

## Recent Management and Conservation Initiatives for Mongolian Gazelle, Mongolian Saiga Antelope, and Gobi Bear

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### Introduction

Three international workshops were recently held on threatened wildlife in Mongolia. Each workshop developed a series of international best-practice recommendations for management and conservation of these species. This paper reports on the rationales, results and recommendations of these workshops.

#### International Research Symposium/ Management Workshop on Conservation and Management of the Mongolian Gazelle

On October 25-27, 2004, a three-day "International Workshop on Conservation and Management of the Mongolian Gazelle" was held in Ulaanbaatar, Mongolia. Mongolian gazelles (*Procapra gutturosa*) are the last great migratory herd of ungulates in Asia, rivaling the Serengeti wildebeest (*Connochaetes taurinus*) and Alaskan caribou (*Rangifer tarandus*) in their size and importance (Schaller 1998). They also form a critical part of the economy of steppe herders, and may provide a commercial opportunity for Mongolia if managed correctly (Zahler *et al.* 2004). Unfortunately, evidence suggests that Mongolian gazelles are decreasing in number from unsustainable hunting – in Kazakhstan, saiga antelope were reduced from over a million animals to below 40,000 in only ten years (Milner-Gulland *et al.* 2001, pers. comm.), and there is the possibility that Mongolian gazelles may be facing a similar decline.

The main goal of the workshop was to create recommendations that will ensure long-term sustainable gazelle management. A total of 22 international experts from the US, Japan, UK, Belgium, China, and Russia participated, along with Mongolian scientific colleagues. Talks were presented to an audience of roughly 140 people consisting of government officials, resource managers, protected areas staff, NGOs, local community members, and other relevant stakeholders. Topics included recent and on-going Mongolian gazelle research findings that are critical

to inform management decisions, including population size, trends, breeding biology, migration, and behavior. An expert-driven priority setting mapping exercise was held to identify historic and present distribution of gazelles and locate areas where more information is needed or conservation interventions are required. Presentations were also given on international best practice in grassland ecology, land use, modeling, and management to determine how Mongolia (and its neighbors) might proceed with economic opportunities while ensuring sustainability of this unique steppe grassland ecosystem. Four working groups developed recommendations on 1) development issues; 2) land use issues; 3) protected areas; and 4) transboundary opportunities with China and Russia, including the potential of creating one or more transboundary gazelle peace parks and the agreement on a draft MoU between China, Russia, and Mongolia.

Outputs were a set of recommendations that together have formed a formal *Mongolian Gazelle Management and Action Plan*. Further outputs include specific recommendations to the Mongolian, Chinese and Russian governments on international best-practice management of the gazelles; and a Memorandum of Understanding between Mongolia, China, and Russia outlining specific actions the three countries should take and methods of collaboration to ensure the conservation of the last of the great ungulate herds in Asia.

#### Conservation and Management of the Mongolian Saiga Antelope

On October 30, 2004, a workshop was held in Ulaanbaatar, Mongolia on "Current Status, Problems, Conservation Needs, and Management of Mongolian Saiga." The Mongolian saiga (*Saiga tatarica mongolica*) is a critically endangered antelope and is an endemic subspecies to Mongolia. The saiga faces numerous threats that are causing a large-scale population decline (Milner-Gulland *et al.* 2001). Recent estimates suggest a drop from over 5,000 to less than 800 (an 85% decline) over the last five years, primarily caused by poaching, habitat loss due to livestock grazing, and

environmental change (WWF 2004, pers. comm.). Poaching for the Chinese medicinal trade appears to be the most immediate threat. The present situation of the Mongolian Saiga is alarming and requires intensive management and conservation activities at all levels to avoid losing this important member of Mongolia's natural heritage.

The main goal of the workshop was to produce recommendations to ensure the survival of the last population of Mongolian saiga, including conservation and management activities and cooperation at the local, national, and international levels. The one-day workshop brought together representatives of Mongolian government and local area authorities, herders, rangers, biologists, and also antelope experts from around the world. During the workshop, discussions were held on the current status of saigas, problems and threats that saigas face, what needs to be done to preserve the Mongolian saiga, and ways to implement conservation activities. Recommendations included targeted anti-poaching efforts, better survey methodologies, radio and satellite collaring of saigas to determine movements and behavior, and improved winter feeding to avoid catastrophic declines from inclement weather. A *Mongolian Saiga Antelope Action Plan* is in development, and the Mongolian Government will also be submitting a request to the Convention on International Trade in Endangered Species (CITES) for listing of the Mongolian subspecies on Appendix I.

### **Gobi Bear Management Workshop**

An "International Gobi Bear Management Workshop" was held on November 2-3, 2004 in Ulaanbaatar, Mongolia. The Gobi bear is one of the most critically endangered large mammals in the world. This small, pale bear is found only in the Gobi desert region of southwestern Mongolia (McCarthy 1999). It lives in one of the most hostile regions on earth where temperatures can vary by over 80°C during a single year. With scant vegetation, little food or cover, and virtually no water, the Gobi bear has managed to eke out a living in these barren hills in apparent isolation for thousands of years.

While there is still much disagreement over the taxonomic status of the Gobi bear, it is universally agreed that the animal is severely threatened. It is listed as "very rare" in the Mongolian Red Book (MNE 1997) and is included as an Appendix I species (critically threatened with extinction) under

the Convention on International Trade in Endangered Species (CITES), to which Mongolia is a signatory country. A PVA analysis performed in 1998 suggested that the bears will very possibly go extinct in 15-20 years (Steinberg 1998). However, accurate data on numbers, breeding, and other relevant factors are scarce or nonexistent, and population estimates vary by a factor of at least 2, ranging from less than 20 to 40 or more (Balint and Steinberg 2003). The bears appear to face numerous threats, ranging from lack of food and water to inbreeding and fragmentation of the few remaining breeding adults. The region where the bears are found is now a Strictly Protected Area but is also used by local people and their livestock, and the bears may face numerous human-induced threats ranging from overgrazing to lack of access to water sources to habitat destruction from illegal miners to direct persecution.

The lack of data about the Gobi bear and its potential threats, the critically low population and dismal forecasts for survival, the varied alternatives for conservation, and the social, political, and economic ramifications of various initiatives prove that there is a critical need for international best practice to inform conservation and management decisions about the Gobi bear. The workshop convened experts in bear conservation and management from around the world to analyze existing knowledge about the Gobi bear and determine how best to move forward to ensure its survival.

Outputs from this workshop were a set of recommendations for policy and actions that will form the basis of a Gobi Bear Management Plan. Recommended actions included camera trap monitoring and satellite collaring to determine status, distribution, trends, movements, habitat use, feeding ecology, and causes of mortality of remaining bears; genetic analysis to determine taxonomic status for investigating potential future conservation actions (e.g., augmentation from neighboring populations, captive breeding) if other interventions are not successful; working with local communities and border guards to minimize disturbance; and improving supplemental feeding stations to provide extra food to the bears in their barren habitat at critical times of the year. At the same time, international participants agreed that they will review and make recommendations on a draft version of the Great Gobi A Strictly Protected Area Management Plan as part of the process to

ensure that the best possible management structure is put in place for this globally critical protected area and its unusual and threatened wildlife.

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