Title
LANDSCAPE THRESHOLDS AND RESPONSE TO FRAGMENTATION BY ENDANGERED NEWFOUNDLAND MARTEN

Model Forest
Western Newfoundland

From	**To**
2002	2005

Keywords
Marten, Fragmentation, Habitat, Landscape

Objective
This project proposes to: define the habitat currencies (e.g. % of mature forest in potential home range, landscape metrics) important to Nfld. Marten; and, to evaluate how changes in the currency affect probability of occupancy of landscapes by marten; and, to provide a tool for evaluating the influences of proposed forest harvesting scenarios on landscape level habitat occupancy by marten.

Description
Empirical data collected during a 12 year study of American marten in northern Maine would be used, in conjunction with data collected in a five year radio telemetry study in western Nfld. This past dataset could be used to identify landscape-scale habitat features most closely associated with home range occupancy. These currencies will be used to evaluate threshold responses of marten to human induced landscape change and to build and test predictive models of marten occurrence based on landscape characteristics. These models will greatly enhance the ability of managers to prioritize areas of likely presence for conducting population surveys, to identify areas of potentially suitable habitat that require forest planning, to reliably predict population responses of marten to alternative forest management scenarios, and to evaluate potential population sizes and distribution across large landscapes.

Reports and Products
Landscape Thresholds and Response to Fragmentation by Endangered Newfoundland Marten. Hearn B.J. 2003. WNMF Report # 2-216-001. 6 pp.