SPRING/SUMMER 2003 VOLUME 3, ISSUE 1

FIELD JOURNAL

Northwest Connections is a non-profit organization working to involve local people and students in the conservation and restoration of habitat linkages across rural landscapes in northwest Montana.

Blackfoot-Clearwater Game Range Count

by Tom Parker

Northwest Connections has been assisting with the annual survey of winter kill on the Blackfoot Clearwater Game Range for five years.

The survey was started by Montana Department of Fish, Wildlife and Parks biologist Jamie Jonkel to monitor trends in the mortality of deer and elk on the game range. The survey is affectionately known as 'the carcass count.'

This year, Northwest Connections was the primary source of field crews for the carcass count. We solicited student volunteers from the Wildlife Biology department at the University of Montana. This arrangement is a good fit for wildlife students who want to gain practical field experience in identifying ungulate species by skull, aging them by tooth wear, and ferreting out the probable cause of death.

As expected, this winter was mild on deer and elk on the game range. After four crews surveyed the area for three days, we only found 14 carcasses. This compares to past years where we've found an average of 30 and as many as 100 dead ungulates. Jonkel reports that since the survey began the leading cause of annual mortality has been hunters, followed by road kill, then predators and finally winter climate conditions. Jonkel feels that the survey is important for tracking changes in mortality over time, especially since the survey effort began before wolves and grizzly bears were as frequent as they are now on the game range.

A whitetail deer carcass with a broken arrow.

STAFF PROFILE: **Steve Lamar**

Steve Lamar has lived in the Swan Valley for 25 years. Steve worked for the Forest Service for 17 seasons as a forestry technician and backcountry ranger. He's also worked as an outdoor instructor and guide throughout the Bob Marshall Wilderness complex for 12 seasons. Steve is an accomplished rustic furniture builder. Steve and his wife Sharon have two grown children, Luke and Annie, who were born at home in Condon. Steve is now NwC's program manager. We can't say enough great things about Steve: he's super competent in the outdoors, organized, thorough, and a lot of fun too!

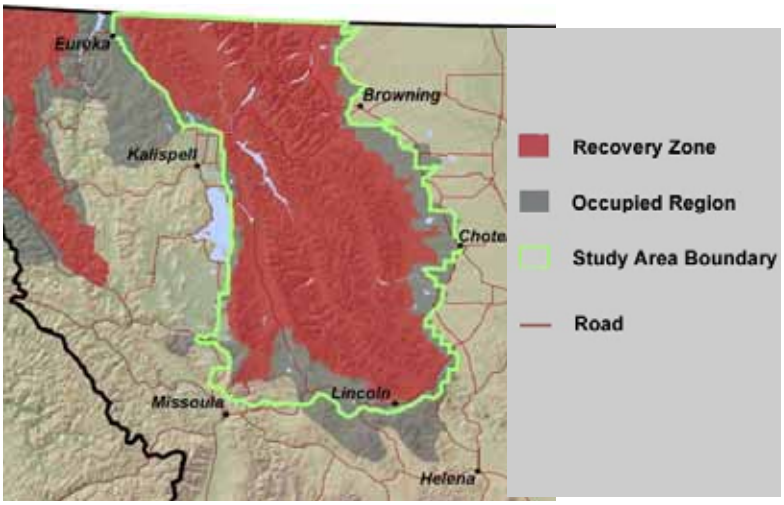
INSIDE

FACTS AND FIGURES

- *7.5 million – the number of acres to be surveyed by the entire USGS Grizzly DNA project*
- *2.5 million – the number of acres Northwest Connections is in charge of for 2003.*
- *4,000 – the number of roads and trail miles to be surveyed by crews this summer*
- *7 … million – the number of steps to be taken on the DNA project!*

Grizzly Bear DNA Project Update

By Melanie Parker



The big push to census the grizzly population of the Northern Continental Divide Ecosystem is on. The main survey will take place in 2004, however a large effort is being mounted this year to make necessary preparations.

