

## Wildlife Hunting in Eastern Mongolia: Economic and Demographic Factors Influencing Hunting Behavior of Herding Households

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### Abstract

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Much of Mongolia's rangelands are under state control and managed via traditional land use practices and are habitat for numerous wildlife species harvested for their meat and fur. Political and economic transformations that have been occurring since the early 1990's continues to affect all aspects of Mongolian society. To cope during periods of economic hardship, many turned to harvesting wildlife resources for income and subsistence and this resulted in precipitous declines of some populations, marmots for example. Interviews with herding households in Mongolia's eastern steppe region were conducted to better determine how wildlife resources (Mongolian gazelle, Siberian marmot, red foxes, corsac foxes, and gray wolf) are utilized and valued by herding families. Hunting, carried out by 65% of interviewees, returned an average of \$103±172 dollars per household. The number of individuals hunted of any particular species during the previous year ranged widely - 46% of households hunted an average of 8±9 Mongolian gazelles (the equivalent of a small cow), 31% hunted 5±5 corsac foxes, 29% hunted 42±47 marmots, 22% hunted 3±3 red foxes, and 17% hunted 3±2 gray wolves. Differences in mean annual income between hunting and non-hunting households were similar (\$1,292±1,132 vs. \$1,080±1,196) however the median difference was greater (\$1,009 vs \$749). However, non-hunting households owned significantly more livestock than hunting households (168±183 vs. 93±92 Livestock Units), and the proportion of hunting households living below the poverty line was higher. Households that were larger or had few numbers of livestock were more likely to engage in hunting than smaller households with more livestock. Household and livestock variables were also significant predictors of a households likelihood of hunting Mongolian gazelle, Siberian marmot, and corsac fox, but not for red fox or gray wolf. Wildlife management policies will likely receive greater acceptance and compliance if subsistence hunting needs were incorporated.

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### Introduction

Conservation and management of wildlife resources takes place across a range of property rights systems varying from highly restricted and exclusive access on private lands to public

land, which is under strictly protected status to complete and open access (Berkes, 2007; Cole & Ostrom, 2012). In landscapes managed according to communal or open access property