al.*,

2010). The species remains poorly studied with little known about its ecology. The IUCN Red List of the Mongolian Mammal classified the species as Near Threatened (Clark *et al.*, 2006). In Mongolia, ibex numbers have declined since peaking around (Clark *et al.*, 2006), the trend