

EST.  2015

WILD HARVEST INITIATIVE®

QUARTERLY UPDATE

•
JUNE 2022



*We are Delighted to
Welcome the US Forest
Service to the Wild
Harvest Initiative®
Partnership Alliance!*

Wild sheep generate over 500 thousand meals every year in North America.

HARVEST PROFILE – WILD SHEEP

History and Conservation

In North America, there are two species a native wild sheep: bighorn (*Orvis canadensis*) and thinhorn (*Orvis dalli*) sheep. Wild sheep live in extreme environments in remote regions, on mountains or near cliffs and canyons that enable them to readily escape from predators. Thinhorn sheep occupy the cold mountainous regions of Alaska, Yukon, Northwest Territories and British Columbia, while bighorn

sheep range from British Columbia down south all the way to Texas, California and Mexico, and as far east as the Dakotas and Nebraska.

Wild sheep have been hunted by many different Indigenous cultures in North America (e.g., Tukadika, Salish, Thompson, and Mountain Shoshone), who depended on the animals for food and tools; for example, horns were fashioned into ladles, dishes, and knife handles by the Puget Sound Indigenous People and the Tahltan. Thinhorn populations were relatively unaffected by European colonization in North America, because the harsh

environments in which they reside largely protected them from colonist influence; however, bighorn were decimated and extirpated throughout much of their historical range. Bighorn were commercially overharvested for their meat, their habitat was fragmented and diminished, and they interacted with domestic sheep and goat, which increased competition for forage and transmitted diseases into wild populations, including Psoroptes-induced scabies and respiratory infections. In the early 1800s, bighorn abundance in North America was estimated to be 1.5–2.0 million, but

by 1960, only approximately 25,000 were left.

The first wave of conservation occurred in the late 1800s, driven by sport hunters that believed in the fair pursuit and conservation of game species. This sparked the implementation of harvest quotas, habitat protection and predator control. Unfortunately, this was not enough to restore bighorn populations. Bighorn had been extirpated from much of their historical range, and the populations that remained were small. It was clear that more had to be done to restore bighorn populations.

Bighorn began to be translocated from one region to another in 1922, with the hope that new populations could form. Translocations were expensive, which limited the number of translocations that could occur and the number of sheep in each

translocation. Translocations became more successful in the mid-1900s, following the advent of the Pittman-Robertson Act in 1937 (an excise tax on firearms and ammunition that is allocated to wildlife conservation) and scientific research that demonstrated that a minimum population size of ~100 sheep are needed to successfully establish a new population.

Today, wild sheep conservation is still driven by those who desire to hunt the species. Hunters allocate vast amounts of money to wild sheep conservation through license fees, excise taxes, and donations to conservation organizations. For example, the Wild Sheep Foundation has raised and distributed over \$100 million to wild sheep conservation efforts. In addition, hunters themselves also volunteer their time to assist with translocations, vegetation management, population

surveys and many other time-consuming efforts needed for effective conservation.

Wild sheep conservation efforts to date have resulted in 1460 translocations of 21,479 wild sheep in North America. Many conservationist hunters would be proud to say that bighorn have been reintroduced into all regions where they historically occurred, are classified as least concern on the IUCN Red List of endangered species, and now number over 80,000 animals — 3 times more than only 60 years ago. While more work is needed to bolster wild sheep populations, wild sheep populations would not be what they are today without the funding, work, and advocacy of passionate hunters, and the active management of various wildlife organizations.

Wild Sheep Hunting: Once in a Lifetime Opportunity and A Powerful Force for Conservation

It is well known amongst those who attempt to hunt wild sheep that demand far outweighs supply, and thus the likelihood of ever hunting wild sheep is very low. For example, in Washington State in 2021, there were 35,198 applicants for bighorn, but only 106 licenses were issued; thus, the probability of success was only 0.30%, roughly 1 in every 332 applicants. The odds of acquiring a license are so low, that a small number of licenses are available for purchase and for auction at exorbitant prices: one license to hunt bighorn in Alberta even went for \$627,000 at auction! Unfortunately — it was not a successful hunt. Needless to say, hunting wild sheep generates an enormous amount of money for conservation.

