
Stone's Sheep Habitat Enhancement



Newsletter

August 2022



Prescribed fire being implemented to enhance Stone's sheep habitat in northeastern British Columbia, May 2022.

Prescribed fire enhances Stone's sheep habitat

Northeastern BC is home to nearly 50% of the world's population of Stone's sheep. Since the 1970s, grassland habitat for sheep has been sustained through prescribed fire programs to maintain high-quality forage on steep south-aspect slopes adjacent to important escape terrain features.

In May 2022, ~160 ha of Stone's sheep winter habitat was treated with prescribed fire in northeastern BC. Using aerial ignition techniques, four south- and west-aspect slopes were burned to improve forage quality and quantity, remove the ingress of trees and woody vegetation, and increase line-of-sight for better predator detection.



Long-term Habitat Enhancement Program

Beginning in 2020, the Wild Sheep Society of BC initiated a long-term habitat enhancement program to restore and enhance habitat for Stone's sheep populations in northeastern BC. The goal of the program is to annually treat 500 to 1,000 ha of important winter and lambing habitat for Stone's sheep across the northeast.



Stone's sheep on proposed burn site during early spring.
Photo: Winter Hawk Studios.

Eleven sites were proposed for treatment in 2022, however, due to late winter and cool and wet spring conditions persisting into the peak burn window, only four of those sites were treated in 2022. An additional 25 sites are proposed for prescribed burning between 2023 and 2025 across four Stone's sheep populations.

Treatment effectiveness monitoring

A component of the habitat enhancement program is the monitoring of wildlife use and habitat indicators pre- and post-treatment, and comparison of results against untreated, control sites. To-date, pre-treatment monitoring has been completed on 10 sites, including the installation of camera traps to monitor wildlife use, and measurement of vegetation plots to evaluate the change in nutritional quality and biomass of forage.



Crews assessing vegetation response on a burn site 6 weeks post-treatment.

Stone's sheep health research

As part of the burn program, we are partnering with the University of Northern BC on a research project to investigate the effect of habitat treated with fire on sheep diet and health. By collecting fresh pellet samples, we can measure hormone levels, which serve as an indicator of health, and determine sheep diet composition. To examine population-level responses in sheep, annual late-winter surveys are being conducted to measure lamb recruitment in sheep populations that have access to burned habitats and those that do not.

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