## **Reindeer Herders Association**

In 2013, and again in 2023, St. Lawrence Island, a small island in the Bering Sea about 164 miles west of Nome, AK and 36 miles east of Russia, declared a food disaster. The island is home to two federally recognized Tribes – the Native Village of Gambell and the Native Village of Savoonga. In both years of food disasters, the villages harvested less than half of their walrus quota, which is a primary food source. Sea ice has thinned, and weather conditions are more unstable, making it harder for hunters to bring home a sufficient supply of food. While St. Lawrence islanders struggle to hunt and harvest walrus, Alaska Natives across the state are also struggling to find enough food for their communities. Salmon are declining in both size and number as more die from heat stress. Those that do return to their spawning grounds are younger than in the past and are often afflicted with parasites and disease. Typically, salmon species spend 6-7 years in the ocean before returning to their spawning grounds, but now salmon are returning after 3-5 years. Additionally, caribou herds – particularly the Western Arctic Caribou Herd – are declining, and hunters are returning empty handed more often.

Food crises in the Arctic will continue to occur – and they will increase in severity. The lack of food harvested in rural Alaska during subsistence season cannot be replaced by storebought counterparts. Not only are traditional foods not available in general stores, but the cost of groceries in these stores is astronomical – especially for families making a median income of \$30,000 or less. A gallon of milk costs nearly \$20, and a loaf of bread can cost \$9, at prices that only continue to increase. This does not account for the cost of shipping prices to rural locations that consumers take on personally, nor for food that arrives spoiled or unusable. At these high prices, store bought food cannot be the primary source of nutrition for a community, emphasizing the importance of subsistence harvests and farmed food. For generations, reindeer herding has been a reliable source of food for Alaska Native communities. On St. Lawrence Island, during these food disaster declarations, it was the reindeer herds that became a crucial source of food to avoid malnutrition. As food security becomes a more pressing issue in the region, reindeer can complement Alaska Native subsistence lifestyles as one possible method of building resilience into the food system.

Reindeer herding was introduced to Alaska by U.S. agencies in the early 1890s, long before it was declared a state. Colonizers slaughtered most of the marine mammal and caribou populations, which Alaska Natives relied heavily upon for subsistence. To combat rising levels of starvation at a time when nearly all of the local food sources had been diminished, reindeer were imported from the Chukchi Peninsula in Siberia. Chukchi reindeer herders were brought to Alaska to teach Alaska Natives how to herd reindeer, but this introduction didn't work as planned. In a later attempt, the Sámi were brought to the region, and with their knowledge, reindeer herds grew rapidly in the following decades. Some Sámi established their own herds in Alaska, creating ancestral ties between modern herders and the first Sámi families that arrived in the region. Owing to this history and 130+ years of culture practice, reindeer herding is deeply engrained in Alaska Native communities across Western Alaska. Many elders recall growing up nomadically and herding reindeer on the tundra with dog sleds, long before the introduction of the snowmachine. In the Bering Strait region, some villages trace their origins to reindeer herding, including Teller, Brevig Mission and Savoonga, which was a reindeer camp for the herders in Gambell for decades before it was officially incorporated as a municipality.

For decades, reindeer herds were federally managed by the Bureau of Indian Affairs (BIA), and a Chief Reindeer Herder was based in Nome. The federal program provided loans to reindeer herders across the region in the form of physical reindeer rather than money, and the recipient of the loaned reindeer was allowed to keep any offspring. Current herders can still trace their herd's origins to these loaned reindeer from the 1940s and 1950s. After 80 years of a federally run reindeer herding program, it transitioned to being Tribally operated in 1971.

The Reindeer Herders Association (RHA) was established in 1971 and is a program of Kawerak, Inc., a Tribal nonprofit corporation. Although the RHA is a program under Kawerak, the boundaries of Kawerak don't encapsulate the entire range of reindeer herding in Alaska. Therefore, the RHA serves 21 reindeer herders across three regions of Western Alaska, where approximately 20,000 reindeer can be found on the open range. The RHA serves as a coordination platform for herders across Alaska to network with one another and advocate for common priorities – such as access to capital, technology, and husbandry management materials. While not all reindeer herders in Alaska are members of RHA, a majority of the reindeer economy is served by RHA, and they assist partners who are not members by sharing information and knowledge.

While reindeer can be a reliable food source as other cultural foods decline in quantity due to climate impacts, the future of reindeer herding given climate change is becoming less

predictable. RHA's Siberian partners, the Nenets, have lost tens of thousands of reindeer to starvation. Warmer winter temperatures have led to rain-on-snow events, wherein rain freezes onto a snowpack and creates a layer of ice overtop. Reindeer cannot paw through this layer of ice to get to the vegetation underneath, preventing them from eating. Similar weather events are happening in Alaska due to warm winter temperatures, and it's having similar consequences for wildlife and reindeer herds. Some herders have considered supplemental feeding for their herds, but similar to the issues of purchased food in rural Alaska, this supplemental feed is expensive. It can also be difficult to plan for, as the amounts needed each year are unpredictable, and the costs to ship and store feed are extremely high. When herders know that reindeer will be corralled, they gather lichen to keep their herd fed. This preemptive planning could be used in lieu of shipped feed but would require a massive amount of human effort.

