

# THINHORN CONSERVATION IN ACTION:

WSF'S FRESH, NEW PARTNERSHIP WITH THE TAHLTAN NATION AND TAHLTAN GUIDE & OUTFITTERS ASSOCIATION YIELDS FIRST STUDY OF ITS KIND FOR STONE'S SHEEP

A herd of Stone's sheep descends on a well-worn game trail as it has every spring to migrate from its winter range to summer pasture on a peak looming across a drainage. At the low point in the trail, the sheep encounter a road and nervously prepare to cross. The sudden rumble of an oncoming ATV startles them, and they stand paralyzed and confused in the four-wheeler's dust wake. The herd faces multiple dim possibilities. Would some of them attempt to dart across the road, separating the herd and leaving them exposed to predation by area wolves and grizzlies? Would they retreat back up the hill from where they had come, where a worn-out food supply awaits them? Or would they safely cross the road but later see their lambs succumb to the physical toll of this new stress compounding their

usual survival struggles?

This scene is played out twice yearly in the Dome Mountain area near Dease Lake in northern British Columbia, within the territory of the Tahltan First Nation people. It is a place once known as the Gateway to the North for early explorers, traders, prospectors and sport-hunters who came here with their native Tahltan guides in search of wealth, adventure and wild species, including majestic Stone's sheep. New genetic research indicates that Stone's sheep only exist in British Columbia, making the Dome Mountain herd both historically and globally significant.

The stage is set for the situation to worsen. The Jade-Boulder Road cutting through the herd's summer grazing grounds on Dome Mountain and its winter territory in the range to the south is slated for increased traffic. The





cause: continued exploration and prospective development of nearby jade and gold mining properties. The situation, however, has not simply been written off as another tragic setback for Stone's sheep. It is a call to action, and it inspired a unique partnership between WSF, First Nation people, guide-outfitters, community members and other stakeholders bent on averting disaster for the area's wild sheep.

## MINING FOR DATA, AND ANSWERS

As part of a three-year endeavor, WSF funded a \$100,000 Grant-in-Aid (GIA) toward year one of the Dome Mountain Stone's Sheep Movement, Roads, Mortality Study, a first-ever scientific analysis of its kind for Stone's sheep. Initiated and proposed by the local Tahltan Guide & Outfitters Association

(TGOA) and the Tahltan Central Government (TCG), the study combines long-term animal tracking through GPS collars linked to Iridium satellites, coupled with a multi-year herd health assessment. It is a monumental undertaking seeded by community-based contributions from TGOA and community businesses. With the financial boost from WSF, it is already yielding results.

According to WSF Senior Conservation Director and Thinhorn Sheep Program Lead Kevin Hurley, heavily increased motorized use of the Jade-Boulder Road east of Dease Lake to access backcountry mining resources is likely in the future. While the area's prospective mines were being explored, no one had thought to examine the impact on the local Stone's sheep, or any other Stone's herd under similar pressure.

Until now.

"If any of the major exploratory mining projects proves out, we anticipate a lot more traffic along the Jade-Boulder Road, and we believe this could disrupt the sheep's seasonal movement north to south and back again," Hurley notes.

Drawing upon his 40-year career in wildlife management, Hurley believes the best way to analyze the potential effect of increased traffic and development on the road is to examine, through GPS-collar data collection, the actual migratory patterns of the herd, its mortality rate and causes of death, and the human-caused impacts on sheep health and survival. Key to the project is a companion Stone's sheep health assessment, funded by a \$15,000 WSF GIA provided by the Kevin & Janine Rinke Thinhorn Initiative, a donor-advised fund supported through the

# CONSERVATION FOCUS



Rinkes' yearly giving to WSF.

"This is a first-ever health assessment of its kind on Stone's sheep, and it was made possible via Kevin and Janine Rinkes' donation," Hurley says. "Viewed together, this Stone's sheep telemetry study and companion herd health assessment are the most significant projects WSF has ever undertaken with a First Nation partner."

Tahltan Chief Rick McLean is quick to point out that his band's involvement in wildlife conservation is an old tradition given new life in recent years.

