

**MARTEN DEMOGRAPHICS ON NORTHERN CHICHAGOF ISLAND
SOUTHEAST ALASKA: IMPLICATIONS FOR POPULATION MANAGEMENT**

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I studied marten demographics on northern Chichagof Island from 1990 to present as part of a larger study on marten population and habitat ecology in southeast Alaska. The study has been conducted in conjunction with the USDA Forest Service to provide information to guide marten population management in the region. To date, 78 martens (50 males and 28 females) have been captured, radio-collared, and monitored on two adjacent study areas (51 km² Salt Lake Bay area and 102 km² upper Game Creek area) to estimate population numbers, sex and age composition, survival, and movements. Carcasses were collected from most martens trapped on northern Chichagof Island and examined to determine the sex and age structure of the catch along with female ovulation rates. Small mammals were snap-trapped along transects each year and their relative numbers have decreased 91% since 1990. Marten density on the Salt Lake Bay study area decreased an estimated 46% from August 1992 to March 1993. The reduction in marten numbers resulted from poor recruitment since 1991-92, poor adult survival during 1991-92 caused by high trapping and natural mortality, the emigration of residents, and the lack of immigration during 1992-93. Trapper catch on northern Chichagof Island was moderate in 1990-91 (172) with a record catch in 1991-92 (515), then a small catch was recorded in 1992-93 (113). Trapping regulations were modified during the period to improve marten population management.

Seventh Northern



Furbearer Conference

Agenda and Abstracts
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