



*Explore. Collect. Protect.*

## **Project Report – Helena National Forest 2015 Lynx Tracking with Veterans – February 2015**

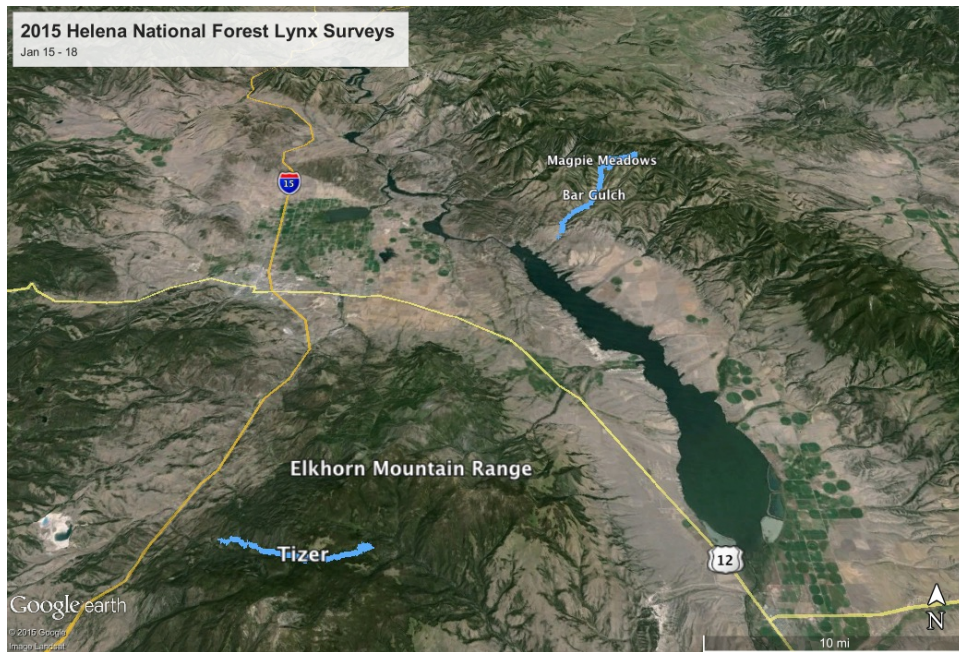
### **Project Summary**

The 2015 Lynx Tracking project was the fourth year of collaborative effort between the Helena National Forest (HNF), the Montana Discovery Foundation (MDF) and Adventurers and Scientists for Conservation (ASC). The primary goals of this project were to engage veterans suffering from Post Traumatic Stress Disorder from the Ft. Harrison Veterans Affairs Hospital in Helena, MT in an effort to survey for lynx and other rare carnivores on the Helena National Forest. This program gave veterans a chance to explore this beautiful and remote area. Tasking them with data collection also provided an opportunity to use skills honed during their military service.

### **Results and Discussion**

Using a combination of snowshoeing, hiking, snowmobiling, and driving, five people surveyed a combined distance of 60.4 miles during four days in two main drainages of the HNF. Conditions were extremely difficult for tracking as warm temperatures led to significant melting, high winds blew snow throughout the area, and nearly an inch of snow accumulated on the final outing day. While no carnivore signs were observed, signs of species observed did include snowshoe hare, red squirrel, shrew, grouse, long-tailed weasel, short-tailed weasel, deer, elk (actual observation – 2 individuals), and moose (actual observation – 1 individual). Figures 1-5 below illustrate transect locations. Table 1 provides information about the signs of species observed by drainage, and table 2 provides raw transect data. Photos from the outing are available for download here:

<http://adventurescience.smugmug.com/Projects/Helena-2015/>.



**Figure 1 : Overview of Survey Areas**



**Figure 2: Bar Gulch Survey Area**





Figure 3: Upper Bar Gulch (Magpie Meadows)