During the summer of 2003, crews will be hiking, riding, and driving thousands of miles of roads and trails to map as many natural bear rub trees as possible. Northwest Connections, as a cooperator on this US Geological Survey project, will undertake roughly one third of this season's survey during a four month field season. Our area includes large portions of the Swan, Mission and Blackfoot valleys as well as western portions of the Bob Marshall Wilderness.

Because bears naturally rub on trees, sign posts and telephone poles, these objects provide a ripe opportunity to gather bear hair. During the 2003 field season, crews will be locating, mapping and setting such rub objects with short strands of barbed wire.

Northwest Connections is providing local knowledge of trail and road systems in the area to improve the efficiency of the survey effort. We have also taken the lead in developing guidelines for stock trails, to avoid any possibility that trees rubbed by horse and mule packs will be set with barbed wire in such a way that it would present a conflict.

As the field season progresses, our crews will be contacting outfitters, local residents and others who might have good information on potential hair collection sites. We'll also be working with packers and other volunteers with pack stock to help supply backpackers with barbed wire and other field gear.

The task before us is a bit staggering. At each and every planning meeting there's always a moment where somebody brings up the obvious, "that's big country." A moment of reverential silence follows. Then everyone says, "yep", and the conversation moves on.

Although most of the lands to be surveyed by the project next year are public lands, there will be some private landowners invited to participate. Most are ranches and private residences in the Blackfoot Valley and on the Rocky Mountain Front, while a few are at the foot of the Swan Range in the Flathead Valley

"That's big country."

and at the base of the Mission Mountains in the Mission Valley. Because these private lands fall within the boundary of what is currently assumed to be occupied grizzly bear habitat, the study would like to make sure that these bears are counted. Cooperation is being negotiated in person with willing landowners on an individual basis.

Where cattle are present, on private or public lands, crews will be constructing cattle exclusion fences this year. The purpose here is to prevent cattle from getting into the

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COOL STUFF

by Andrea Stephens

GIANT WATER BUG

NwC's amphibian survey crews have often run into the fearsome Giant Water Bug in local ponds. Natural History magazine (March 2003) reports about the creature's reproductive behavior and its fascinating relationship to Vietnamese cooking.

Giant Water Bug males continuously tend eggs laid by the females. In some species, males have a large scent gland. Robert Smith, an entomologist at the University of Arizona, theorizes that the gland, located directly between the hind legs, functions to leave a scent trail for the male to find his brood of eggs. Since the attentive father leaves the eggs and crawls down into the pond to gather water many times a day, he must negotiate a maze of branches to return to his eggs each time.

Remarkably, the excretion from this gland is apparently a treasured component in Vietnamese cuisine. Vietnamese-American economist Le Anh Tu Packard writes of her grandmother's traditional Vietnamese noodle dish: "…just one drop of the essence extracted from the *ca cuong*'s scent glands…suffused the dish with an indescribable fragrance, enough for the entire family."

Just one more reason to appreciate our local wetlands!

Field Notes

by Steve Lamar

The morning alpenglow is splashed across the face of Lindy Peak as I work my way up along its arcing southeast ridge. It is a beautiful fall morning in the Swan Valley with the air crisp, cool, and delicious. The fall colors are peaking with the bright yellows of the Larch trees contrasting with the sea of green conifers. The bright, blue skies with the tops of the taller mountains etched with white recent snow make for an incredible scene. I realize how fortunate I am to witness this display of natural beauty.

I am here today working with Northwest Connections on its Whitebark pine monitoring program, and am on my way to the top of Lindy Peak where I will take photos and observations to compare with photos and data from the 1960's, '70's and '80's. The Whitebark pine is going through trying times. Disease and insect attacks, from white pine blister rust and mountain pine beetles respectively, along with the lack of naturally occurring fire and its resulting influence are together greatly reducing the Whitebark pine population in North America. The Whitebark pine is an important component of the landscape's ecosystem. The cones from these trees produce seeds that are a major food source for

(Continued on page 4)

(Field Notes — Continued from page 3)

many animals and birds - most notably the Grizzly bear, pine squirrel, and Clark's nutcracker. The seeds or 'pine nuts' contain 50 to 60% fat. Grizzly bears have historically fed on these seeds in the fall to gain weight before hibernating. What I see today is a bit encouraging as the majority of Whitebark pine appear to be healthy on this ridge. However, there is no sign of Whitebark pine cones or caches. Perhaps this area's topography and isolation are factors that have offered some degree of protection from the onslaught that has struck so deadly in other areas. Time will tell if this area can hold on and survive.