"The Tahltan have been reliant on our wildlife for thousands of years. In the past 150 years, the management of that wildlife had been taken from us, with less than stellar results," McLean explains. "In the last 15 years, we saw the need to

re-engage with wildlife management, for future generations as well as for the benefit of wildlife now. On a project-by-project basis, we've gone out on our own in partnership with the guides and outfitters to be more involved in wildlife management. We've been very happy with WSF's willingness to help us with this very successful project."

Success hinges on cooperation between the people who have called the Dome Mountain area home since ancient times and newcomers dazzled by the land and wildlife. Kevin Rinke views his involvement in funding the sheep health assessment as a solid example of international cooperation inspired by a shared vision.

"I think that the First Nations and the Canadian people residing in areas where Stone's sheep live know that the idea of wildlife

conservation doesn't have borders," Rinke notes. "From my perspective, as an American who has enjoyed the privilege to hunt in British Columbia, the opportunity for me to contribute so that First Nations people, Canadians, Americans and my own kids can have a chance to hunt wild sheep in this area gives this a real value. Working in partnership is the key."

It could easily be argued that the Tahltan and other bands have the most skin in the game when it comes to wild sheep. The three First Nations in Northwestern BC cover an area that amounts to 11 percent of the province's land area, including treaty-based wildlife rights to 70 percent of all provincial Stone's sheep habitat. Together, three First Nation bands—the Tahltan, Taku River Tlingit and Kaska Dena—hold

60 percent of the world's Stone's sheep within their borders. Highly invested in the future of wild sheep, they are natural allies of both TGOA and WSF. At WSF's April 2017 Thinhorn Summit II in Anchorage, Alaska, that investment was argued with clarity as McLean presented a lecture on the Stone's sheep collaring project and other Tahltan conservation collaborative efforts.

## THE IDEA TAKES FLIGHT

Observations from two previous airborne environmental assessments had inventoried the wild sheep along the Jade-Boulder Road. Those assessments had raised serious concerns. As more local community members in the Dease Lake area came forward to voice concern about wildlife issues, the TGOA decided to take action, with a focus on Stone's sheep.

"This is a population of a couple hundred sheep that are very susceptible to development in the area," observes Bill Oestreich, pilot and TGOA vice president. "You can see their vulnerability from