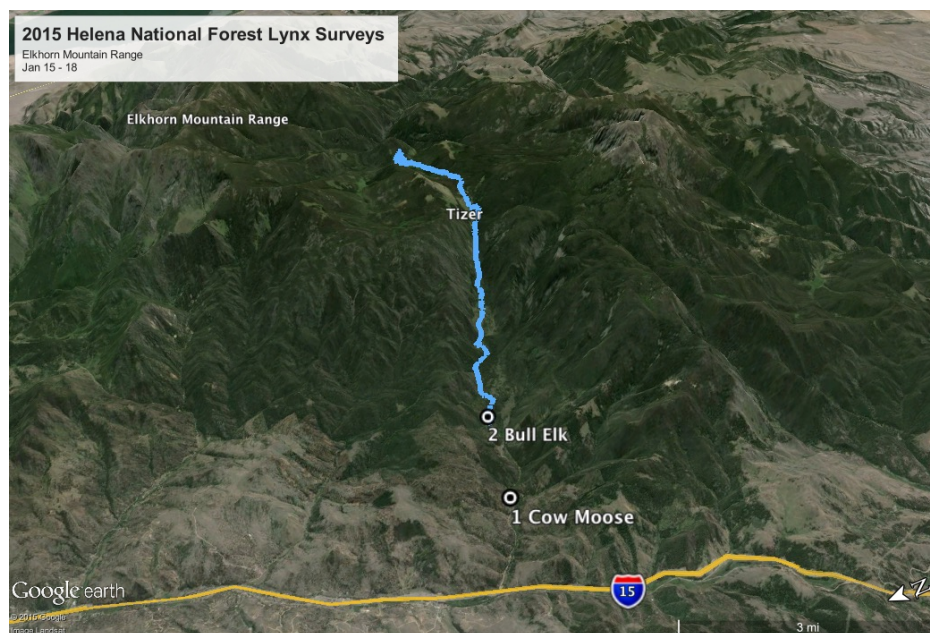


Figure 4: Tizer Drainage - Elkhorn Mountain Range

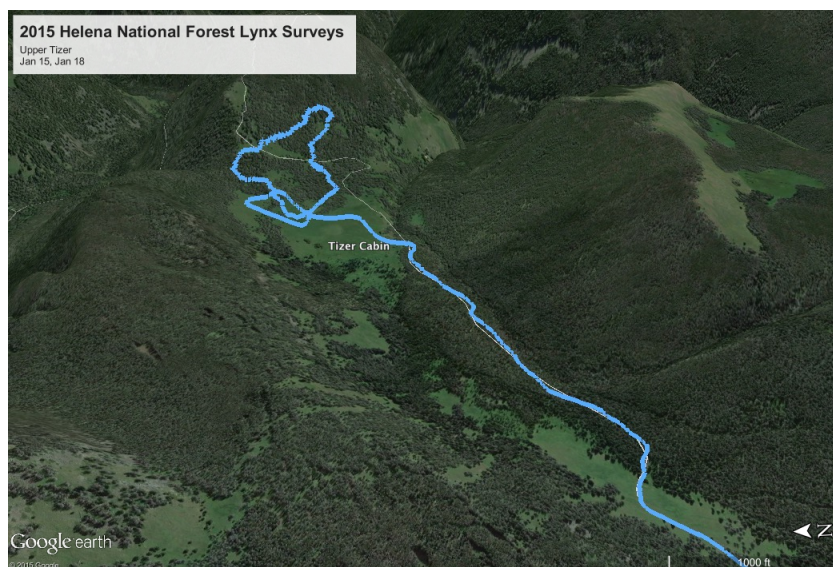


Figure 5: Upper Tizer Drainage -Elkhorn Mountains

Species	Tizer	Bar Gulch
Snowshoe Hare	Medium below 6000ft. and High above 6000ft.	Low
Red Squirrel	Low	Medium
Shrew	Low	N/A
Grouse (Unknown)	N/A	Low
Deer	N/A	Low
Moose	Acutual Observation - 1	N/A
Elk	Actual Observation - 2	N/A
Weasel (long and short-tailed)	N/A	Low

Table 1: Species signs observed by location

Name	Start Time	End Time	Length (mi.)	Elapsed Time	Avg. Speed	People
Tizer Scouting	1/15/15, 10:08 PM	1/16/15, 8:50 AM	5.60	10:42:28	0.5 mph	2
Magpie Scouting	1/16/15, 5:08 PM	1/16/15, 7:13 PM	18.20	2:05:29	9 mph	2
Magpie West	1/17/15, 12:11 PM	1/17/15, 6:15 PM	10.60	6:03:47	1.7 mph	5
Magpie East	1/17/15, 4:25 PM	1/17/15, 5:47 PM	6.50	1:21:31	5 mph	5
Tizer Snowmobile	1/18/15, 10:26 AM	1/18/15, 11:59 AM	9.50	1:32:56	6 mph	4
Tizer Lower	1/18/15, 11:59 AM	1/18/15, 3:52 PM	8.80	3:52:57	2.3 mph	2
Tizer Upper	1/18/15, 12:46 PM	1/18/15, 1:49 PM	1.20	1:03:18	1.2 mph	2
<b>Totals</b>			<b>60.40</b>			

Table 2: Transect Data