



Muskox – Concerns about Parasites

Muskox don't have any parasites that can be transmitted to humans. But some local hunters and wildlife managers have concerns about parasites being transmitted between different muskox populations and between muskox and sheep.

The muskox found on the North Slope are from a herd of animals that originated in Greenland and were reintroduced to Alaska in 1969. They are a different subspecies from the muskox that are currently found in the Northwest Territories and Nunavut. As the North Slope muskox move further east and the NWT muskox move west, there is a chance that one or both of these



populations will cross the Mackenzie River as they expand their range. If this happens, it is possible that the different parasites each population is carrying could be passed along to a currently uninfected group of animals.

Muskox east of the Mackenzie in the NWT are infected with a parasitic lungworm called *Umingmakstrongylus pallikuukensis*. This lungworm has not been found in the North Slope muskox population. If this parasite is transmitted from mainland muskox to the North Slope muskox, it might increase this population's susceptibility to predation or other forms of natural mortality, by damaging the lungs of animals it infects. There are also concerns that the lungworm may spread to Dall's sheep. At this time it is not known if this lungworm can be transferred from muskox to sheep, or what its effect on the sheep would be. Dall's sheep already have their own parasitic worms that cause considerable lung damage.

Another lungworm, called *Protostrongylus stilesi*, has been found in North Slope muskox, but not in muskox on the NWT mainland. This parasite is commonly found in Dall's sheep populations throughout North America and is known to adversely affect sheep populations. This lungworm could be transferred from North Slope to mainland muskox if the two populations mix. Research is currently underway to learn more about the spread of parasites to address these issues.

Photo by Ken Madsen

For more information, visit the Wildlife Management Advisory Council (North Slope) web site on muskox of the Yukon and Alaska North Slope at www.taiga.net/wmac/species/muskox.