WSF Central Asia Caprinae Conservation Initiative

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INTRODUCTION

To build a cultural and institutional conservation ethic that will survive and flourish, this model program must provide and promote ownership for the people of each country and its government in implementing conservation, sustainable-use, and enhancement of that nation's natural resources.

The foundation for the Central Asia Conservation Initiative (CACI) is science-based conservation of wild sheep and goats and the habitat upon which they depend. Hunting-based tourism will serve as the primary funding mechanism for this project. While working in full cooperation with government agencies, incountry expertise and in-country hunting organizations, key conservation support and economic incentives will be advocated for by the Wild Sheep Foundation (WSF). In-country leadership, expertise, and implementation will be provided by the government, citizens, and local communities. In order for this program to be successful and sustainable, each of these goals and program elements will continue long-term.

Funding for the CACI will be provided through a species-specific Conservation Management Fee (CMF) for harvest of a wild sheep or goat. Included in the CMF is the government permit, revenue to implement the 14 program goals and elements listed below, and funding for guidance, support and marketing expenses associated with the CACI. In addition, WSF will, in collaboration with the respective governments, provide important information for species assessment and consultation with the IUCN Caprinae Specialist Group.

Overall Goal (Central Asia)

Establish science-based conservation practices and reliable funding sources within Central Asia countries to conduct and fund repeatable population monitoring surveys, habitat enhancement, disease surveillance and sustainable use harvest quotas supported by all stakeholders.

Species/Subspecies Addressed

Caprinae Species Native to Central Asia with initial emphasis on argali (spp.), markhor (spp.), ibex (spp.) and urial (spp.).

Central Asia Wild Sheep & Goat Enhancement Goals & Program Elements of the CACI

Goal #1. Work closely with Caprinae Specialist Group under the IUCN Species Survival Commission to sponsor, facilitate, and participate in Red-List Assessments for Caprinae species worldwide

Goal #2. In-country Ownership and Commitment to the Program

- Emphasize and involve utilization of in-country expertise, and develop, where needed.
- Implement program elements with government, citizen, and local community involvement.
- Develop full collaboration between researchers, managers, government officials, universities, and CITES regulators in North America, the European Union, and Central Asia countries.
- Assist in development of integrated data management systems with data security provisions and agreements that balance open-data public policies and researcher/industry needs with protection of critical habitat and location data.

Goal #3. Support Establishment of a Central Asia Caprinae Expert Group

- Develop expert review and good communication pathways within and between countries, with USFWS, EU and other CITES authorities, and be a communication link between conservation and Central Asia government ministries and other authorities.
- Members will be citizens of Central Asia countries, and will be non-governmental employees.
- Group expertise will communicate directly with Central Asia governments; group members will have
 expertise, engage in, and understand the WSF Central Asia Conservation Initiative, and will provide
 assessments of wildlife populations and assess governmental monitoring systems of individual
 countries.
- Advice and support to the Central Asia Caprinae Expert Group will be led by WSF, IUCN SULi, and the IUCN Caprinae Specialist Group. In addition, this group of advisers will solicit support from IUCN and CITES authorities for this unified effort.
- Develop and adopt a set of benchmark assessment standards and best management procedures for the various types of management activities to be implemented.

Goal #4. Develop Positive Relations with Commercial Hunting Interests Operating in Central Asia

• Develop outreach strategies with commercial interests involved in hunting Caprinae species in Central Asia to gain their support for implementation of the Central Asia Conservation Initiative.

Goal #5. Population Monitoring

- Develop and Implement annual and science-based repeatable population surveys:
 - Establish seasonal wild sheep and wild goat population surveys, i.e. reliable and repeatable survey periods.
 - o Establish Demographic Baseline. Classify females, young of year, males (by age class...age class to be determined).
 - o From above data, calculate post-season yearling/female ratios, male/female ratios, adult yearling male to adult male ratios, etc.

Goal #6. Establish Sustainable Legal Harvest Allocations Based on Credible Data

- From population surveys, develop and implement management practices that protect and conserve critical habitats and provide for development of sustainable harvest strategies.
- Establish harvest management procedures that includes science-informed assignment of population boundaries, defining minimum harvestable population numbers, objectives for healthy herd demographics, composition and recruitment, and maximum sustainable harvest rates (e.g., 3% of the population).
- Implement horn plugging to uniquely identify harvested animals:
 - o Provide plugs, drill bits, and in-country drills.
 - o Provide training via video and hands-on instruction.
 - o Establish central in-country locations for horn plugging of all harvested animals.
 - o Collect material (e.g., horn drill shavings, tissue) for genetic analysis.

Goal #7. Identify Seasonal Habitat Use and Movement Patterns

- Develop seasonal movement and dispersal pattern data and home range maps using existing in-country scientific expertise and local knowledge augmented by GPS radio collar relocation data where feasible.
- Develop a remote sensing satellite collar monitoring program that generates information and produces maps of resource and habitat selection, survivorship, and habitat use patterns. Recommendations on the percentage of marked or collared individuals from a population will depend on management needs and focal questions, but initial projects may utilize a small number (5-10) of GPS satellite collars where feasible with full understanding that it will take time to develop program funding.

• Maximize data collection during any handling efforts by collection of genetic, health and fitness samples; incorporate aspects of the WAFWA WSWG wild sheep health sampling protocols.

