

Occurrence of Furbearers in Weyerhaeuser's Edson Forest Management Area - 2003

- In January and February 2003, Weyerhaeuser Company Ltd. conducted systematic surveys of furbearer species in the Edson Forest Management Area (FMA). The surveys are part of a comprehensive Wildlife-Biodiversity Monitoring Program intended to assess the occurrence and distribution of species across each Weyerhaeuser Forest Management Area in Alberta.
- Surveys are repeated every three years and were previously conducted in the Edson FMA in January and February 2000. Over time, repeated surveys will allow comparison of furbearer occurrences and distribution in response to landscape level forest management practices. Surveys are not designed to assess species abundance.
- Furbearer snow track surveys are conducted along seismic lines. Only tracks less than 24 hours old are recorded. Forest types and structure is determined visually along the track survey transect.



Results and Key Findings

- A total of 1,480 furbearer tracks were recorded over 61.9 km of transects. Snowshoe hare (47%), red squirrel (32%), and short-tailed weasel (13%) tracks were the most abundant.
- Twenty-one weasel tracks were recorded in 2000, compared to 190 in 2003.
- Fox tracks were recorded in 2003 only. Coyote and lynx tracks were also more abundant in 2003 than in 2000.
- Species diversity indices varied considerably within and between years, being generally greater in 2003 than in 2000.
- During both surveys, squirrel tracks were less abundant in openings and immature stands, but more abundant in stands with coniferous canopy cover.

*This summary is based on the work of:
Gilbert Proulx
Alpha Wildlife Research & Management Ltd.
229 Lilac Terrace, Sherwood Park, Alberta
(780) 464-5228
e-mail: alphawild@telusplanet.net*

- In both 2000 and 2003, snowshoe hare tracks were more abundant in mid-seral coniferous stands; they were less abundant in early seral stands and in old deciduous ones.
- During both surveys, squirrel tracks were less abundant in openings and immature stands, but more abundant in stands with coniferous canopy cover.
- In 2003, more tracks of animals inhabiting forest mosaics such as weasels, fox and coyote were recorded, this resulting in greater species richness.

Table 1. Summary of Furbearer Tracks Recorded in 2000 and 2003

Species	Number of Tracks 2000	Number of Tracks 2003
Snowshoe Hare	1,174	699
Red Squirrel	547	470
Short-tailed Weasel	21	190
American Marten	14	3
Fisher	42	48
Red Fox	0	25
Coyote	9	18
Wolf	4	3
Lynx	12	23
Cougar	2	1
Total	1,825	1,480

Conclusions

- ◆ As in 2000, the 2003 inventory showed that the Edson FMA’s furbearer community is diversified and includes species associated with early-, mid- and late-seral stages.
- ◆ Contrary to the literature, which considered fishers to be uncommon in central Alberta, both surveys confirmed the presence of fishers throughout the FMA.
- ◆ For unknown reasons, marten tracks were detected less frequently in 2003 than in 2000. Past reports by Proulx have suggested that the scarcity of tracks could be related to a relatively low marten abundance and/or limited distribution, or to a lack of late-seral coniferous forests with structural attributes at canopy and ground levels, to too much habitat fragmentation, or to an abundance of fishers that are known to prey on marten.
- ◆ The wide distribution of fisher tracks across the landscape suggests that the current mosaic of plant communities still provides furbearer communities with adequate interspersions of cover and food
- ◆ Despite variations in track frequencies from 2000 to 2003, there is no apparent change in the overall composition of the terrestrial furbearer community of the Edson FMA.

This Research Report was prepared by Wendy Crosina and Luigi Morgantini, Weyerhaeuser Company, Alberta Division.