## Looking for the Elusive Lynx

Rachel Feigley and Jodie Canfield, Wildlife Biologists

species found in Montana. They were listed as "threatened" under the Endangered Species Act in 2000. Since then, biologists on the Helena National Forest have been mapping lynx habitat and looking for these elusive animals. In 2002, a three-year survey was initiated in the Big Belt Mountains; surveys in the Elkhorn Mountains began in 2003.

Lynx roam widely and have a home range area of 25-50 square miles. Cool and moist coniferous forests of lodgepole pine, subalpine fir, spruce, and Douglas-fir provide habitat for the lynx and its almost exclusive menu item - snowshoe hare.

Lynx are medium-sized cats weighing up to 23 pounds. A typical adult is about 3-feet in length. The most distinguishing characteristics of lynx are tufted ears and large hairy paws. These paws function like snowshoes to keep them on top of the snow, giving lynx a winter advantage over other predators in snowy high-elevation forests.

The surveys we conducted followed a nation-wide effort called the National Lynx Detection Protocol. This survey includes 25 transects, 2 miles apart in a random grid pattern in potential lynx habitat. The beginning of each transect is located using a Global Positioning tool (GPS). The transect consists of 5 plots set up 100 meters apart on a compass line. Each plot has a visual attractor (shiny pie pan hanging from tree) as well as something for the nose (a carpet square doused with a mixture of beaver castorium and catnip oil). These attractants are meant to lead the lynx to a piece of carpet spiked with nails, which is attached at the bottom of a tree. This works because the pad is also spiked

ynx are one of three wildcat with smelly oil and catnip, and lynx, like all cats, like a nice scratching post.

> Since the transect points were random, getting to them was interesting. Many required a full day to drive hike, and/or bushwhack to the starting point. Some of the transects were located in thick dog-hair lodgepole stands crisscrossed with downfall; others required scaling through and around house-sized boulders. Once the transects were established and the characteristics of the habitat assessed, field crews returned to each plot on two week intervals to collect any carpet pads that had snared hair. At each check, plots were "re-baited" (i.e. more smelly

Montana for identification. The lab uses a very sophisticated DNA sequencing procedure that allows them to positively identify species from body tissue samples.

During this first season, crews collected 25 hair samples in the Big Belt Mountains. The test results showed that we had collected hair from bobcat, coyote, black bear, and domestic cattle, but alas no lynx. In 2003, 34 samples were sent from the Big Belts and 16 from the Elkhorn Mountains. We expect to get the results back from the lab in March.

Lynx are most common in the boreal forests of Canada, where stuff and catnip was sprinkled on their populations fluctuate with the carpet pads). The plots were the snowshoe hare densities. taken down after the 3<sup>rd</sup> check. Lynx populations in the in The hair samples were sent to the southern boreal forests may be a

genetics lab at the University of function of "overflow" from the north when population is rising. Where habitat in the south is favorable, populations persist.

> Lynx were once trapped all over the mountainous parts of Montana, including the Big Belt and Elkhorn Mountains. Today, we know that lynx populations have survived in the wetter, more contiguous forested habitats found west of the Continental Divide. But we don't know if the drier, more fragmented forest habitats east of the Divide are important to the long-term persistence of lynx populations. Therefore, the survey results from the Big Belt and Elkhorn Mountains will help provide some of those answers and enable the Helena National Forest to plan management activities that will enhance and maintain lynx habitats into the

## Lewis and Clark Bicentennial Events on the Forest

Sara Scott, Interpretive Specialist and Archeologist

It's been almost 200 years since Replicas of expedition artifacts the Lewis and Clark expedition set up on a table let visitors slip made their way up the Missouri River. They spent quite a bit of time on what are now Helena National Forest lands. As part of the upcoming bicentennial commemoration, the Helena Forest developed an interpretive program to help share the history of the expedition with forest

In July of 1805, the Corps of Discovery passed through the Gates of the Mountains just 25 miles north of Helena. summer on busy weekends at Meriwether Day Use area on the Missouri, a forest interpreter talked about items the expedition carried with them as they arduously paddled upriver. back in time to an era when only canoes traveled the mighty river. Replica items included copies of the journals, writing equipment including quills and feathers, powder horns, flint and steel, sewing kits, and candle molds.

In July of 1806, Meriwether Lewis and 9 men crossed Lewis and Clark Pass northeast of Lincoln. Last summer, twelve guided hikes were led up to the pass including two hikes under a full moon. The tours spoke to highlights of the expedition's notes as they passed through the area—complaints of "musqutoes" [mosquitos], the trepidation at running into the "Minnetares" Indians [likely Blackfeet or Crow], the moose

that frightened Lewis' dog, and the joy in recognizing familiar landscapes [Square Butte] as the men crossed Lewis and Clark Pass. Guided hikes also focused on the natural history of the area and on ancient Indian people that traveled trails along the Blackfoot River and Alice Creek.

More Lewis and Clark interpretive events are planned for the summer of 2004.

