

First Confirmation of Cougar, *Puma concolor*, in the Yukon

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Cougar (*Puma concolor*) have been reported from the Yukon as early as 1944. Despite many sightings, no indisputable, physical evidence of Cougar being present in the Yukon had been obtained. Here, we report on the first. In November 2000, a specimen was secured from near Watson Lake, in southeastern Yukon. Whether this specimen, and the numerous sighting records, are indicative of a low-density breeding population in the Yukon, or represent transients, is unknown.

Key Words: Cougar, *Puma concolor*, Puma, Mountain Lion, Yukon.

The Cougar (*Puma concolor*) is one of the most widespread terrestrial mammals in the Americas, with their reported range extending from southeastern Alaska to Patagonia (Logan and Sweanor 2000). Globally, Cougars are classified by the IUCN (World Conservation Union) as Near Threatened, thus they require careful attention by wildlife managers. In the Yukon, Cougars appear to have naturally occurred only in recent history (<100 years), similar to other species such as Coyote (*Canis latrans*), Mule Deer (*Odocoileus hemionus*), and White-tailed Deer (*O. virginianus*; Youngman 1975; Hoefs 2001). The first reported Cougar sighting in the Yukon was in 1944. Since then, reported sightings, of variable reliability, have increased steadily. Despite local knowledge and expert opinion suggesting that Cougar were present in the Yukon, no physical evidence (e.g., scat, hair, confirmed tracks, photographs, or a specimen) had been found to substantiate any sightings. Here, we report the first irrefutable evidence of Cougar in the Yukon.

On 12 November 2000, a dead Cougar was discovered approximately 3 km NE of Watson Lake, Yukon (60.06°N, 128.70°W) by two local residents (E. Murphy-Kelley and J. Rhodes). The Cougar was found in a derelict car; apparently the abandoned car was being used as shelter by the Cougar. Interestingly, it appeared from tracks in the snow that there was another Cougar traveling with the one found. The Cougar appeared to have died shortly before being discovered, as it was not yet fully frozen despite temperatures being about -8°C.

The specimen was retrieved, measured, aged, and necropsied. Standard morphometric measurements were made using established protocols for Cougars (I. Ross personal communication) while the carcass was laid laterally. Skull measurements were taken from a cleaned skull. Aging was done by gumline recession (Laundré et al. 2000). A field necropsy was performed to determine the cause of death, and select organs and tissues were examined at the Western College of Veterinary Medicine (Saskatoon, Saskatchewan) for dis-

ease and other disorders. The specimen's hide was prepared as a mount and it is now in the collections of the MacBride Museum (Whitehorse, Yukon); the skull and skeleton reside with the Yukon Department of Environment (Whitehorse, Yukon).

The Cougar was an adult male that was estimated at >3 years old, and appeared normal except that it was emaciated – it weighed only 37.7 kg (males >2 years old normally weigh >53 kg; Logan and Sweanor 2000). Morphometric measurements were: total length = 223 cm; tail length = 83 cm; chest girth = 61 cm; high neck circumference = 40 cm; maximum neck circumference = 42.5 cm; right hind pad length = 41 mm; right hind pad width = 49 mm; head circumference = 50.5 cm. Skull measurements were: length = 217 mm; zygomatic breadth = 177 mm. No disease or other disorders were apparent. The stomach was empty and it is believed that the cause of death was starvation.

At the periphery of the Cougar's range, sightings are normally all that is available to judge whether a low-density or transient population of Cougars exists (e.g., Gerson 1988; Cumberland and Dempsey 1994; Stocck 1995; Gau et al. 2001), and this evidence, on its own, is inconclusive. Finding this specimen confirms that Cougars are occasionally found in the Yukon. Records also exist from adjacent jurisdictions: a specimen was obtained in Wrangell, Alaska, in 1989, there are an increasing number of sighting records in eastern and southeastern Alaska (Alaska Geographic Society 1996), and animals have been sighted (but with no corroborating evidence) west of the Mackenzie River in the Northwest Territories (Gau et al. 2001). Six unconfirmed Yukon sighting records include kittens (Yukon Department of Environment, unpublished data), suggesting a breeding population. Alternatively, Cougars seen in the Yukon may represent a few individuals (e.g., young males) that make long distance dispersals and are not indicative of a viable local breeding population (Pierce et al. 1999; Sweanor et al. 2000). In Wyoming, one radio-collared male Cougar is known to have dispersed >1000 km

(Thompson and Jenks 2005). Regardless, Cougars appear to be a rare but regular component of the mammalian fauna of the Yukon.

This confirmation of the addition of Cougar to the list of species in the Yukon is representative of the relatively dynamic state of the mammalian fauna of northern biomes. Other northern areas are also witnessing colonization by some species of large mammals. For example, Moose (*Alces alces*) and Coyotes are relatively new additions to the mammalian fauna of Labrador (Chubbs and Schaefer 1997; Chubbs and Phillips 2002). In the Northwest Territories, White-tailed Deer and Cougar also appear to be expanding northward (Veitch 2001; Gau et al. 2001).

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