As I hike along today, I see several Clark's nutcrackers, ravens, Stellar jays, Gray jays, Black-capped chickadees, Golden-crowned kinglets, Red-breasted nuthatches, Downy and Hairy woodpeckers. I see tracks in the scattered patches of snow of elk, mule deer, squirrels, chipmunks, mouse, and ptarmigan. But no bear sign.

Although the carnage has been great overall to the Whitebark pine in North America as well as here in the Swan Valley, I remain optimistic that through public awareness, a proactive land management agenda that includes prescribed fire, and through nature's resiliency the Whitebark pine will survive and will again some day flourish.

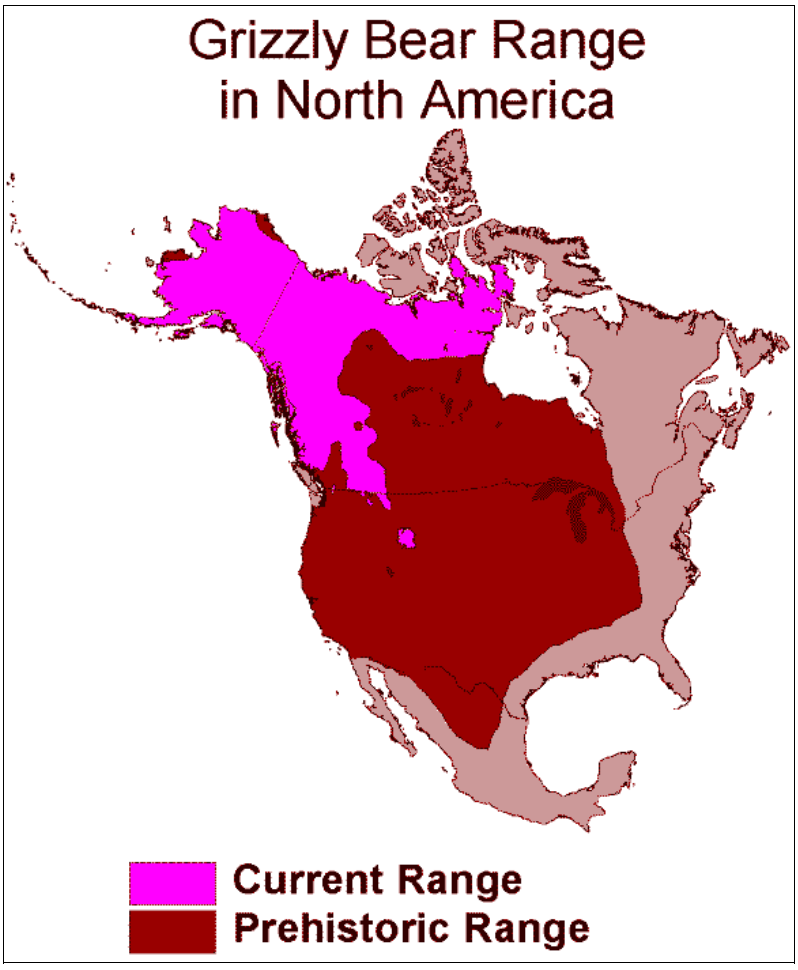
Image provided by Whitebark Pine Foundation. For more information on whitebark pine go to www.whitebarkfound.org.

(Grizzly Bear DNA —Continued from page 2)

'active' hair snagging sets that will be deployed in 2004. These will be small rings of knee-high barbed wire with a stinky lure set in the center. Bears walk under or over the wire to investigate the scent and quickly leave when they find no food, depositing in their wake small tufts of hair that reveal their species, gender, identity and familial ties.

By 2006, the USGS will be able to use all of the samples collected to build a minimum count, estimated population, and general distribution of grizzly bears across the Northern Continental Divide Ecosystem. What makes this study important, says Kate Kendall the project leader, is that the NCDE is the only one of the five 'recovery areas' in the lower 48 states that has a significant grizzly population *and* is connected to populations in Canada. This makes our region likely the bears' best chance for long term survival south of the 49th parallel.

