Cougars Confirmed in Manitoba

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A discussion of cougar sightings in Manitoba is guaranteed to arouse passions. Many people who have seen a cougar report their sighting hesitantly, expecting ridicule, while others continue to insist they have seen a cougar long after a period of time when objective evidence would indicate otherwise. It is beyond doubt that cougars have been seen in Manitoba. Many credible sightings are reported every year, and the occasional hair sample or track confirms the presence of this elusive predator. There are those who believe that these sightings are either of escaped captive animals or of dispersing males from other jurisdictions that are "just passing through." Conversely, there are those who are critical of government biologists for not admitting that the province has a breeding population and managing them accordingly. It has long been an axiom of science that "extraordinary claims demand extraordinary proofs." From 1973 until 2004, not a single dead cougar had been reported or turned over to Manitoba Conservation. In the absence of evidence, perhaps the biologists can be forgiven if they err on the side of caution in assessing the status of so rare an animal.

The shooting of a cougar at Stead, 35 miles northeast of Winnipeg in 1973, and a detailed assessment of 281 documented sightings from 1879 to 1975 first established the species as resident in the province (Nero and Wrigley 1977). Subsequent department field surveys that failed to find evidence of resident cougars and a 31-year hiatus in the reporting of any dead specimens significantly cooled interest in the species, although sightings continued to be documented by biologists and Natural Resource Officers. Then in rapid succession at the end of 2004, two dead cougars were reported to the department.

Is this cougar habitat?

The first was a female, shot by a landowner on the southern boundary of Duck Mountain Provincial Forest Reserve on November 1. The second, a male, was taken accidentally by a licensed trapper south of Riding Mountain National Park on December 30, a distance of just over 60 miles from where the first cougar was killed. Both locations are situated within Manitoba's Western Upland Natural Region.

The region is dominated by the Porcupine Hills and the Duck, and Riding Mountains, the highest and most visually apparent relief in the province. Two broad river valleys separate the three main upland areas and contain the region's best agricultural lands. The uplands exhibit the undulating relief typical of topography formed by glacial till and melt water. Water is ponded in many small depressions and lakes as a result of poorly developed drainage, although numerous small streams flow radially from the uplands through incised valleys. Typically, these river channels are deeply cut with terraces, flood plains, and poorly drained deltas. Uplands, lowlands and river valleys combine to provide suitable habitat for a mixture of plant communities, characteristic of boreal forest,

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aspen parkland, and prairie. Most importantly, the region contains Duck Mountain Provincial Park and Riding Mountain National Park, which collectively provide almost 1,700 square miles of essentially undeveloped habitat. Additional area is provided by the Duck Mountain Forest Reserve, in which logging is the primary activity but human development is minimal. Elk, moose, black bear, white-tailed deer, and mule deer are the region's largest mammals. Predators include wolves, foxes, lynx, wolverines, and now maybe cougars.

In late January 2005, a team of government, university, and museum biologists and a provincial veterinarian performed a necropsy on the two cougar specimens. Both were in excellent condition with more than adequate stores of subcutaneous and abdominal fat for midwinter. The male weighed in at a little over 115 pounds, the female at 91 pounds. The stomachs were essentially empty except for some conifer needles, a few strands of grass, and small quantities of their own hair. The female provided one clue regarding diet. Old porcupine quills completely embedded under the skin were found

