

# Northern Range Extension of the Pygmy Shrew, *Sorex hoyi*, in the Yukon

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A Pygmy Shrew, *Sorex hoyi*, was captured in a pitfall trap on the Blackstone River (65°04.6'N, 138°10.8'W) in central Yukon. This represents a northern range extension of about 110 km for *S. hoyi* in the Yukon.

Key Words: Distribution, Pygmy Shrew, *Sorex hoyi*, Yukon.

Shrews, *Sorex*, have been undersampled in northwestern North America because they are often not the focus of surveys (Jarrell 1986; Nagorsen 1996) and they are not readily captured in traps designed for small rodents (Nagorsen 1996). As such, our knowledge of the distributions of shrews in northwestern North America (i.e., Alaska, Yukon, northern British Columbia, western Northwest Territories) is limited. In recent years, however, directed surveys of shrews in this vast region have resulted in discovery of a new species, the Alaskan Tiny Shrew, *Sorex yukonicus* (Dokuchaev 1997), and range extensions for a number of species (e.g., American Water Shrew, *S. palustris*, Jarrell 1986; Cook et al. 1997; Tundra Shrew, *S. tundrensis*, Nagorsen and Jones 1981; Alaskan Tiny Shrew, *S. yukonicus*, and Pygmy Shrew, *S. hoyi*, Peirce and Peirce 2000). Nevertheless, much work is needed to better understand the distributions of shrews in northwestern North America. Herein, we describe a northern range extension for *S. hoyi* in the Yukon.

During an extensive survey of the small mammal fauna along the Dempster Highway in central Yukon, a Pygmy Shrew was captured on 12 July 2005, 2 km west of the Blackstone River (65°04.6'N, 138°10.8'W), 129 km northeast of Dawson City. The shrew was cap-

tured in an unbaited pitfall trap installed flush with the substrate. Pitfall traps have been found to be particularly effective for Pygmy Shrews (Prince 1941). No other shrews were captured at this site. The specimen was identified using dental characteristics and keys in Nagorsen (2002) and van Zyll de Jong (1983). The specimen (Field ID: DEMP-0015) is held by the Yukon Department of Environment, but will be deposited at the Museum of Southwestern Biology.

Our record represents a northern range extension of approximately 110 km for *S. hoyi* in the Yukon. Youngman (1975) mapped the hypothetical range as being as far north as the Old Crow Flats (approximately 68°N). Prior to our capture, however, the northernmost specimen records of *S. hoyi* in the Yukon were from 22 km east of Dawson City (Youngman 1975; van Zyll de Jong 1983) and the abandoned village of Forty-mile (64°25'N, 140°32'W), 67 km northwest of Dawson City (B. G. Slough and T. S. Jung, unpublished data).

This Yukon range extension of *S. hoyi* is not surprising as there are more than 125 specimens held at the University of Alaska Museum of the North that were collected north of 65°N in Alaska, with the most northerly taken near the Dalton Highway at the Dietrich River (67°37'N, 149°46.8'W; UAM 23050). In

addition, van Zyll de Jong (1983) reported specimens from Chick Lake and Fort Franklin, two locations north of 65°N in the Northwest Territories. It is likely that *S. hoyi* ranges further north in the Yukon; this is a species of the boreal forest and it likely extends north to the treeline. Further observations are needed to document the range of *S. hoyi* and other soricids in the Yukon and elsewhere in northwestern North America (Cook et al. 1997).

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### Literature Cited

- Cook, J. A., C. J. Conroy, and J. D. Herriges, Jr.** 1997. Northern record of the water shrew, *Sorex palustris*, in Alaska. *Canadian Field-Naturalist* 111: 638-639.
- Dokuchaev, N. E.** 1997. A new species of shrew (Soricidae, Insectivora) from Alaska. *Journal of Mammalogy* 78: 811-817.
- Jarrell, G. H.** 1986. A northern record of the water shrew, *Sorex palustris*, from the Klondike River, Yukon Territory. *Canadian Field-Naturalist* 100: 391.
- Nagorsen, D. W.** 1996. The mammals of British Columbia Volume 2: Opossums, shrews and moles of British Columbia. Royal BC Museum Handbook. UBC Press, Vancouver. 169 pages.
- Nagorsen, D. W.** 2002. An identification guide to the small mammals of British Columbia. Ministry of Sustainable Resource Management, Ministry of Water, Land, and Air Protection, Biodiversity Branch, and Royal BC Museum. 153 pages.
- Nagorsen, D. W., and D. M. Jones.** 1981. First records of the tundra shrew (*Sorex tundrensis*) in British Columbia. *Canadian Field-Naturalist* 95: 93-94.
- Peirce, K. N., and J. M. Peirce.** 2000. Range extensions for the Alaska tiny shrew and pygmy shrew in southwestern Alaska. *Northwestern Naturalist* 81: 67-68.
- Prince, L. P.** 1941. Water traps capture the Pygmy Shrew (*Microsorex hoyi*) in abundance. *Canadian Field-Naturalist* 55: 72.
- van Zyll de Jong, C. G.** 1983. Handbook of Canadian mammals. 1: Marsupials and insectivores. National Museums of Canada, Ottawa. 210 pages.
- Youngman, P. M.** 1975. Mammals of the Yukon Territory. National Museums of Canada, Ottawa, Ontario. Publications in Zoology 10: 1-192.

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