## Central Idaho Wolverine and Winter Recreation Research Study

July, 2011 Project Partner Update



A wolverine at one of our pre-baited log-style traps on the Sawtooth National Forest. The lid is locked open, so he is free to come and go as he pleases.

### **Recreation Monitoring**

Again this year, we are appreciative and impressed by the generous support of the winter recreationists who volunteered to carry our little orange data loggers. Our crews routinely visited 6 trailhead parking areas throughout our study area. They approached recreationists to provide information and ask for their help with the study. This year, approximately 80% of the folks approached agreed to cooperate with the study by carrying a data logger, and of those, we had about a 70% return rate on the data loggers. This is lower than last year, but still an impressive show of support by the region's recreationists. Over the winter, we collected over 1,200 tracks of winter recreationists through this voluntary participation!

We also are very appreciative of the continuing support of the Brundage Mountain Cat Ski program, who again asked their guides to strap on our data loggers, providing us important information on this recreational use within our study area.

This year, Payette Lakes Alpine Yurts and Payette Powder Guides also got into the action, and had their backcountry ski guides carry our data loggers.

Thank you to all who have participated!

### Successful Second Winter Season!

The Central Idaho Wolverine and Winter Recreation Study undertook its second field season this last winter. In 2011, we repeated work in the same areas north and west of McCall on the Payette National Forest, and also expanded our study area to include through the Warm Lake area east and southeast of Cascade on the Boise National Forest. The focus of our efforts again this year included live-trapping and GPS collaring wolverines to monitor their movements and behaviors and simultaneously asking winter recreationists to carry a GPS data loggers while recreating in the study area. This larger study area certainly meant extra effort, but it was well worth the investment. Over the winter, we monitored 10 wolverines and collected data from hundreds of volunteer winter recreation enthusiasts.

In addition to the intensive efforts undertaken on the Payette and Boise National Forests, we also completed a preliminary study on the Sawtooth National Forest near Stanley, Idaho. In this study, we collected hair for DNA analyses from wolverines visiting potential future trap sites, we monitored trail use using remote trail use counters and we undertook parking lot counts.

### **Wolverine Monitoring**

Last fall, we built a few more of our log-cabin style traps to expand our trapping efforts, and this winter we had 11 live traps stretching from Hard Creek on the Payette National Forest to Warm Lake Summit on the Boise National Forest. We opened the traps on January 10th, and the wolverines were ready for us. By mid-February, we had captured 8 animals, including 5 of the 6 individuals that we had monitored the previous winter and 3 new animals. In total, we recaptured and GPS-collared all 6 animals from the previous winter, as well as 4 new animals. And, we again had a visit from an 11<sup>th</sup> animal - a female, F6, in the Secesh/Burgdorf area, who we first met last year at about the same time - in late March and April when it is too late to put a collar on her. So, in total, we know of 11 wolverines roaming around our study area!

Based on our monitoring, the three females from last year did not reproduce this year. But, a female new to us this year in the Warm Lake area, F5, did establish a reproductive den and was still lactating when we removed her collar in late April. We will be visiting her den this summer, after she and the kits have left, in an effort to document the den and potentially collect hair or scat left by the kits.

## More details on this year's study will be available in our 2011 Annual Report, available in September!

For more information or questions, contact:

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or visit the website: www.forestcarnivores.org

### **Central Idaho Wolverine and Winter Recreation Research Study**

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### **Project Partners**

- USFS Rocky Mountain Research Station
- Payette, Boise and Sawtooth National Forests
- Round River Conservation Studies
- Idaho Department of Fish and Game
- Idaho State Snowmobile Association
- Central Idaho Recreation Coalition
- US Fish and Wildlife Service
- Brundage Mountain Resort
- Resource Advisory Councils of Southwest and South Central Idaho
- University of Montana
- Valley County Commissioners
- The Wolverine Foundation

# Local Businesses and Organizations Get Involved

In addition to our 'formal' partners on the project, our informal partners, collaborators and supporters are critical to the success of the effort. Several local business offered discounts to recreationists who returned units - see www.forestcarnivores.org for our previous newsletter for a listing of our many business collaborators. In addition, we are grateful for the support of the Nez Perce Tribe, who has been an important collaborator of the project. Also, the McCall Snowmobile Club members who helped us break trail to some of our traps on big powder days are very much appreciated! We also want to thank Outdoor Solutions, who has provided free or discounted services in modifying and improving our collars and animal handling equipment. The Payette Winter Recreation Forum continues to be actively interested and provides great advice and insights that help the project in many ways. Thank you all!



On the Sawtooth National Forest, we baited log-style traps but locked the traps open, so wolverines were rewarded with a free meal for leaving a hair sample. We collected hair at four different sites over the winter.

