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Cougars (*Puma concolor*) in the Northwest Territories and Wood Buffalo National Park

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ABSTRACT. Extralimital reports of cougars (*Puma concolor*) at the northern limits of their range are rare. We documented at least 21 individual occurrences of cougars from the Northwest Territories and the Wood Buffalo National Park area between the years 1983 and 2000. Our evidence suggests that, at a minimum, transient cougars are regular visitors to northern Alberta and the Northwest Territories.

Key words: Alberta, cougar, Northwest Territories, *Puma concolor*, Wood Buffalo National Park

RÉSUMÉ. La présence de couguars (*Puma concolor*) est rarement rapportée en dehors des limites septentrionales de leur territoire. On a documenté au moins 21 cas individuels de la présence de couguars dans les Territoires du Nord-Ouest et le parc national Wood Buffalo entre les années 1983 et 2000. Les éléments de preuve que nous apportons suggèrent que, à tout le moins, les couguars de passage sont des visiteurs réguliers du nord de l'Alberta et des Territoires du Nord-Ouest.

Mots clés: Alberta, couguar, Territoires du Nord-Ouest, *Puma concolor,* parc national Wood Buffalo

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The usual range of cougars (*Puma concolor*) extends from Chile, through the western United States, to northern British Columbia (Lindzey, 1987). In Alberta and northern British Columbia, cougars are primarily found in forested habitats similar to those used by their primary prey species, the white-tailed deer (*Odocoileus virginianus*) and the mule deer (*O. hemionus*) (Dixon, 1982). It is often difficult for the public to observe cougars, as the species generally has a low population density and is cryptic and highly mobile (Ross et al., 1996). Forest cover may also obscure or reduce an observer's view, and lynx (*Lynx canadensis*), wolf (*Canis lupus*), coyote (*C. latrans*), and feral or domestic cats and dogs may be mistaken for cougars.

Accounts of cougars in the Northwest Territories (NWT) have been regarded as exceedingly rare (Kuyt, 1971). Kuyt (1971) documented three observations of cougars in the Wood Buffalo National Park (WBNP) area from 1962, 1967, and 1970. Novak et al. (1987) documented seven cougars harvested from the NWT in 1919–20. However, Obbard et al. (1987) noted that those data, summarized from fur-trading records, represent the places where the skins were sold and may not be the area of harvest. In other parts of Canada, there has been evidence of cougars outside their normal range in the Yukon Territory (Anderson, 1983; Klassen, 2000) and Alberta (Alberta Fish and Wildlife Division, 1992). Also, Nero and Wrigley (1977) summarized cougar sightings and carcass collections from Saskatchewan, Manitoba, and Ontario (northwest of Lake Superior).

We constructed a database consisting of cougar sightings from firsthand visual accounts by Parks Canada staff and wildlife personnel of the Government of the NWT Department of Resources, Wildlife and Economic Development (RWED), and firsthand sightings relayed directly to RWED Wildlife or Parks Canada staff. A sighting was considered reliable if the observer reporting the event was the primary witness, the distance from the animal observed was less than 250 m, and identifiable characteristics (including colour, tail length, fur length, and body size) were described without prompting.

We catalogued 37 reliable visual sightings of cougars between the years 1983 and 2000 (Table 1). However, because long-distance movements have been reported for some cougars, we wanted to reduce the possibility of multiple sightings of the same animal in our database. Anderson et al. (1992) reported maximum dispersal distances for 33 male and 32 female cougars from various North American populations to be 274 and 140 km, respectively. Logan and Sweanor (2000) reported a 483 km dispersal for an individual cougar from his natal area to the site of his death at 30 months of age. Thus, we filtered our database to yield one sighting per year from a 200 km radius surrounding its coordinates. Our filtered database has 21 reliable visual sightings of cougars in the NWT and the WBNP area (Fig. 1). Note that not one of these

