

Southwest Crown of the Continent Forest Carnivore Monitoring Project

By Scott Tomson, Clearwater Resource Council

The terms species diversity and intact ecosystems can be overused buzzwords but these things truly are an amazing aspect of the Clearwater Valley and the Southwest Crown of the Continent (SWCC). Recent focus on the SWCC, largely due to our intact ecosystems, has led to the area being selected for Collaborative Forest Landscape Restoration Act (CFLRA) funding. This federal funding helps the Forest Service and engaged partners implement forest and watershed restoration projects in selected areas. The Seeley Lake Ranger District and large portions of the Lincoln and Swan Rangers Districts comprise the area designated as the SWCC.

While the funding is primarily designed to enhance existing budgets for project implementation, up to 10% of the total is allocated to conduct high priority monitoring within the selected areas. This monitoring is focused on evaluating how individual projects, and the overall landscape, respond to restoration and fuels reduction treatments over time.

There are several monitoring focal areas including; fuels, vegetation, weeds, aquatics and wildlife. Decisions on how monitoring will be conducted are made by committees comprised of various non-governmental partners and Forest Service representatives. Members of Clearwater Resource Council, the Blackfoot Challenge, Northwest Connections and Swan Ecosystem Center have been actively engaged in these committees and the broader oversight committee. This participation brings local input and consensus to the projects – an overarching goal of the CFLRA program.

A multi-species forest carnivore monitoring project was one of the proposals selected for funding in 2011. The focal species for this project are lynx, wolverine and fisher, although location information is collected for wolf, lion, and marten as well. This project is a synthesis of other past and present work being conducted across western Montana by the Forest Service, Rocky Mountain Research Station, Montana Fish, Wildlife and Parks and non-profits like Northwest Connections (NWC).

For many of the forests carnivores that are known or suspected to exist within the SWCC, little information is available regarding their distribution, population status, or habitat relationships. Due to a multi-year lynx study based in Seeley Lake, we know a fair amount about lynx habitat selection in this area but know little about how populations change over time. Conversely, we have very limited information on fisher or wolverine distribution, habitat selection or population stability.

Forest carnivore monitoring will be conducted using two primary methods: fisher hair snaring, and Winter Track Surveys. The first method targets one particular species, the fisher, and aims to collect genetic samples (hair) that can be analyzed to verify the species' presence.

Further information including the sex of the animal and even the genetic “signature” of the individual can be determined from viable hair or scat samples. Determining individual ID and sex are important and can allow us to say, “we have at least X male and Y female fisher on the Seeley District”. If we only

analyze to species all we could say is that we picked up fisher hair at multiple locations – possibly all from the same animal.

This hair snare method relies on setting out hair snare boxes in a systematic pattern across the landscape. The triangular boxes are open ended and fitted with gun brushes to snag hair as animals enter to grab the bait hanging within. These snare boxes are out for a minimum of three weeks. After this time, they are picked up and any hairs are collected from the gun brushes. These hairs are then transferred to storage containers and sent to a lab for genetic analysis. When we get the lab results back we know the variety of species that investigated our traps.

The winter track surveys differ in that they are intended to detect multiple species. This method incorporates collection of scats and hairs frozen in or along tracks and in daybeds to allow for genetic species verification. In addition it can provide information about habitat selection because we are not baiting these animals in.

The track surveys are also conducted across a systematic grid system. The grid cells are 5x5 miles in size and field personnel cover at least 6.2 miles of survey route per grid cell. When fresh lynx, fisher or wolverine tracks are encountered we GPS the location and follow the backtrack for a maximum of 1 mile. Any hair or scat seen along this backtrack is collected, stored in a desiccant vial and sent to the lab for DNA analysis.

The Condon based organization Northwest Connections (NwC) is contracted with the Forest Service to do much of this work. At this time there are 4 fulltime NwC employees and 2 Forest Service employees working on the field aspect of the project. These folks are working long days and covering an area from Swan Lake through the Clearwater and East to Lincoln. While much of the work is conducted using snowmobiles, crews are currently gearing up for backcountry trips into Monture Creek and the N. Fork of the Blackfoot. No snowmobiles used here, just snowshoes and leg muscles.

While we do not have results to report from this year's work, we have picked up fisher in several hair snare locations on the Seeley district in past years. We know there are some out there and look forward to learning more about all of these rare carnivores through these efforts across the SWCC.

This work would not be possible without the hard work and dedication of our field crews, non-governmental partners and dedicated agency personnel. Undertakings like these are not logistically easy nor is there much funding available to pull them off. Nonetheless, they are important and the information gained has many benefits from a resource management perspective. If you are interested to learn more about this project or forest carnivores in general please contact NwC, CRC or the Seeley Lake Ranger District. And stay tuned for the 2012 results of this exciting work.

And to tide you over until these results are known, you can learn more about a couple of these forest carnivore right here in Seeley Lake this week. At 7:00 PM on Wednesday February 9, 2012 at Seeley Lake Elementary, biologists Rich DeSimone and Brian Shinn will present an informative talk about one of the longest-running mountain lion studies that took place just south of Seeley Lake. And to double your pleasure, Doug Chadwick, author of *The Wolverine Way* will be speaking this Saturday, February 11th at

the Grizzly Claw. The PBS special based on his work, *Wolverine: Chasing the Phantom*, will be shown earlier the same evening. Please check the Pathfinder for exact times.

If you enjoy getting out into the woods in winter, on snowshoe, cross country ski, or snowmobile, you can't help but notice the many tracks in the snow. Those tracks tell stories that are fun to learn, if you know the language. I encourage everyone who enjoys nature, to learn to study and read the tracks. There's no better time than winter snow-cover to see just who has been in your backyard!