In 2022, Typhoon Merbok slammed into the west coast of Alaska from the Bering Sea. The damage to Alaska Native communities was insurmountable and impacts from flooding to coastal and riverine erosion further exacerbated erosion from permafrost thaw. The typhoon caused infrastructure damage that affected communities are still repairing, including damage to reindeer corrals that actively manage herds. Typhoons are becoming more common in Alaska, and the sea ice in the Bering Sea, which serves as a buffer for the storm before it makes landfall, is forming later and less each year. This lack of a buffer will continue to cause infrastructure damage and erode the tundra, presenting continued challenges for the reindeer economy.

Reindeer herders are also facing challenges unrelated to change in the environment. Many herders operate on public grazing permits under federal or state agencies and have no ownership of the land. This gives herders little control or ability to predict changes in these permits, instead leaving them subject to changes from local and federal government agencies. Herders are often given no warning in advance to changes. Additionally, reindeer herding is such a unique form of animal husbandry that requires training and knowledge to perpetuate, so youth engagement has long been a priority. RHA and its partners have worked hard to showcase the value and income potential in reindeer husbandry to new generations of youth, as these jobs directly impact the inter-generational sharing and teachings of Traditional Knowledge. Reindeer have long been classified as an 'exotic' species under United States Department of Agriculture rules, meaning that meal sales produce lower value and herders struggle to access regular funds available to traditional meat commodities like poultry and beef. Without consistent access, the herder's labor is

given in-kind and all herders hold multiple jobs to subsidize their husbandry practices. Knowing the challenges of finding funding to support a reindeer herd can dissuade potential successors, as gaining access to funding and capital are struggles for all Alaska Native village communities, not just those with reindeer herds.

As part of a new wave of energy in reindeer herding, RHA is supporting networks of young reindeer herders, including those who have recently completed the High Latitude Range Management (HLRM) Program at the University of Alaska-Fairbanks Northwest campus in Nome. This program focuses heavily on reindeer science and husbandry. It originated out of the Northwest campus in 2011, as this is a central location for herders in Alaska and is structured to compliment the lifestyles of herders. This program has provided a consistent supply of students and graduates, and the continued support from RHA helps them achieve their goal of doing well by their legacy and herding for decades to come. Herders Bruce and Ann Davis hosted successful reindeer youth summits out of their ranch, the first of their kind, near Nome, Alaska. RHA is continuing to partner with the current ranch owner, Bonnie Scheele, to continue Bruce and Ann's legacy to continue youth summit gatherings for herders.

RHA is working to ensure that herders of all ages have access to critical supplies, including lumber and wire for repairs to corrals, and horn cutters. In addition to these critical supplies, RHA is working to give herders access to modern technology used in herd management. They've distributed satellite collars that allow herders to check a map on a million-acre range to check the location of their herd, rather than manually keeping track.

RHA and its High Latitude Range Management (HLRM) program partnership reinvigorated international partnerships that originally brought reindeer herding to Alaska over a hundred years ago. Recently, a group of Savoonga herders traveled to Finland, where they toured some Sámi reindeer herding facilities. A year earlier, some RHA staff traveled to Finland and stayed with the Sámi for three weeks, learning from them, seeing their herd management techniques, and visiting the <u>Sámi Education Institute</u>. RHA plans to reciprocate this hospitality and host international herders in Nome at the 2026 Reindeer Conference. This international Arctic knowledge exchange is essential for adapting reindeer herding practices to a changing climate, and RHA will play a key role.

This profile was developed in 2025 by Taryn Bell, Institute for Tribal Environmental Professionals, Northern Arizona University, with financial support from the Bureau of Indian Affairs. The profile is available on the Tribes & Climate Change website: www7.nau.edu/itep/main/tcc/Tribes. The tribal climate change profiles featured on the website are intended to be a pathway to increasing knowledge among tribal and non-tribal organizations interested in learning about climate change mitigation and adaptation efforts.

Special thanks to Nathan Baring for his assistance in developing this profile. More information on the Reindeer Herders Association can be found on their website: <a href="https://kawerak.org/natural-resources/reindeer-herders-association/">https://kawerak.org/natural-resources/reindeer-herders-association/</a>

More information on the High Latitude Range Management Program at the University of Alaska Fairbanks Northwest Campus can be found on this PDF: https://www.uaf.edu/nwc/files/programs/OE\_Cert-HLRM.pdf

Citation: Bell, T. (February 2025). Reindeer Herders Association. Climate Change Program, Institute for Tribal Environmental Professionals, Northern Arizona University.