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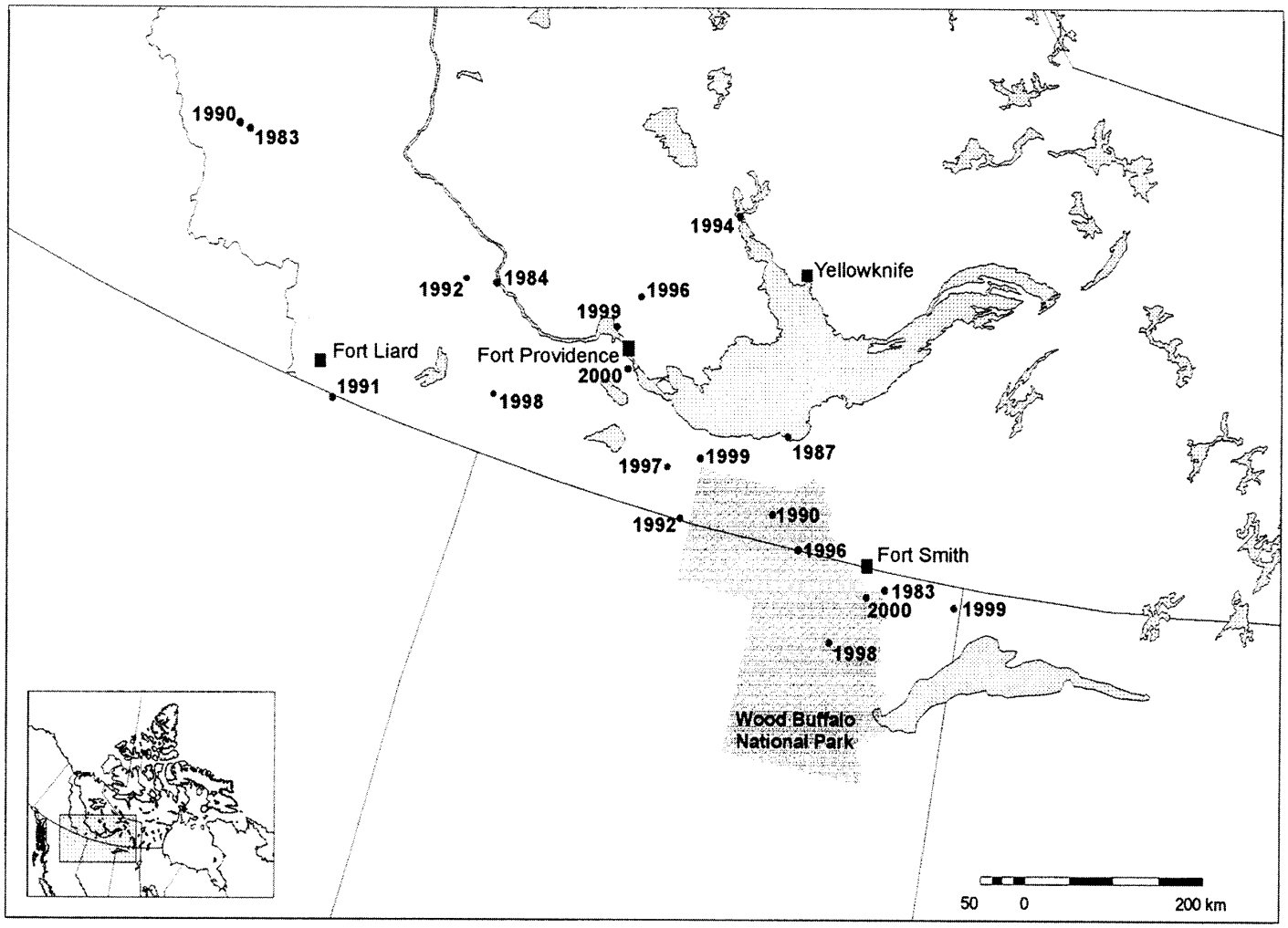

FIG. 1. Location and year of sighting of some cougar occurrences from the Northwest Territories and the Wood Buffalo National Park area.

TABLE 1. Year and general location of cougar sightings in the Northwest Territories and the Wood Buffalo National Park area, 1983–2000.

Year	General Location	Year	General Location
1983[1]	Wood Buffalo National Park	1997	Near Caen Lake by Fort Providence
1983[1]	Hell Roaring Creek, Nahanni National Park	1997[1]	Near the community of Enterprise
1984[1]	Near the community of Jean Marie River	1998[1]	Wood Buffalo National Park
1987[1]	Near the community of Pine Point	1998[1]	Near the community of Trout Lake
1987	Near the community of Pine Point	1999[1]	Near the community of Fort Providence
1990[1]	Wood Buffalo National Park	1999[1]	Near the community of Hay River
1990[1]	Hell Roaring Creek, Nahanni National Park	1999[1]	Andrew Lake north of Lake Athabasca
1991[1]	Petitot River by the BC-NWT border	1999	Wood Buffalo National Park
1992[1]	Alberta-NWT border	1999	Wood Buffalo National Park
1992[1]	Liard Trail-Mackenzie Highway junction	1999	Wood Buffalo National Park
1994[1]	Near the community of Edzo	1999	Wood Buffalo National Park
1996[1]	60 km north of Fort Providence	1999	Wood Buffalo National Park
1996[1,2]	Wood Buffalo National Park	1999	Near the community of Fort Smith
1996	Wood Buffalo National Park	2000[1]	Southwest of Fort Providence
1996	Wood Buffalo National Park	2000[1]	Near the community of Fort Simpson
1996	Wood Buffalo National Park	2000[1]	Wood Buffalo National Park
1996	Slave River near Wood Buffalo National Park	2000	Wood Buffalo National Park
1996	Near the community of Fort Smith	2000	Wood Buffalo National Park
		2000	Near the community of Fort Providence

[1] Year and location in filtered location database (Fig. 1).

[2] Two cougars were observed together.

sightings included cubs, nor was any sighting wholly substantiated by a carcass or photograph.

Local climate and snow accumulation variations can affect the distribution of ungulates and cougars (Murphy, 1983; Telfer and Kelsall, 1984). Recent years with mild winters and low snow accumulations could aid a resident cougar population to persist in the southern NWT and WBNP. However it remains unknown whether the cougar sightings we documented represent transient or resident individuals. Should it be determined that a resident cougar population is established in the NWT, wildlife managers will need to consider the potential affects of cougars on the behaviour, distribution, composition, and density of some ungulate species (Compton et al., 1995; Ross and Jalkotzy, 1996; Wehausen, 1996; Kunkel et al., 1999).

Other management implications for cougars in the NWT and WBNP are currently limited. Since no cougar hunting season currently exists in the NWT, cougars cannot be hunted legally by resident hunters. The Federal NWT Act does guarantee to all status Indians and Inuit the right to subsistence hunting on unoccupied Crown lands of any species not in danger of extinction. In that circumstance, however, it is illegal to keep or sell the hide for trophy purposes.

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