For more information on the Northern Divide Grizzly Bear Study go to: http://nrmsc.usgs.gov/research/NCDEbeardna.htm.



PERSPECTIVES *Of Wolves and Me*

by Julie Fuller

The wolves moved about eight miles north, just outside the study area between last night's location and this morning's. Snow has drifted across the county road, so I couldn't get a good triangulation without going clear around a long back way. When I returned to the "wolf shack" after morning telemetry, I got a call from rancher Pete Durham, who found an elk calf dead on his ranch among some wolf prints. Investigation was unusually easy, as for once it was neither snowing nor was wind blowing hard enough to cover prints. I tracked the blood trail of the calf for nearly a half mile uphill to where she had jumped over a fence, slipped and fell and the wolves first grabbed her. The alpha pair were the key ones hunting it, their tracks overlapped with the elk or were right beside it. The two pups followed along the periphery, joining in only at the end of the chase. This calf gave them a run. Following the tracks uphill further revealed another dead elk calf, this one with just a few bites out of it, barely touched. This is the second time I've seen this "surplus killing" behavior, where wolves kill but don't eat. Apparently, the wolves had moved north just before dawn, came upon a herd of elk bedded down, set upon the first calf and killed it. They may have seen the second calf running away and had some behavior trigger to prey on this one as well.

"I sympathize with ranchers now more than ever. The conservation of wolves outside protected national parks depends, in a large part, on their good will."

It is a crazy experience to track wolves in the snow, when the beeps coming from my telemetry unit indicate the wolves are very nearby. The tracks of the big male are nearly large enough for me to put my open hand in, and he weighs nearly as much as I do. And he and his mate just killed two 600lb elk.

After the necropsies of these two elk, I talked with the ranchers in the area. Pete, a third generation Montana rancher, near 70 years old, was wonderfully polite considering the wolves just killed an elk after running it right through his cattle herd. He raises black angus, and barely can keep them going. He's in rough terrain, winters are harsh, ever-growing elk herds are competing with his cattle for graze, and now he has to worry about wolves. He remembers the day when his father and grandfather lost all sorts of horses and foals to wolves. In those days, game was a lot less plentiful. Wolves are a blessing and a curse, and a pendulum like Poe's. They keep elk numbers down, but wolf numbers grow, and elk migrate back to Yellowstone when winter is over. What do wolves eat then? How long will it be until he loses a cow? He doesn't mind having the wolves there as long as they stay out of trouble, but he is understandably worried about the situation, and I appreciated that much more his kindness to me. Here I come, the "wolf biologist" to ask him "guess what is in your back yard?" We talked about getting him some rubber bullets to keep nearby, and joked about their effectiveness (don't freeze them, now!!) The wolves killed that first elk scarcely a half mile from his house.

I came home after evening telemetry to relax in the "wolf shack", a cozy log cabin known as the Cowboy House in summer. My reverie was interrupted by Dave Henderson, local rancher who lost his dog last year when wolves killed it in front of him. He called to tell me his mule has been attacked. Perhaps the gaping wound in its leg is from the mule kicking out and getting tangled in barbed wire. Perhaps it is a wolf bite. The wolf tracks went right through his pasture, and my telemetry data confirms that sometime during the night they passed through his ranch. I'll learn more tomorrow.

Tonight, the wolves had been headed back south, toward the Sun Ranch where they are as safe as they can be. This is the friendliest territory in the valley, and place where 80% of their activity occurs. On my way home, in the Rocky Mountain sunset, I saw thousands (likely at least 1,200 although possibly more) of elk spread out across the yellow, glowing, grassy fields. Tomorrow, I will go out and try to see if any of these has fallen.