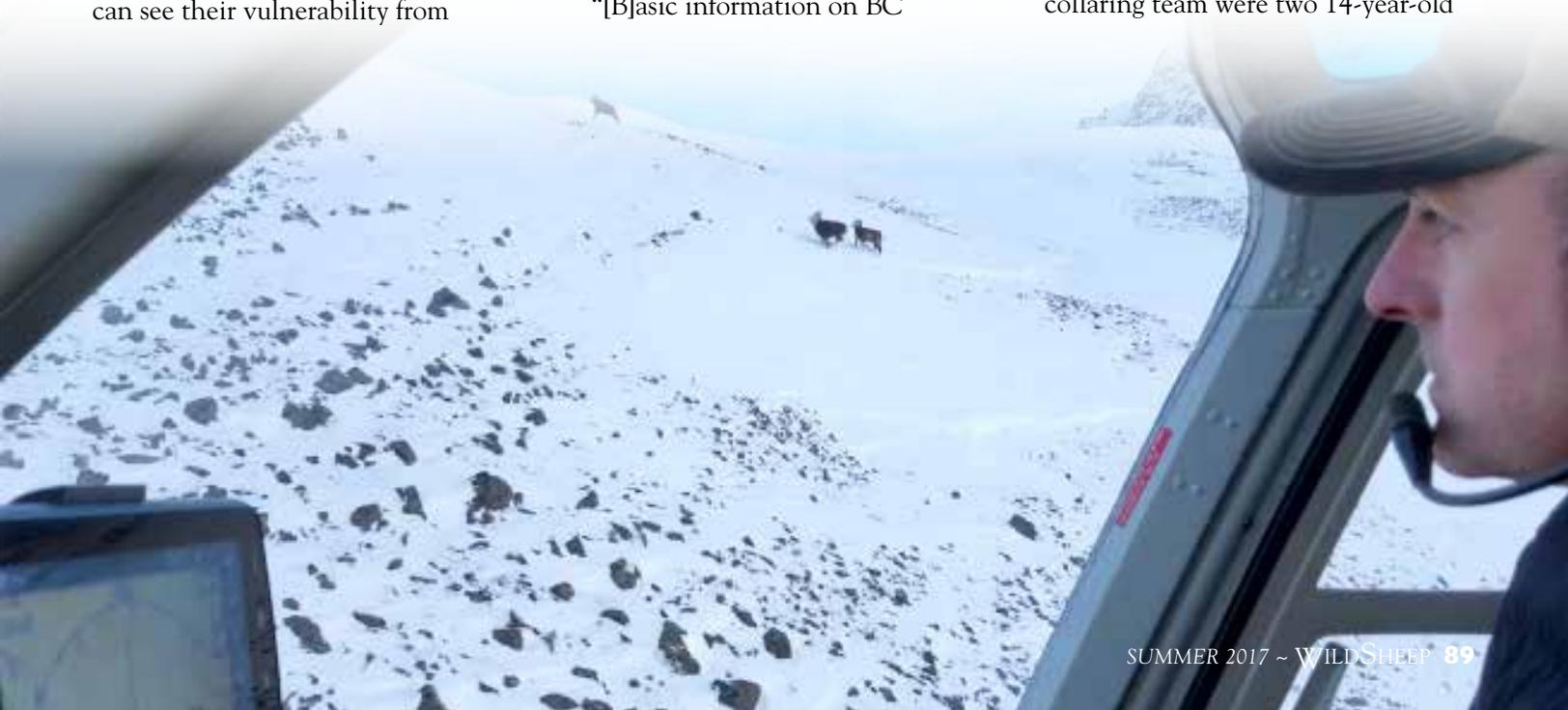
increased traffic on that road. We would see sheep hold up because of human disturbance. It appears they are vulnerable to predators because of their disrupted movement across the road and the considerable distance to escape terrain. We wanted this study to focus on human impacts, yearlong sheep habitat use and predation."

Spearheading the idea of collaring Stone's sheep in the Dome Mountain/Dease Lake area, the TGOA collaborated with the TCG to make it their priority conservation project. In recent years, the TGOA and TCG have increased their involvement in hands-on conservation work benefitting wild sheep and other BC native species – and in raising the money to get it done. This new effort would take their work to a new level. As word spread, the project quickly attracted letters of support from other organizations, including the Wild Sheep Society of British Columbia and the BC-based Wildlife Stewardship Council.

"[B]asic information on BC

Stone's sheep population range use, wintering and lambing habitats and migration corridors is lacking and information on the research herd is directly applicable to these needs," wrote Dr. Helen M. Schwantje, Wildlife Veterinarian for British Columbia's Ministry of Forests, Lands and Natural Resource Operations, in support of the project. "Of special concern to me, there is very little information on Stone's sheep general health and specifics on pathogen profiles, in particular in the light of recent advances in the understanding of bighorn sheep health profiles. Without filling in these gaps in baseline information on BC Stone's sheep, population assessments and their management cannot be effectively performed."

Working with the TCG, TGOA started building a team to execute the collaring endeavor. Among those soon to join were the local Tahltan Guardians – Tahltan band members trained as citizen game wardens and wildlife monitors. Joining the collaring team were two 14-year-old



# CONSERVATION FOCUS



Tahltan students who had never before had an opportunity to mingle with top wildlife management experts and witness what happens when they work with animals in the field.

In addition to leading daily safety briefings at his Dease Lake home, Oestreich was organizing daily operations, piloting the helicopter and finding their quarry. Along the way, he and the other professionals involved remained mindful that, through responsible mentoring, the team's Tahltan Guardians and youth participants could someday lead wildlife departments and manage their own wildlife capture-and-collar crews.