Approximately 3500 tags are awarded each year for bighorn sheep hunting and 10,500 are awarded for thinhorn sheep hunting. The cost of each tag can vary from \$300–\$2000 depending on residency and location. Furthermore, the number of tags purchased is often only a fraction of the number of hunters that pay to be put into a draw to acquire a license. Therefore, despite the relatively small number of hunts available, wild sheep make a big impact on conservation funding.

One might think that because there are far more thinhorn licenses available, that more thinhorn are harvested. While a thinhorn license might be easier to get, thinhorn inhabit cold mountainous regions with unforgiving climate and inaccessible terrain. For example, in Alaska in 2020, 2,393 hunters spent 14,538 days hunting thinhorn sheep — but only 613 sheep were harvested — that means, on average, only one sheep is harvested for every 24 days spent hunting! The difficulty associated with harvesting the animal results in thinhorn sheep accounting for only 38% of all wild sheep harvested.

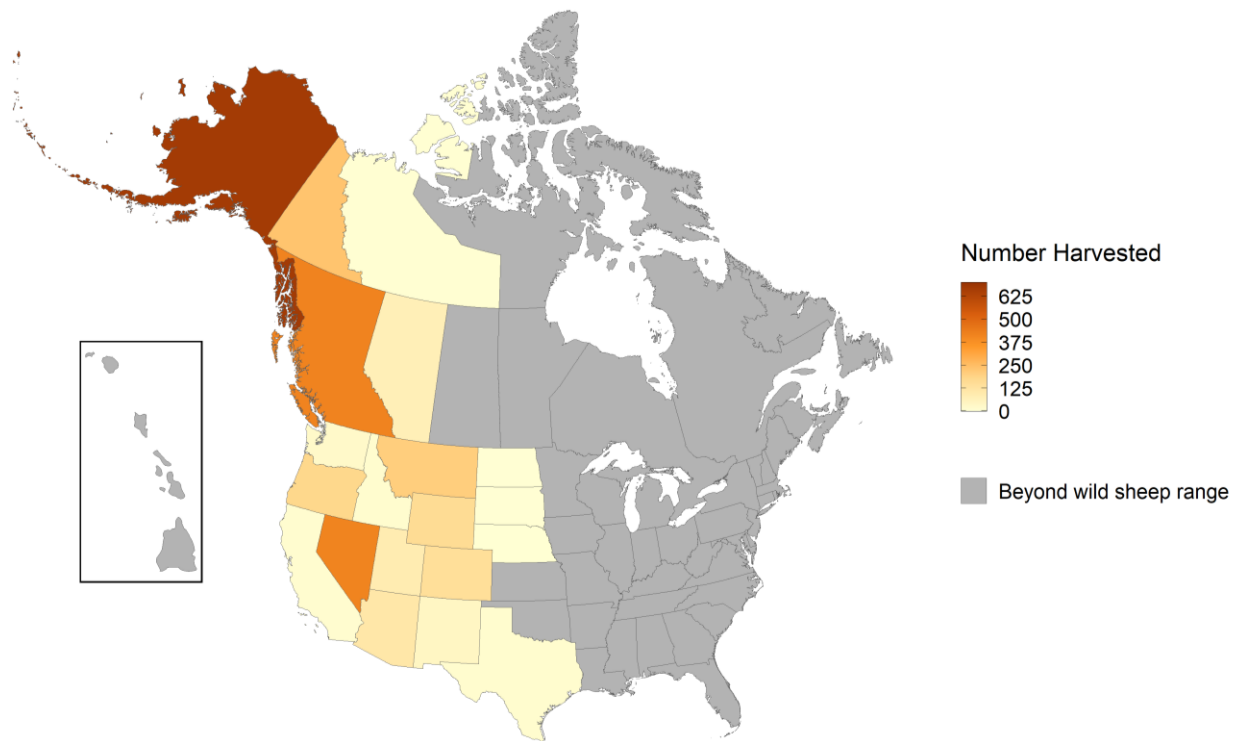


Figure 1. Average number of moose harvested in Canada and the USA each year (2014-16).

Modern Relevance as a Food Provisioning System

While hunting wild sheep is critical for the conservation of the species, it also contributes to food security. The data provided below reflect recreational hunting, however, subsistence hunting also results in the harvest of wild sheep harvest each year. Furthermore, British Columbia did not differentiate between the harvest of thinhorn and bighorn sheep, although both are harvested in the region. Lastly, the Northwest Territories did not collect harvest data on wild sheep during the 2015/16 season, therefore to estimate the harvest in the 2015/16 season, the harvest in the 2014/15 season was used.