Wolves sometimes kill quickly, making it look effortless, with a blood trail of 30yds or less. Sometimes, they chase animals like the calf I found today... a mile from her herd, a half mile of biting and bleeding. Some kills are very gory, with hemorrhaging and broken bones from falls down hills. Sometimes they put animals out of their misery, animals hunters have shot and wounded. I think that every wolf-lover should see some of these wolf kills. And realize the risks, and the worry that ranchers with horses, dogs, and cows feel when they learn of unpredictable carnivores are in their area. I sympathize with ranchers now more than ever. The conservation of wolves outside protected National Parks depends, in a large part, on their good will.

This was a neat story I felt like passing on.

Julie Fuller was a Northwest Connections intern in the summer of 1998. She wrote this during the winter of 2003 while working as a wolf biologist near the Madison River.

Restoring Whitebark Pine

by Tom Parker

The Wildlands Volunteer Corps, a program of Northwest Connections, will involve eight local high school volunteers this summer in a Whitebark pine restoration project. The project is being led by the Swan Lake Ranger District of the Forest Service and will be in the Jewel Basin of the Swan Range, a hiking-only area above Creston, Montana.

Last year, the Forest Service burned 96 acres in the Jewel Basin as part of a long term program to return fire to its natural role on the Swan Front. Such fires help Whitebark pine by reducing the competition from subalpine fir and preparing a suitable surface for seedling regeneration. The crew will plant approximately 2,000 seedlings that have been specially cultivated by the Forest Service to be resistant to white pine blister rust, the non-native fungus that attacks five-needled pines in North America. Once the planting is finished, the crew will survey several of the surrounding Whitebark pine stands to better understand the impact of blister rust, mountain pine beetle and fire exclusion.

The crew will backpack into the area and camp out all week. Participants, ranging in age from 15 to 18, will learn how to use a map, compass and GPS unit for orienteering, how to camp and work safely in bear country, the basics of tree identification and forest stand inventory, and about different approaches to forest restoration. The Wildlands Volunteer Corps will also be working on amphibians in the Swan Valley and goshawks in Seeley Lake this summer.

It's time to say *THANK YOU!*

We had a great response to our wish list last fall. Thanks so much for helping to supply our office and field crews. Thanks to ...

Gary and Deanna Palm for a copy machine and office furniture
Peter Pronco, Dan Holland and Paul Oosting for a Cannon digital camera
Steve and Elaine Sulser for a Fuji digital camera (yes, we needed both!)

It's also time to say thanks to ***ERIN SEXTON*** who came on last fall as NwC's Landscape and Livelihood intern. Erin stayed on through the winter, but will be heading off to her new home in the North Fork of the Flathead. Keep up the good work Erin!

Events Calendar

Wildlands Volunteer Corps
(kids 15-18)
- Amphibian Monitoring
  June 16-22
- Whitebark Restoration
  June 26-July 2
- Goshawk Inventory
  August 4 - 10

Bear Information Night
(Results of recent bear research and plans for future studies — 7pm at Condon Community Hall)
July 16th

Board/Staff Meeting 4-6pm
July 17th

River Walk
(Interpretive hike up a local stream to understand stream dynamics and fish habitat — 10am-4pm)
August 16

Dessert Auction
(Community social/fundraising event)
August 22

Landscape and Livelihood Field Semester
September 3 - October 29

Community Firewood Day
October 4th (10am-3pm)

STAFF and BOARD

Permanent Staff: Raeann Henrekin, Steve Lamar, Tom Parker, Melanie Parker, Andrea Stephens
Seasonal Staff: Rob Henrekin, Tiger Hulett, Deb Hulett, Jessie Lund, Mike Stevenson
Interns: Casey Johnson, Maureen Hartman, Sarah Richie
Board Members: Agnes Beck, Gary Freyholtz, Bob Love, Roger Marshall, Mary Mitsos, Melanie Parker, Tom Parker, Steve Seibert, Sue Stone.

Wish List

- Digital projector
- 4x4 passenger vehicle
- TV / VCR
- Small waders
- Graphic design services
- Large capacity coffee pot

I want to support Northwest Connections' efforts in community based conservation and education.

I'm sending …

- ☐ $10
- ☐ $25
- ☐ $50
- ☐ $100
- ☐ $500
- ☐ $1000

to be used for...

- ☐ monitoring and restoration
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- ☐ community involvement
- ☐ general support

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All things are connected: the land, the animals and the people.