

for fishers elsewhere in British Columbia. We documented fishers resting in or under accumulations of woody debris, subnivean cavities under shrubs, in cavities in balsam poplar or aspen trees, under single pieces of coarse woody debris, or on platforms in black or white spruce trees or lodgepole pine. We also radiolocated fishers resting in abandoned buildings, underground burrows, abandoned beaver lodges, magpie nests in willows, on the snow surface and in snow burrows not associated with any habitat element. The home ranges of 11 fishers for which we collected sufficient data averaged 28 km² (SD = 16, *n* = 9) for females and 190 km² (SD = 53, *n* = 3) for males.

We identified 1 new potential Wildlife Habitat Area and

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Studying fisher winter habitat in northern Saskatchewan muskegs

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Carnivore populations and species are lost in our rapidly changing world at ever-increasing rates, and we must learn to preserve as many extensive natural areas as pos-

sible (Estes 1996, Mech 1996). This means that we must continuously learn more about carnivores' habitat needs in different ecosystems and regions of the world. Although fishers occur primarily in late-seral coniferous and mixed-coniferous-deciduous forests (Proulx et al. 2004), regional variations in forest type, canopy cover, and understory have been observed throughout the species' range (Badry et al. 1997). Site-specific investigations are essential to assess the potential of an area for fishers.

In western Canada, fisher habitat studies have been conducted in coniferous, mixed-wood and aspen forests (Badry et al. 1997, Weir and Harestad 1997, Proulx 2006). In the Mid-Boreal Upland Ecoregion of northern Saskatchewan, where fisher is a species of concern because of its value as a furbearer and its importance for the subsistence of Aboriginal groups, fishers inhabit landscapes rich in treed peatlands (muskegs). However, little is known on the winter use of these peatlands by fisher. In Alberta, I observed fisher tracks zigzagging across black spruce bogs in search of snowshoe hares (*Lepus americanus*). Soper (1964) indicated that fishers inhabiting the Wood Buffalo National Park "favored a boggy, black spruce-muskeg type of country". Using a habitat model based on Proulx's (2006) model developed for fisher in the sub-boreal forest region of British Columbia, I will investigate fisher distribution in northern Saskatchewan in January-February, once peatlands have frozen over and allow for safe access across the landscape. Hopefully, this research will further our understanding of landscape attributes and stand characteristics that are selected by fishers inhabiting areas rich in shrubs and dwarf trees.

Literature Cited

Badry, M. J., G. Proulx, and P. M. Woodard. 1997. Habitat use by fishers in the aspen parkland of Alberta. Pages 233-251 in G. Proulx, H. N. Bryant, and P. M. Woodard, editors, *Martes: taxonomy, ecology, techniques and management*. Proceedings of the Second International Martes Symposium, Provincial Museum of Alberta, Edmonton, Alberta, Canada.

Estes, J. A. 1996. Predators and ecosystem management. *Wildlife Society Bulletin* 24: 390-396.

Mech, L. D. 1996. A new era for carnivore conservation. *Wildlife Society Bulletin* 24: 397-401.

Proulx, G. 2006. Using forest inventory data to predict winter habitat use by fisher *Martes pennanti* in British Columbia, Canada. *Acta Theriologica* 51: 275-282.

Proulx, G., K. B. Aubry, J. Birks, S. W. Buskirk, C. Fortin, H. C. Frost, W. B. Krohn, L. Mayo, V. Monakhov, D. Payer, M. Saeki, M. Santos-Reis, R. Weir, and W. J. Zielinski. 2004. World distribution and status of the genus *Martes* in 2000. Pages 21-76 in D. J. Harrison, A. K. Fuller, and G. Proulx, editors, *Martes and fisher (Martes) in human-altered landscapes: an international perspective*. Springer, New York, New York, USA.

Soper, J. D. 1964. *The mammals of Alberta*. The Hamly Press Ltd., Edmonton, Alberta, Canada. 410 pages.

Weir, R. D., and A. Harestad. 1997. Landscape-level selectivity by fishers in south-central British Columbia. Pages 252-264 in G. Proulx, H. N. Bryant, and P. M. Woodard, editors, *Martes: taxonomy, ecology, techniques and management*. Proceedings of the Second International Martes Symposium, Provincial Museum of Alberta, Edmonton, Alberta, Canada.