Between the 2014/15 and 2015/16 harvest seasons, a total of 5,647 wild

sheep were harvested in the US and Canada: 2,977 in 2014/15 and 2,670 in 2015/16. Nearly 3 times more wild sheep were harvested in the US than in Canada: of the combined total, 1,458 animals were harvested in Canada and 4,189 were harvested in the US. Bighorn sheep make up the approximately 62% of the wild sheep harvest. Between the 2014/15 and 2015/16 harvest seasons, at least 1,818 thinhorn and 2,992 bighorn were harvested.

On average, each year, 2,824 wild sheep are harvested with a total live mass of approximately 532.1 thousand lb. This amounts to 187.5 thousand lb of edible meat, which is equivalent to 500 thousand meals (based on a 6 oz. serving). These harvest quantities represent a significant contribution to the local diets, culinary traditions and home

food budgets of many North American families.

Average Mass of One Ram		
	Live (lb)	Edible (lb)
Thinhorn	187.4	66.0
Bighorn	221.7	78.1

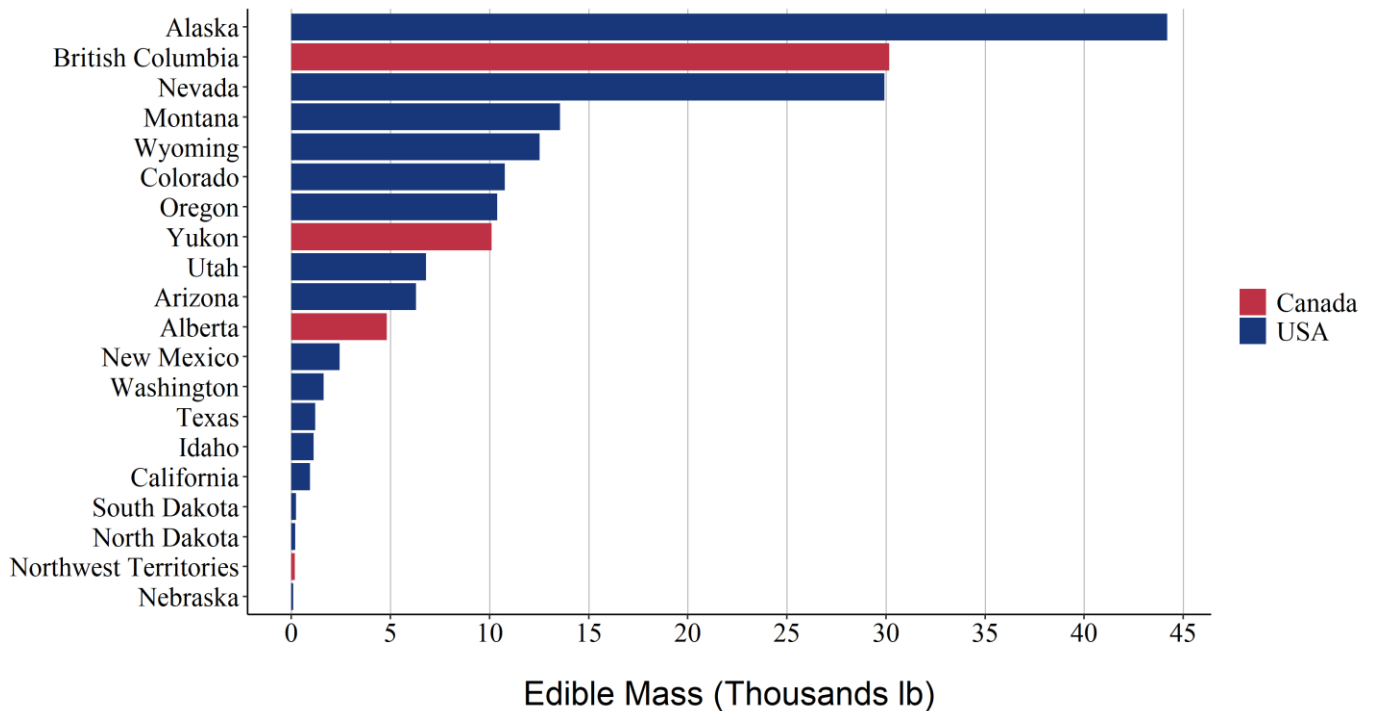


Figure 2. Average amount of wild meat generated from wild sheep harvests in Canada and the US each year (2014-16).

