

Chapter 9

LATE-WINTER HABITAT OF FISHER (*PEKANIA PENNANTI*) IN 3 ECOZONES OF WESTERN CANADA: IMPLICATIONS FOR HABITAT CONSERVATION

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Abstract: I review my findings from 3 studies on winter habitat use by fishers (*Pekania pennanti*) in 3 ecozones of western Canada. My investigations were conducted during different years over a 25-year span. The study areas were <1,000 km from each other, and had distinctive vegetation characteristics. The study area in the Montane Cordillera Ecozone was dominated by hybrid white spruce (*Picea glauca*), Engelmann spruce (*Picea engelmannii*), subalpine fir (*Abies lasiocarpa*), and lodgepole pine (*Pinus contorta*), with temperatures ranging from -30 to 0°C, and 45–150 cm snow depths. The study area in the Prairies Ecozone was dominated by open grassland alternating with deciduous and mixedwood groves, and had temperatures ranging from -12 to 0°C, and 20 cm snow depths. Finally, the study area in the Boreal Plains Ecozone was a fire-dominated region with upland deciduous and coniferous boreal forests, and open and treed fens and bogs, with temperatures ranging from -30 to 0°C, and 30–65 cm snow depths. Fisher habitat selection varied among study areas. In the Montane Cordillera, fishers selected late-successional mixed coniferous stands with 30–60% canopy closure; in the Prairies, they selected deciduous forests with well-developed understories; and in the Boreal Plains, fishers used or selected a mosaic of black spruce bogs, and coniferous, mixed, and deciduous forest stands. Fishers consistently avoided open areas in all study areas, but the vegetation composition of macro-habitats varied considerably among ecozones. However, all of these habitats provided fishers with adequate canopy cover, and similar critical elements such as shrub thickets, logs, and snags. My findings indicate that different fisher habitat conservation programs are required in each ecozone. This chapter reminds wildlife biologists that generalizations on the habitat ecology of fishers are not sufficient to ensure the persistence of populations, and habitat conservation plans must be based on regional datasets that have been collected over many years in representative landscapes.