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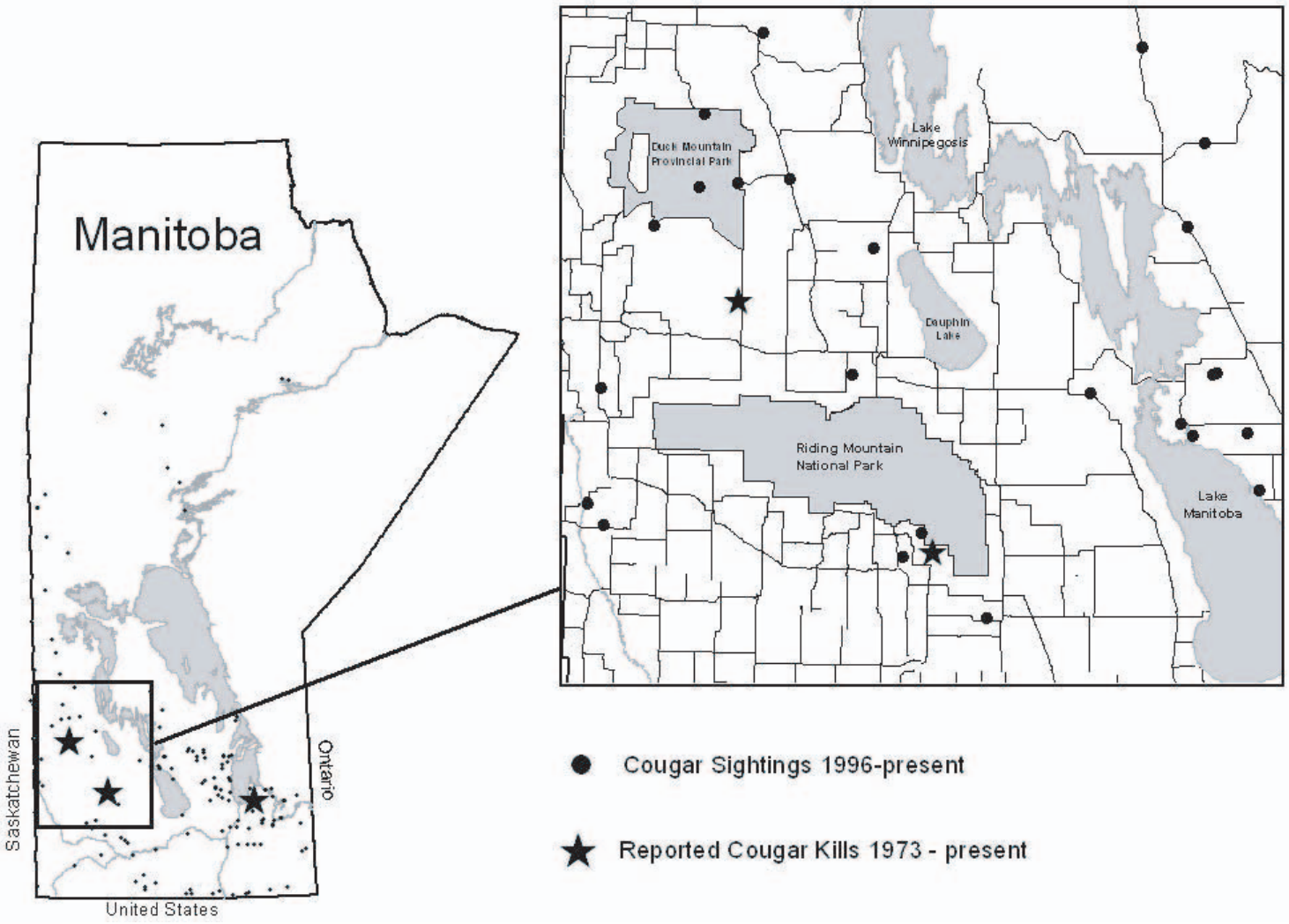
Distribution of Recent Cougar Sightings in Manitoba



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on one front paw and one hind foot, her throat, the back of her head, and on her shoulders. Both cats were found to carry tapeworm and roundworm species typical of wild cougars in North America.

Life as a predator of large herbivores can be difficult at times, and scarring was evident on internal organs of both cougars, reflecting past blunt trauma – perhaps caused by a good kick from a desperate elk or deer. The male exhibited scar tissue on the right lung, the pancreas, and along the duodenum. The female's injury was more severe. Scar tissue was evident on her spleen, and her diaphragm – although healed – had been perforated. Breathing must have been compromised for some time following the injury, making hunting difficult. The porcupine quills take on new meaning in this light.

The most disappointing result of the necropsy was the observation that the female had never bred. Since females tend to disperse relatively short distances from where they are born, it is reasonable to speculate that the Duck Mountain female is evidence of a breeding population in Manitoba or along the border in the adjacent province of Saskatchewan. Evidence of breeding by the female would have added weight to the argument. Tissue samples have been sent for DNA analysis, and additional questions may be answered with the results of these tests. Were the two cats related? Are there any South American markers indicating a captive origin? Does the degree of heterogeneity of markers say anything about the degree of inbreeding (which may be evident if a small local population exists with minimal immigration from other populations)?

Following a flurry of reports by the press, Manitoba Conservation received numerous letters, e-mails, and phone calls. Without exception, rural, or urban, correspondents urged that greater protection be provided for cougars within the province. There is absolutely no evidence of the "cougar panic" that has occurred in other jurisdictions following the sighting or killing of a cougar in areas where they have been absent for a long time.

These two incidents at the end of 2004 generated a great deal of interest in cougars by the public. The press coverage to date has stressed the fact that cougars are a protected species in Manitoba and that it is illegal to deliberately kill them. Manitoba Conservation has agreed to provide the hides from these cougars for mounting and display to a local museum and the Riding Mountain National Park Visitor Centre, with the condition that each display have a strong conservation message. Skeletal remains will become part of the permanent collection at the Manitoba Museum in Winnipeg.

Unfortunately, we may never know the original source of Manitoba's cougars. In the absence of a North American-wide cougar DNA database with which to compare samples and recent work demonstrating a low degree of genetic variability between North America's cougar populations (Anderson et. al. 2004; Culver et. al. 2000), the origin of Manitoba's cougars may remain as elusive as the big cats themselves.

Photo Credit

Southern Boundary of Duck Mountain Provincial Park – Cara Gill

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