

POPULATION DYNAMICS OF SNOWSHOE HARES IN THE SEELEY-SWAN REGION TM

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We present mark-recapture based snowshoe hare densities from 20 sites, where we observed a decline in snowshoe hare populations since 1998. Snowshoe hares are found in multiple habitats, and can reach high densities in forest stands with a component of saplings and shrubs near ground level. Mature stands with complex structure may provide important winter habitat. We present estimates of survival from radio-telemetry, suggesting that survival is high in the summer and winter, but lower in the spring and fall. Lowest survival rates were in spring and fall in forest stands with open-canopies and few saplings in the understory. We present preliminary results from an experiment examining the short-term effects of pre-commercial thinning on snowshoe hare densities. We find roughly a four-fold decrease in winter hare densities after stands are thinned to standard industry prescription. A modified thinning treatment, with 20 percent of the stand retained in unthinned patches, shows some promise in retaining hares.