Meanwhile, the TGOA applied to WSF for financial support of the project, which they both saw as a natural fit with the foundation's thinhorn sheep goals, as stated in the WSF *North American Conservation Vision 2020*. After review, WSF approved a \$100,000

GIA and set guidelines on what progress milestones, data and reports it expected the project to produce in creating a scientific study of the Dome Mountain/Dease Lake herd's movements, behaviors and survival. WSF also funded trail cameras to record current vehicle movement over the Jade-Boulder Road. This would establish a baseline for truck, ATV and motorcycle traffic before a mine is developed any further. WSF funding also paid for a participating expert, senior biologist Shaun Freeman of ERM Consulting, and the field time spent by Tahltan Guardians on the collaring endeavor. As TGOA continued to commit funds to the project, Tundra Helicopters came forward to donate flight time and BC Yukon Air stepped up with monetary support.

As the ewe collaring prepared to get underway, the BC Ministry's Dr. Schwantje and master's candidate Dr.

Caeley Thacker, DVM, were getting their equipment ready to examine the captured sheep's health and take samples from their respiratory tracts. Joining them in the field would be wildlife biologists, including Freeman and Bill Jex, the British Columbia Ministry's wild sheep manager for that provincial region.

In February 2017, the team was airborne and on its way to the herd's winter range. The battle plan was straightforward: collar ten Stone's sheep ewes in three days. By helicopter, teams consisting of two biologists, a veterinarian and at least one student would fly into the field, where they captured ewes individually using a net gun shot from the helicopter. Once netted, the sheep were tested for disease, collared, then released. The turnaround time was 20 to 24 minutes from capture to release for each ewe. Working efficiently was critical to keeping stress on the sheep, and possible resulting sickness or death, to a minimum.

"That first two weeks after capture, you wonder. It's a vulnerable period for them," Oestreich says. "Four months post-capture, the ten sheep we collared are all still alive and doing well."

From one staging area, the helicopter would leapfrog the crew to another, where they would repeat the same steps. Though many of the participants had never participated in a net-gun capture and the mission was always challenging with available daylight constraints and elusive sheep hiding in huge country, everyone executed their jobs flawlessly.

"It was refreshing working with Ministry staff, biologists, Tahltan Guardians and the others—all people

working together for the betterment of wildlife,” Oestreich says. “We became a team very quickly.”

A surprise side project also sprung up during the course of the collaring. Community members had informed the TGOA about a few local families who were living in nearby Telegraph Creek and keeping small herds of domestic goats. Through outreach, the homesteaders agreed to have Drs. Schwantje and Thacker perform disease testing on their animals to detect the presence of *Mycoplasma ovipneumoniae* (MOVI), a bacterium that triggers wild-sheep pneumonia.

“The local people were not aware of some of the potential risks of domestic stock in proximity to wild sheep until we approached them,” Oestreich says. “They were all open to veterinary testing of their animals, and all were ultimately clear of MOVI.”

The time the veterinarians spent educating the homesteaders about the disease’s danger and the importance of keeping their domestic animals separated from any wild sheep and goats will yield long-term benefits. WSF plans to work with the TGOA to implement and support a plan for local people to quarantine and disease test any new sheep and goats brought into the area to prevent a MOVI outbreak.

## LASTING LEGACY

With expert analysis and monitoring by ERM consultants, WSF and its partners will be getting updates in the coming weeks on the collared ewes as they roam their expected summer home on Dome Mountain. Meanwhile, the collared wild sheep will continue to be monitored for the next three years. Everyone involved is watching the



situation closely, with an action plan expected to follow after all the data is in and thoroughly analyzed.

“I wanted WSF to launch a big legacy project in British Columbia, and it is critical that we involve First Nation people in our projects,” says WSF President and CEO Gray N. Thornton. Last year, after attending the TGOA meeting in Dease Lake, Thornton personally observed wild sheep crossing the Jade-Boulder Road when he flew over the area in the company of a concerned Tahltan First Nation elder. Ewes were standing just out of range of a passing vehicle, Thornton explains. Even in the high country, they faced the same problem: Thornton’s aerial recon revealed ATV trails crisscrossing Stone’s sheep game trails winding up the steep slopes.