### Sawtooth Study

The Sawtooth Recreation Area and National Forest was the site of the first Idaho wolverine study back in the 1990s, by Jeff Copeland. We are pleased to be exploring opportunities to initiate work for our study in this same area. To provide us with information on wolverine presence and winter recreation use patterns, we initiated preliminary data collection in areas surrounding Stanley, Idaho this winter. In anticipation of starting a full study in this area, we selected trap sites in the fall, and built 4 traps that served as bait stations for us this winter.

This year, we simply baited these traps and other potential trap sites, and set up small hair collection sets that non-invasively take a sample of hair from visiting animals, including wolverines. At some of the stations, we were also able to set up infra-red triggered cameras, catching our visitors in photos. Over the winter, we documented 3 wolverines visiting 4 sites using the cameras. The DNA analyses will confirm the identity and sex of each animal.

We installed a series of trail use counters along major motorized and non-motorized recreation access points to provide initial information on the relative popularity and use of different regions of the study area. In addition, we conducted parking lot counts several times a week through the winter to provide us insights into the distribution of recreation across the area.

We are very pleased with the results of the Stanley-based preliminary study, and look forward to exploring the possibility of setting up a full study there this coming winter!

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Our 6 ft tall intern, Drew Chambers, standing at the lid of a wolverine trap under about 10 feet of snow. The trap stands about 4 feet tall, so there is close to 15 ft of snow when this picture was taken in mid-March And more snow on the way!

### Planning for Next Year

With two winter seasons now successfully completed, we have been planning and fund-raising to continue the study. Now, more than ever, it is critical to keep the work going, so that the last 2 years of hard work and commitment by our many partners really pays off. We know that we need a couple more years of good data before we feel confident that we have the information we need to meet the project goals (see <a href="https://www.forestcarnivores.net">www.forestcarnivores.net</a> for more information on overall project goals and objectives).

One of our study design requirements is that we examine multiple landscapes that support both wolverines and winter recreation. This is as important as continuing to study the same landscapes: both are ways to gather data on how wolverine responses to winter recreation may vary – through space and through time. In following our study design, we are pursuing the establishment of new study areas in 2012 on the Sawtooth and Boise National Forests. We should be able to report more on this in the Fall, 2011 and in our 2011 Annual Report available in September.

Idaho Public TV filmed our work this winter, and our project will be highlighted in a segment of the Outdoor Idaho program "Working for Wildlife". It will be aired July 14 and July 17. Check out IDPTV website and facebook for more info!

# Diversity of Winter Recreation Information

Again this winter, we undertook a diversity of efforts to document winter recreation activities. As previously mentioned, the critical information we have gained through the volunteer participation of recreationists went exceptionally well. In addition, we established 30 infra-red trail use counters across the Payette-Boise NF study area and another 10 on the Sawtooth NF. These units provide great information on the total number of users passing by, and record this information for us 24/7 – providing us with excellent use. A preliminary evaluation of the trail use data shows that this was another busy year and the number of users leaving the major parking areas is similar or higher than last year. We are looking forward to delving into this information further in the 2011 Annual Report.

It is great to see that the recreation information that we are collecting is starting to be recognized for the value it has in documenting the popularity and importance of winter recreation in the area. We have had a request to potentially collaborate with the Avalanche Center to use some of our data to evaluate whether avalanche conditions alter the way folks recreate or where they choose to travel on those high avalanche days. This may assist the Avalanche Center in refining their avalanche monitoring and communication work to most effectively keep us aware and safe in the backcountry. We are considering this opportunity and will be discussing this further with our partners.

#### **Wolverine Secrets Revealed**

As researchers, we have the opportunity to 'get to know' the individual wolverines that we follow - through their personalities at the traps and through their movements. For example, we know M2 to make long movements but were still impressed when he travelled from the north shore of Little Payette Lake to an area north of Burgdorf in a couple days (and then turned around and came back to Lick Creek)! Or, when we captured a new female in F2's home range, we thought she might be F2's daughter still residing in her parental territory. Indeed, results from DNA analyses indicate that F4 is the daughter of F2 and M2. We remotely monitored F2's den last year, and are pleased that a kit roaming the study area. Interestingly, we did not pick up any other animals related to F2, or F3 (who also had maintained a reproductive den last winter). This last summer, we visited F3's abandoned natal den and collected hair that, according to DNA analyses, was consistent with a kit mothered by F3 (and fathered by an unknown male). That kit did not visit our traps over last winter.

We also learned from DNA analyses that our new 2011 male M5 is the son of M1 and a female that was killed in wolf trap last summer. M1 is the territorial male who roams the Hard Creek-Granite Lake region, and M5 appears to have remained in his father's territory over this last winter.