

Nez Perce National Forest
2008 Lynx Hair Snare Surveys
Final Report



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December 8, 2008

Introduction

The Rocky Mountain Research Station (RMRS) conducted winter surveys for lynx on the Nez Perce National Forest (NPNF) in January and March of 2007. Due to snow conditions and lack of funding, the Nez Perce NF was unable to continue that effort in 2008. The Forest attempted lynx hair snare surveys during the summer and fall of 2008 following the protocol established by McKelvey et al. 1999.

Methods

Discussions were held with the RMRS and the NPNF in August of 2008 regarding the hair snare surveys. Field trips were also conducted with Jim Claar and Tim Bertram, Northern Region, to familiarize them with lynx habitat on the Nez Perce NF.

The protocol calls for placing no fewer than 25 transects at a density of 1 transect per every 1 or 2 miles for a period of 2-4 weeks. Each transect consists of 5 stations.

As an initial step, a 1-mile grid was established for the Nez Perce NF by Greg Harris (GIS specialist). Only those points that fell within lynx habitat (subalpine fir/Engelmann spruce) were chosen. Final transect locations were selected based on close proximity to open roads for ease of access and where the Forest historically has had sightings of lynx. The area around Dixie Summit on the Red River Ranger District was chosen as the place to conduct this survey.

Joanne Bonn, wildlife biologist, and Scott Vuono, technician, deployed lynx hair snare equipment on September 4, 5, and 11. A total of 5 transects (25 stations) were installed around Dixie Summit off Forest Service Roads 222 and 1190 (Figure 1).

Figure 1.

Lynx Hair Snare Survey Sites - 2008



Results

The majority of the overstory tree species at the stations were subalpine fir, Engelmann spruce, and lodgepole pine. The understory consisted of blue huckleberry, thinleaf alder, fool's huckleberry, grouse whortleberry, and Labrador tea. A large percentage of the lodgepole pine trees are dead or dying from Mountain Pine Beetle attacks. Overstory tree canopy cover ranged from 10% to 60% and shrub cover ranged from 10% to 70%. The average diameter of the overstory tree ranged from 9 inches for lodgepole pine up to 13 inches for subalpine fir and 20 inches for Engelmann spruce. A summary of transect attributes can be found in Appendix A.

Transects were visited and re-baited on September 23, 29, and 30 by Joanne Bonn and MaryAnn High, wildlife biologist. Carpet pads were collected on October 22 and 23 by Joanne Bonn and Scott Vuono. All carpet samples were looked at under a dissecting microscope on November 10.

No lynx were detected during September and October 2008 on the Nez Perce NF. There was some precipitation in the form of snow prior to checking the stations on September 23. The weather then turned warm and was sunny when the samples were collected in mid October.

Discussion

Although the Nez Perce made a concerted effort to conduct the hair snare surveys during the fall of 2008, we fell far short of complying with the established protocol of installing 25 transects. This is a very labor intensive survey. The amount of land not easily accessible by open roads and the ability to dedicate days to this effort and still meet other Forest priority project workloads and timeframes was a challenge. This type of survey is best conducted with a dedicated crew.

The Nez Perce NF has dedicated funding in FY09 to resurvey the winter routes started in 2007. This survey is a more cost-effective effort and is more conducive for looking for a rare animal over a much larger area.

Literature Cited

McKelvey, K. S., J. J. Claar, G. W. McDaniel, G. Harvey. 1999. National Lynx Detection Protocol. USDA Forest Service, Rocky Mountain Research Station, Missoula, MT. 16 pp.

