

Okanagan yilíkʷlɁkn (Bighorn Sheep) Disease Update

Over the past years, yilíkʷlɁkn in the southern Okanagan have been experiencing a steady population decline. This decline is theorized to be due in part to infection by pneumonia (*Mycoplasma ovipneumoniae* (M. ovi)), psoroptes (*Psoroptes cuniculi*) mites and Blue Tongue as contributing factors to overall poor yilíkʷlɁkn health.



PSOROPTIC MANGE

An ongoing health issue is affecting yilíkʷlɁkn in the Okanagan Valley known as Psoroptic (“sore-op-tic”) Mange. Mange is a skin disease caused by tiny Psoroptes mites that can live on an affected animal's skin and survive in the environment without a host animal for up to a month or longer. These mites primarily infest the ears and body of the host animal, consuming the surface skin, which can cause weeping sores, leading to hair loss, inflammation, scabs, crusting, and poor haircoat condition. Since the 2011 discovery of the first case in the Okanagan, yilíkʷlɁkn populations have declined by around 60%. Other strains of this parasite have caused the decline and even collapse in yilíkʷlɁkn populations in the United States.

BLUETONGUE

Bluetongue is a viral, non-contagious disease spread by biting midge insects. It affects species of ruminants, mainly sheep. Bluetongue causes many symptoms, including ulcers, sores, painful hooves, lameness and reproductive problems. Bluetongue was first diagnosed in 2021 near Mount Hull in Washington, Grand Forks, BC, and south Okanagan. During the disease outbreaks, 8 of 12 collared yilíkʷlɁkn near Grand Forks and 9 of 22 collared yilíkʷlɁkn in the south Okanagan died from suspected or confirmed blue tongue. In the spring of 2022, Washington state documented a decline of 59% of the Mount Hull/Omak Lake yilíkʷlɁkn population. Similarly, in March of 2022, declines of approximately 75% in Grand Forks and 40% in the south Okanagan yilíkʷlɁkn population were documented.



MYCOPLASMA OVIPNEUMONIAE

Mycoplasma ovipneumoniae (M. ovi) is a bacterial species commonly found in the nasal cavity and sinuses of apparently healthy domestic sheep and goats. M.ovi is transmitted to wild sheep and goats via nose-to-nose contact. In yilíkʷlɁkn, M. ovi has been associated with large all-aged die-offs due to pneumonia, often followed by years of low lamb birth and survival rates that can have devastating population impacts. In July 2020, M.ovi was confirmed in the south Okanagan yilíkʷlɁkn populations, with clinical disease and mortality seen. Lamb recruitment inventories conducted in 2021 and 2022 have shown poor lamb-to-ewe ratios. Most recently, in 2022, there were eight lambs to 100 ewes. Substantially lower than the desired 30 lambs to 100 ewes.



CONTINUED MONITORING

We are approaching the 2023 spring lambing season and are seeking help from the public. We are specifically looking for three different observations and photographs.

1- Collared bighorn ewes with lambs at heel

We appreciate photos of collared ewes/lambs and any identifiers such as number tags, location, and time. This will allow us to track monitor survival rates.

2- Coughing or sick mountain goats and yilíkʷlɁkn

All descriptions of sick individuals are critical to monitoring disease presence and spread. Clinical signs of sick sheep may include coughing, runny nose, laboured breathing, and lethargic behaviours.

3- Crusty, scabs or poor coat condition animals

Any sick-appearing mountain goats, yilíkʷlɁkn, feral horses, rabbits, or hares should be immediately reported to ensure quick investigations. The photograph to the right demonstrates normal ears(yellow) versus infected ears (red).



We all need to work together to help recover yilíkʷlɁkn

Please send in all sightings or any other reports you think may be important to:

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