PROGRESS REPORTING

Recreational Fishing in Canada

A technical paper focusing on the food value of Canada’s recreational fishery has been subjected to review by an external expert. Their comments and suggestions are being carefully considered for a revised draft. In this report, we summarize new findings surrounding recreational fishing in Canada, with important conclusions regarding the relevance of recreational fishing as a food provisioning system.

Wild Harvest Initiative® Database

Wild Harvest Data Collection

Our latest round of data collection, focused on the 2016-2019 period, is complete. In the next step of the

process, we are creating Jurisdictional Harvest Verification Forms, which will be sent to state agencies to ensure that the data we have collected are accurate and comprehensive. In the last quarter, we updated the format of these verification forms, from their old PDF format, into new online surveys. This will enable a simpler and more efficient verification process for state agency personnel and will enable automation of data collection from verification forms. This update will significantly reduce the time needed for data quality assurance.

Economic Valuation - Hunting

Research and consultations needed to derive domestic economic and environmental replacement costs are ongoing.

Database Updates

In the last quarter, we contracted TriWare Technologies, an industry leading technology and business support provider based in St. John’s, Newfoundland to update the cloud-based Wild Harvest Initiative® Database. This update will enable data files to be uploaded directly into the database, which will significantly reduce the time needed to integrate new harvest data into the database.

Wild Meat Sharing and Consumption Index

Wild Meat Sharing and Consumption Index Survey reports have been through the revision stage with state agencies for Wyoming and Nevada and are currently awaiting final approval. We have now completed the Arizona survey, which is currently in revision with the Arizona Game and Fish Department.

In the last quarter, we launched the Wild Meat Sharing and Consumption Index Survey in Alaska. The survey is currently open to responses from hunters in the region. So far, we have received over 2000 responses, and analyses will begin shortly.

Once analyses of these four latest surveys are completed, we will conduct a comparative analysis (with the Texas survey results also included) to determine how hunting harvest sharing compares among states. This information will be presented in a separate document that will include a review of relevant academic and grey literature.

We remain in discussions with other US States concerning subsequent surveys and hope to launch a Canadian survey in 2022.

Additionally, we continue to investigate the possibility of expanding this program to administer surveys in other parts of the world, thus potentially documenting the true universality of the wild-meat sharing phenomenon.

Wild Harvest Initiative® Partnership Alliance

Exploring New Partnerships

We are pleased to welcome the US Forest Service into the Wild Harvest Initiative® Partnership Alliance! This represents the first national government agency involved in the Initiative. It is the culmination of months of partnership discussions and contract revisions and is a big step forward for the Wild Harvest Initiative®. The use of the US Forest Service logo is currently pending approval and will be included in our partner list once available.

We remain engaged in partnership discussions with several organizations, including state agencies, an alternative energy company, and a land trust.

Communications

Fact Sheets

In the last quarter, we reformatted the Moose Factsheet to give a new look to our Factsheet series. This new format puts a larger emphasis on wild-

animal harvesting as a food provisioning strategy, and the importance of the harvest to food security. We will be modifying all existing factsheets and creating all new factsheets with this new format.

Press Releases

A press release to announce the joining of the US Forest Service into the Wild Harvest Initiative® Partnership Alliance is in progress and will be released in the next quarter.

Podcasts

In the last quarter, we finished production of a new podcast series with Randy Newberg. It is a 5-part series discussing the North American Model of Wildlife Conservation. The podcasts feature Shane Mahoney, and each episode breaks down a fundamental tenet of the model. During the podcasts, Shane and Randy discuss the foundation of the model, clarify misinformation surrounding it, discuss its virtues, room for improvement, and much more.

The podcasts can be found here: <https://open.spotify.com/show/39WS18G1NAwtzfp5W1F5Gv>



THE WILD HARVEST INITIATIVE® PARTNERSHIP ALLIANCE



Not pictured is Richard A. "Dick" Corbett