

LANDSCAPE-SCALE FOREST PLANNING — USING THE AMERICAN MARTEN AS A GUIDE

Barry Burgason

Practicing Ecologist, Huber Resources Corporation, PO Box 554, Old Town, ME 04468
Bburgason@huber.com

Huber Resources is using a habitat model for the American marten as a landscape-scale harvest planning tool. Based on work by Dr. Dan Harrison of the University of Maine, a marten habitat unit is defined as approximately 1,250 acres in size. Marten cover necessary for denning, predator escape and foraging consists of hardwood, softwood or mixed wood stands over 30 feet in height and >80 square feet of basal area. A successful marten habitat unit will have 70% or more of its area occupied by these cover stands.

In planning future timber harvests across the landscape, the goal would be to have four or more marten habitat units per township size area (~23,000 acres) at any given point in time. The concept is that, over time, these marten habitats will shift across the landscape as the forest is harvested and re-grows. During the time they are in earlier stages of succession, they provide habitat for a different suite of species. The marten was selected as a surrogate species because the scale of habitat it requires appears to benefit a majority of other vertebrate species occurring in northern Maine forests.