Goal #8. Develop Habitat Management Strategies Based on In-Country Scientific Findings and Experiences in Other Jurisdictions

- Develop digital mapping (GIS) of seasonal habitats for wild sheep and goats.
- Implement land use planning options that identify overlap of wild sheep distribution and domestic livestock grazing.
- Implement incentive programs for domestic livestock owners to graze away from crucial winter habitat to minimize. forage competition between livestock and wild sheep.

Goal #9. Implement Health Monitoring

- Convene a necropsy, pathogen and genetic sample collection training session in Central Asia, Kazakhstan.
- Identify wildlife and livestock diseases and parasites that are of concern in Central Asia.
- Establish wild sheep and goat herd/population health/fitness baseline datasets.
- Determine equipment needs, costs and sources.
- Identify labs (preferably in-country) where samples can be processed.
- In-country lab(s): determine needs and costs and develop funding sources.
- Out-of-country: Work with CITES to facilitate transfer of tissues/samples if CITES permit is required.
- Develop sampling protocol and begin sample collections.

Goal #10. Advocate for Genetic Monitoring

- Identify labs (preferably in-country) where samples can be processed.
- In-country lab(s): determine needs and costs and develop funding sources.
- Out-of-country: Work with CITES to facilitate transfer of tissues/samples if CITES permit is required.
- Develop sampling protocol.
- Collect samples as specified: horn-plugging material, from dead animals found in the field, from live animals captured in capture operations, etc.

Goal #11. Establish a Country-Specific and Species-Specific Conservation Management Fee for Hunting-Based Tourism (via Conservation Permits, to help fund conservation work)

- The Conservation Management Fee (CMF) is specific to a species.
- Each CMF would allow for the harvest of 1 individual of a species.
- 70% of the CMF will be directed to on-the-ground conservation and restoration work.
- As this CACI evolves and as CITES status improves, the percentage of CMF fees allocated between various program elements will be refined.

Goal #12. Support an increase in technical and management capacity for key officials in targeted conservation areas by developing short-duration manager-to-manager and wildlife disease health professional exchanges between North America and Central Asia experts

- Key Central Asia managers/officials will spend time in the field in North America with a variety wildlife expertise, primarily at the State and Provincial levels.
- Exchanges will occur during short intervals (i.e., 2 weeks per year), spread out over multiple years.
- Partners in developing exchange include key Central Asia Governments, US Government, IUCN, TWS, SCIF, WCS, Panthera, outfitting community, etc.
- Duration, 5 years, with multiple NA and key Central Asia participants.

Goal #13. Develop a WSF Presence in CITES and with the USFWS Endangered Species Program As population assessments of wild sheep and goats improves, efforts should concentrate on sustainable harvest opportunities and international trade, with a focus on the US, EU and Central Asia.

- Develop collaboration between researchers, managers, governmental officials and CITES regulators in NA. EU and Central Asia.
- Share and discuss CV2025 with the USFWS.
- Provide regulators with reliable and current information regarding species status and enhancement efforts in Central Asia countries.

Goal #14. Support Legal Hunting by Residents as an Incentive for Sustainable and Healthy Populations of Caprinae Species and their Habitats

- A long-term goal is to mirror the U.S. funding approach of Federal Aid (PR), where NGO funding would provide a surrogate PR type match for funding conservation.
- Countries that have citizen hunting will need to develop a resident hunting license fee that could be used to match NGO funding.
- A goal of local funding to provide 5% of the cost of hunting-based conservation, focusing on citizen involvement and ownership with in-country conservation of Caprinae and other species.

Additional Considerations: Successful implementation of management and enhancement actions presented in the 14 program goals and elements should lead to improved conservation status and "down-listing" in risk status of species targeted by this initiative. Each of the start-up actions should be established and functioning. An active public relations program with widespread multimedia outreach disseminating the conservation merits of the CACI program is essential, and must include publication of program results in appropriate scientific or commercial media outlets and regularly scheduled social media releases of population numbers, habitat data, relative health information for wild sheep populations, etc. These conservation merits also include positive economic, social, and environmental benefits. Involving and informing the people of the country and elsewhere of the scientific merits of the program and the potential benefits to the in-country public and the larger conservation community are equally important. Examples include:

- Participation of local citizens in population monitoring, identifying movement and seasonal use patterns, and determining sustainable harvest levels will encourage local citizens and communities to conserve wildlife
- Engaging agricultural and forest leaseholders in developing economic incentive programs to enhance wild sheep habitat adds economic viability to what the land can sustainably produce.
- Some diseases can be transmitted between humans, livestock, and wildlife. The livestock industry could benefit from knowledge gained from disease monitoring that may ultimately enhance agricultural production.
- Genetic monitoring will improve the understanding of taxonomic relationships and refined classification of Caprinae species native to Central Asia.
- Analysis of blood, fluid, and tissue samples will establish a health baseline against which to measure future changes.
- Live capture will enhance disease and genetic monitoring and, where feasible, deployment of GPS telemetry collars will facilitate the public's understanding of the challenges faced by wildlife.

The purpose and benefits for people and Caprinae conservation of hunting-based tourism authorized under the CMF and within the CACI must be clearly defined. In the future and as the program and populations expand, permits may be issued for both mature males and females. At that point in time mature male permits could be referred to as either-sex permits to remove the stigma of trophy from reference to harvest.