Appendix A

2008 Lynx Hare Snare Surveys

Nez Perce National Forest

Date	Observer	Transect No.	Slope %	Azimuth (degrees)	UTM Reading NAD83	Elevation (m)	Overstory Tree	Overstory Cover (%)	Shrub Species	Shrub Cover (%)	Comments
9/4/2008	Joanne Bonn, Scott Vuono	T1S1	12	150	623617E, 5052292N	1894	ABLA, PIEN	40	ALIN, VAGL	10	
9/4/2008	Joanne Bonn, Scott Vuono	T1S2	12	110	623758E, 5052165N	1887	ABLA, PIEN	40	VAGL	20	
9/4/2008	Joanne Bonn, Scott Vuono	T1S3	5	126	623754, 5052157	1884	ABLA, PIEN	40	VAGL, LEGL	20	
9/4/2008	Joanne Bonn, Scott Vuono	T1S4	17	54	623816, 5052076	1880	ABLA, PIEN	30	VAGL, MEFE	20	
9/4/2008	Joanne Bonn, Scott Vuono	T1S5	17	104	623870, 5051998	1870	ABLA, PIEN, PICO	20	VASC	20	PICO snag patch
9/5/2008	Joanne Bonn, Scott Vuono	T2S1	19	294	622022, 5052310	1942	PICO, ABLA, PIEN	40	VAGL, VASC	20	ABLA saplings
9/5/2008	Joanne Bonn, Scott Vuono	T2S2	40	184	621914, 5052347	1926	PICO, ABLA, PIEN	40	VAGL		PIEN saplings
9/5/2008	Joanne Bonn, Scott Vuono	T2S3	5	300	621827, 5052372	1927	PICO, PIEN	50	ALIN, VAGL, VASC	50	old clearcut, pole 40' tall trees 8" dbh
9/5/2008	Joanne Bonn, Scott Vuono	T2S4	3	262	621735, 5052346	1913	PICO	40	ALIN, VAGL	40	8" dbh 40' tall PICO, ES saplings, old clearcut
9/5/2008	Joanne Bonn, Scott Vuono	T2S5			621637, 5052367	1910	PICO	20	ALIN, VAGL, MEFE, VASC	10	old clearcut 30' tall PICO
9/5/2008	Joanne Bonn, Scott Vuono	T3S1	28	136	622015, 5053911	1745	PIEN, ABLA, PSME, ABGR	50	ALIN, VAGL	20	
9/5/2008	Joanne Bonn, Scott Vuono	T3S2	35	147	622057, 5053812	1736	PICO, ABLA, PSME	30	VAGL, VASC	10	PICO mostly dead
9/5/2008	Joanne Bonn, Scott Vuono	T3S3	15	116	622154, 5053861		ABLA, PIEN	50	VAGL, MEFE, ALIN	60	
9/5/2008	Joanne Bonn, Scott Vuono	T3S4	8	313	622297, 5053885	1737	PIEN, ABLA	40	VAGL, ALIN, MEFE	60	
9/5/2008	Joanne Bonn, Scott Vuono	T3S5	20	310	622389, 5053920	1717	PIEN, ABLA	40	MEFE, VAGL, ALIN	70	
9/11/2008	Joanne Bonn, Scott Vuono	T4S1	24	82	622115, 5049113	1900	ABLA, PIEN	30	VAGL, ALIN	40	10" dbh trees
9/11/2008	Joanne Bonn, Scott Vuono	T4S2	12	87	622113, 5049121	1911	ABLA, PIEN, PICO	50	VAGL, MEFE, ALIN	60	20" dbh trees
9/11/2008	Joanne Bonn, Scott Vuono	T4S3	8	111	622204, 5049147	1893	ABLA	30	VAGL, MEFE, ALIN	70	15" dbh trees
9/11/2008	Joanne Bonn, Scott Vuono	T4S4	9	154	622298, 5049139	1863	PICO, ABLA	10	VASC, XETE, VACA	20	PICO-9" and dying, ABLA 6" & 30' tall
9/11/2008	Joanne Bonn, Scott Vuono	T4S5	19	142	622422, 5049089	1860	PICO, ABLA	40	VASC, XETE	20	9" dbh trees
9/11/2008	Joanne Bonn, Scott Vuono	T5S1	5	231	622008, 5050712	1947	ABLA, PICO	30	VAGL, VASC	60	10" dbh trees
9/11/2008	Joanne Bonn, Scott Vuono	T5S2	18	249	621930, 5050650	1943	PICO, ABLA	50	ALIN, VAGL, VASC	50	11" dbh trees
9/11/2008	Joanne Bonn, Scott Vuono	T5S3	22	242	621849, 5050594	1918	ABLA, PIEN	60	VAGL	20	13" dbh trees
9/11/2008	Joanne Bonn, Scott Vuono	T5S4	17	242	621760, 5050570	1910	PICO, ABLA	30	VAGL, VASC, ALIN	40	PICO-9", ABLA 4" dbh 30' tall
9/11/2008	Joanne Bonn, Scott Vuono	T5S5	20	242	621673, 5050518	1872	PIEN, ABLA, (PICO snags)	50	MEFE, VAGL, ALIN	60	16" dbh, PICO snags, BBWP feeding on ABLA

Photos: T1S1 - 2 photos of the set up. Rest of the stations have 4 photos from the 4 cardinal directions

Tree Species: ABLA-subalpine fir, PIEN-Engelmann Spruce, PICO-lodgepole pine, PSME-Douglas-fir, ABGR-grand fir

Shrub Species: VAGL-blue huckleberry, ALIN-thinleaf alder, VASC-grouse whortleberry, LEGL-labrador tea, MEFE-fool's huckleberry, VACA-dwarf huckleberry

Other: XETE-beargrass,

All transects were visited and rebaited at 2-3 weeks and picked up at about 5 weeks.