DISTRIBUTION OF THE LONG-TAILED WEASEL IN ALBERTA

Gilbert Proulx and Randy K. Drescher
Wildlife Section, Alberta Research Council, Edmonton

The Long-tailed Weasel (*Mustela frenata longicaudata*) is a small, terrestrial carnivore of the family Mustelidae. It is the largest of the 3 species of weasels found in Alberta (Figure 1) and has the broadest ecological and geographic range of any of the North American weasels. The ‘long-tail’ is found in forests, open woodlands, prairies and alpine habitats where it feeds on a variety of small mammals and birds. In 1982, the Long-tailed Weasel was classified as “threatened” by the Committee on the Status of Endangered Wildlife in Canada. This status was assigned because of apparent habitat loss (particularly the aspen parklands) and increased use of agricultural pesticides. However, more recently the species was seen often by biologists, naturalists, trappers, and others. Is the species really threatened?

In 1991, the Alberta Fish and Wildlife Division contracted the Wildlife Section of the Alberta Research Council to revise the provincial distribution of this species south of the 54th latitude in Alberta. In order to estimate this distribution, the researchers mailed questionnaires to 330 rural residents near 11 communities, 300 resident and registered trappers, and 168 professionals in wildlife and agriculture. Researchers also met with residents in six regions of central and southern Alberta.

Five hundred and four responses were received. The presence of Long-tailed Weasel was reported in 96 distinct communities; it was confirmed in 48 locations on the basis of roadkills, captures, and multiple observations. These locations led to the determination of a minimum area of distribution in Alberta. The species was found in central and southern Alberta in areas reported by previous
researchers since the 1940s. It was reported all over the parklands where open grasslands alternate with tree groves, and drought is not as prevalent as in the prairies. The distribution coincides with the black soil zone of the province. It is noteworthy to mention that previous studies reported a similar distribution for the Northern Pocket Gopher (Thomomys talpoides).

This study is the first to identify the overlap existing between the Long-tailed Weasel and the Northern Pocket Gopher (Figure 2). However, the relationship existing between these two species is not well understood. Food habit studies failed to find pocket gophers as an important prey item for weasels. It is possible that weasels prey on gophers or voles which are known to feed on the vegetation found on gopher mounds. Weasels also may den in the burrows of these fossorial (ground-dwelling) mammals. Obviously, more studies are needed if we are to better understand the distribution of the Long-tailed Weasel.

Although the results of this study do not allow us to estimate Long-tailed Weasel populations in Alberta, they suggest that this species is present in its original mid-century range. Maybe the Long-tailed Weasel has learned to live in habitats modified by humans or even taken advantage of the mosaic of rangeland, crops and potholes currently found in central and southern Alberta!