

ANNUAL REPORT

**USE OF PRE-COMMERCIALY THINNED STANDS BY SNOWSHOE
HARES**

**Original Report
For/By Western Nf
Model Forest**

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March 31, 1994**

Field work for this project was begun in September 1993. The study area was selected after collaborating with Corner Brook Pulp and Paper Company. Stag Lake Provincial Park provided stands suitable for controls and company pct activity immediately outside the park provided treatment blocks (Figure 1).

METHOD/RESULTS

As described in a previous progress report, 180 permanent plots were located in stands pre-commercially thinned in 1983, 1985 and 1987 (10, 12, 14 years post-thinning) and in unthinned control stands. Three stands in each pct treatment year were selected and 15 permanent plots located in each at 50 m spacing on 3 x 5 grids. Similarly, control stands inside the park were located on three, 3 x 5 grids (Figure 2).

In October each plot was cleared of rabbit pellets. Overwinter use of these stands by hares will be accessed when all 180 plots are revisited in May 1994 and pellets are counted and removed. Similarly, summer/early fall use will be estimated when plots are again recounted in October 1994.

Confirmation of relative hare abundance, prior to winter, was estimated by placing baited live-traps in each stand on permanent plot locations on the 3 x 5 grids for 4 nights. Hare densities were very low generally as they are throughout the province. This was reflected in the effort required to record a capture during the trapping period. Only 15 hare captures were recorded in a total of 720 trapnights in all stands. The highest relative abundance as

indicated by trapnights/hare (Table 1) were on average; 1985 stands followed by 1983, control and lowest numbers were on 1987 stands.

All hares caught were weighed, sexed, aged (juvenile/adult) and tagged. Radio-collars were affixed to 13 hares; however, data collection was disrupted when problems occurred with the batteries in most units.

CONCLUSION

In addition to a continuation of pellet counts on permanent plots and live-trappings to estimate relative abundance, the 1994 field season will concentrate on vegetation sampling to develop a habitat profile in pct and control stands. Considerable effort will also be made to affix radio-collars and continue monitoring the movement and survival of hares.

Table 1. Relative Abundance of Snowshoe Hare in 1983, 1985, 1987 PCT Stands and Controls in October-November, 1993 as Determined by Live-Trapping

STANDS #	YEAR THINNED DATE TRAPPED	TRAP NIGHTS	HARES TRAPPED	TRAPNIGHTS/HARE
1053	1983	60	1	60
1038	1983	60	4	15
1029	1983	60	0	nil $\bar{x} = 36$
5084	1985	60	0	nil
1061	1985	60	2	30
4011	1985	60	4	15 <hr/> $\bar{x} = 30$
2059	1987	60	1	60
3059	1987	60	0	nil
3056	1987	60	0	nil <hr/> $\bar{x} = 180$
6016	Control	60	0	nil
3079	Control	60	2	30
5018	Control	60	1	60 $\bar{x} = 60$
TOTAL		720	15	$\bar{x} = 48$