“One of the challenges identified by our first Thinhorn Summit in 2014 was

the impact of roads and ATV paths on thinhorn sheep ranges. Last year when I flew over the road, I could see ATV tracks leading up from the main road and going right to the Stone’s sheep habitat on the peak above. We’ve collared ten sheep, and now we will know what’s happening to them because of this impact,” says Thornton.

He notes that the partnerships WSF has forged on the Dome Mountain/Dease Lake project extend worldwide, from the US and Canada to the First Nations and beyond. The \$100,000 grant WSF earmarked for the study was partially derived from funds provided to WSF by the SCI Foundation’s Hunter Legacy Fund 100. Of those SCI Foundation funds, WSF dedicated \$50,000 to the Stone’s sheep study in the Tahltan territory and, with direct WSF funding, doubled the war chest with an equal match. With the subject

# CONSERVATION FOCUS

---

herd part of a unique purebred endemic population, eyes around the globe are now following this study's progress with interest.

Thornton notes that the other half of the SCI Foundation's \$100,000 grant to WSF went to address another pressing issue. Partnering with its Alaska Chapter, WSF sent \$50,000 to Alaska's Department of Fish and Game, which then tripled it with a three-fold match using Pittman-Robertson federal aid. The resulting \$200,000 formed the bedrock for a new Dall's Sheep Management Plan. An updated management scheme for Alaskan Dall's sheep is long overdue, since the existing regional plans for the species were over 40 years old.

While WSF keeps pushing thinhorn sheep management and conservation forward on multiple fronts, TGOA is raising the bar for conservation in British Columbia. Currently, TGOA sponsors a health study of wild ungulates. In 2016, TGOA partnered with the TCG to facilitate the first annual Northern Wildlife Symposium, examining wild species' health, population issues, human impacts and more. At the second-annual Northern Wildlife Symposium held in Dease Lake in May 2017, Hurley was there representing WSF and presenting his

insights on the collaring project and an array of other topics.

To maintain their zeal for action, TGOA members generously donate hunts to fund conservation projects. At the 2016 *Sheep Show*<sup>®</sup>, Bill and Devlin Oestreich donated a Stone's sheep hunt for auction, with 60 percent of the winning bid going to TGOA for on-the-ground conservation. At this year's *Sheep Show*<sup>®</sup>, BC Safaris donated a 10-day Canadian moose hunt, and Little Dease Ventures donated a 10-day grizzly bear hunt. A portion of both those auctions went to fund TGOA conservation projects. At next year's convention, two more TGOA members are slated to donate hunts to keep Stone's sheep projects advancing in northern BC and First Nations territories.

All parties involved concur that the prospects look promising for future initiatives involving First Nation and TGOA partnerships with WSF.

"The Tahltan people are taking a more active role in hands-on wildlife management in localized areas," Oestreich says. "And they want to have more participation in wildlife management across their entire territory."

Thornton predicts that the Tahltan people will achieve that goal through determination to honor their heritage

of environmental responsibility and wildlife sustainability.

"What's most exciting is the Tahltan are absolute wildlife stewards," Thornton says. "The Tahltan were the first hunters in that area, and they are hunters today. They were the first guides, leading white explorers like Andrew J. Stone, the namesake of Stone's sheep. What is truly exciting was listening to Tahltan chiefs, who were willing to say that their people were part of the problem, too, driving ATVs up the mountain when they shouldn't, for example. These people get it."

For Chief McLean, keeping tabs on progress as the data rolls in, this is only the start of a friendship he hopes will grow and endure, for the good of his people and the wild species that coexist with them.

"We are pleased to be partners with WSF to make the Tahltan Nation's role in wildlife management very real. With our Guardians and our youth involved, it's extremely important to show that this isn't about yesterday, it's about tomorrow. Especially with our young people, we are showing them that there are career paths available to them as biologists, veterinarians, pilots and other conservation work. We need to create opportunity for them, and this project is the catalyst." **WS**