

CITES & LIVELIHOODS CASE STUDY 2019

# Bighorn Sheep hunting and trophy trade in Mexico



## SPECIES, USE AND TRADE

Bighorn Sheep inhabit arid and semi-arid areas with steep mountains and cliffs across western Canada, the western United States, and northern Mexico.

The introduction of livestock and uncontrolled hunting during the colonisation era led to rapid decline of Bighorn Sheep, with populations plummeting from roughly 1 million (1800) to fewer than 25,000 (1950). In Mexico, the Northeast populations were extirpated and the Northwest and Baja Peninsula populations fragmented.

Trophy hunting of Bighorn Sheep takes place widely across North America, with Mexico exporting approx. 100-200 trophies per year, mainly to the USA (Fig 1).

Hunting is allowed only within Conservation Wildlife Management Units (UMAs), around half of which are established by local communal farmers (*ejidos*), covering the large majority of bighorn habitat. An additional UMA on Tiburon Island in the Sea of Cortez off the Sonora state coast is owned and managed by indigenous Seri Indians. Here in 1975, 20 sheep

were reintroduced after long local extinction. This island population grew to 650 individuals by 2012, and has been a source for repopulation of habitats on the Mexico mainland.

Community and indigenous UMAs oversee and participate in hunting expeditions on their land, generate and keep associated revenues, and carry out monitoring, anti-poaching, and other wildlife management activities.



**BIGHORN SHEEP**  
*Ovis canadensis*



**APPENDIX II (MEXICO POPULATION ONLY)**



**LEAST CONCERN**



## LIVELIHOOD BENEFITS

Before the hunting programmes, both *ejidatarios* and the Seri Indians faced acute poverty, depending mainly on large herds of domestic goats and traditional fisheries exploitation.

Trophy hunting provides important economic and social benefits to the communities. Sale of hunting opportunities generates USD 10,000-40,000 (Int\$ 90,400-361,600) per hunt for *ejido* communities, a highly significant amount in rural regions with a high level of poverty. All *ejido* members

benefit from hunting through sharing of profits.

Seri Indians on Tiburon Island currently sell 10-15 hunts per year, and 8-12 more in mainland Sonora on Seri lands, with recent permits selling for USD 80,000 to 90,000 each (Int\$ 723,300-813,600), retaining around 85% of this after commissions to hunting brokers. Bighorn population growth has enabled the community to earn an additional USD 1.2 million from sale of young animals for re-introduction to their mainland range.

Hunting income supports conservation, habitat management and community development projects including scholarships, a natural disasters fund, infrastructure (lighting, water, sanitation), paying local police, and building ecotourism infrastructure.

Trophy hunting also creates permanent and temporary jobs for community members, including "eco-guardians" to deter poaching, guides, outfitters, cooks, cleaners, and wranglers.



Seri Indian women. All community members gain benefits from the trophy hunting programme. Photo: Patricia Zepeda Arriaga.

## CONSERVATION IMPACTS

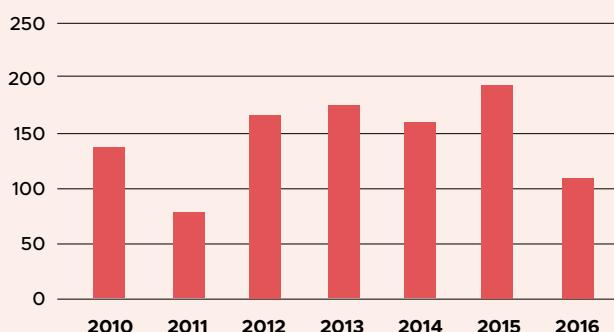
Before these hunting programmes were initiated, local *ejidos* and Seri communities did not generally value or protect wild sheep, and depended largely on goats, which were damaging to habitats and competed with bighorn populations.

The Mexican Bighorn Sheep population has steadily grown since trophy hunting started in 1995 (see Fig 2). The Tiburon Island population is currently approx. 477 (close to carrying capacity), and has contributed over 500 animals for mainland reintroductions. Mainland populations have also grown in this period (e.g. in Chihuahua from zero in 1970 to over 600 today). The global Bighorn Sheep

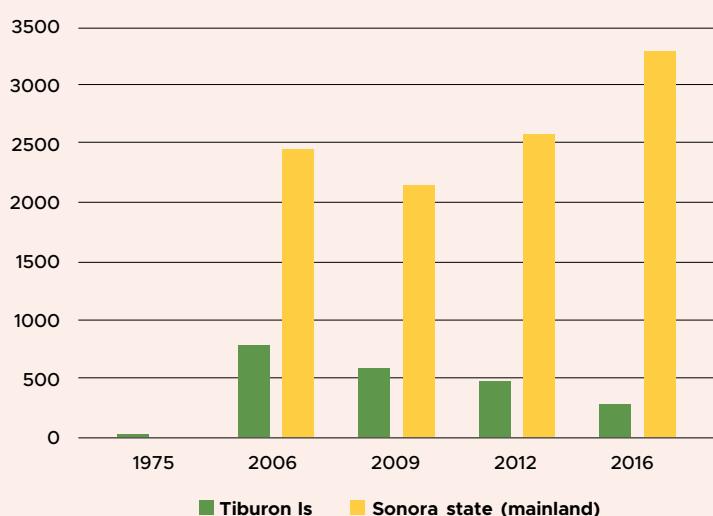
population has more than tripled from its historic lows to approx. 60,000-80,000 today, largely driven by incentives from well-managed hunting.

Hunting is carefully managed to avoid negative impacts. Only males of over 6 years of age are hunted with regional quotas of 10-20% of adult males.

Recoveries of Bighorn Sheep populations are driven by the benefits that local landowners and communities can gain from trophy hunting. Incentives from trophy hunting and trade have also led to large-scale habitat restoration, improved connectivity, and reduced livestock and overgrazing.



**Fig 1.** Wild Bighorn Sheep hunting trophy exports from Mexico 2010-2016.



**Fig 2.** Increases in wild Bighorn Sheep populations in the state of Sonora under a sustainable trophy hunting programme. Trophy hunting was re-established in Mexico in 1995. The recent decrease in the Tiburon Island population is due to the large number of animals (>500) translocated to the mainland, to re-establish extirpated populations and maintain the island population at or below carrying capacity.

## LESSONS LEARNED AND DIRECTIONS

Well managed Bighorn Sheep trophy hunting and trade provides powerful incentives to reduce poaching, engage communities in anti-poaching and conservation, re-build species populations and conserve habitat, while providing important economic and social benefits for indigenous and local communities.

### CURRENT CHALLENGES AND DIRECTIONS INCLUDE:

- combating poaching
- reducing diseases transmitted by feral species and livestock
- addressing social problems, including land tenure and benefit-sharing
- strengthening the capacity of

- communities to manage wildlife and participate in the value chain
- increasing the level of local benefits, and
- involving more women and youth in Bighorn Sheep management.

**Case study prepared by** P Mosig Reidl, L Guillermo Muñoz Lacy and R Cooney. Edited R Cooney.

IN COLLABORATION WITH:



Sustainable Use  
and Livelihoods  
Specialist Group

[www.cites.org](http://www.cites.org)



For the full case study see  
[cites.org/eng/prog/livelihoods](http://cites.org/eng/prog/livelihoods)