

BSU Explores Modern Frontiers

Western exploration didn't end with the trappers, miners and hardy pioneers who lived 100 years ago. On the brink of the 21st century, a new breed of explorer is hard at work, charting unknown territories in what is still the land of myths and dreams.

These modern-day explorers may not look much like their counterparts from earlier generations, but they share much in common. Like the first pioneers, they are making new discoveries that are changing the way we view our Western landscape. Their work is redefining how we tackle issues involving our lands.

At Boise State University, these millennial explorers are hydrogeologists, anthropologists, historians, writers, geologists, political scientists, biologists, business experts and many others. In this issue of FOCUS, we take a closer look at a few of these people and their work.

Glenn Oakley photo

A BURNING ISSUE: STUDY EXAMINES WILDFIRE'S EFFECTS

By Melanie Threlkeld McConnell

Mark Fuller has lived in Boise for only four years, but already the career ecologist has noticed the dramatic decline of the Snake River Birds of Prey National Conservation Area, a delicate ecosystem that is deteriorating one species at a time.

The cause? Primarily, bigger and hotter wildfires inexhaustively fueled by cheatgrass, a flourishing non-native plant that is wiping out Idaho's native vegetation; and to a lesser degree, the effects of military training in the area by the Idaho Army National Guard.

"If you drive down Swan Falls Road, even the untrained eye can recognize the huge differences in areas that were burned the last two years. There are no shrubs and very few bunch grasses, compared to beyond the burned areas where you can see sagebrush," Fuller says. "It's a dramatic example of how these wildfires completely eliminate the sagebrush."

Fuller is the director of the Raptor Research and Technical Assistance Center at BSU. He served as the administrator of a comprehensive study that documented the changes in vegetation, habitat, raptors and prey in the 485,000-acre area, which lies along an 81-mile stretch of the Snake River Canyon in southwest Idaho. The results were published recently in a report titled "Effects of Military Training and Fire in the Snake River Birds of Prey National Conservation Area" (NCA).

The study was a collaborative effort by a group of scientists from BSU, the U.S. Bureau of Land Management (BLM), the Idaho Army National Guard and the Snake River Field Station of the U.S.G.S. Biological Division.

The results reveal that more than 50 percent of the shrubland in the NCA has burned since 1979, due in part to too much fire suppression, which allowed non-native plants and other fuels to proliferate. Computer simulations project the complete loss of shrublands within

25 to 50 years without fire suppression. Projections also indicate it will require up to 80 years to recover from the vegetation changes that occurred in the 15 years between 1979 and 1994, if recovery is possible at all.

"We're changing dramatically from a native plants and animal state to an altered state," Fuller says. "We don't know the consequences of losing all these native plants and the overall effect on the production of the ecosystem. For example, cheatgrass is not a good food source for cattle. It greens up early in the year and then it's dry, it's gone. It is replacing other plants that are viable food sources.

"It's really an important issue for people who live on the Snake River Plain ... cattlemen and livestock raisers in general. They have to be concerned about how these changes in vegetation affect their ability to use the land."

The research also noted that the long-term use of tracked military vehicles during training had destroyed some of the native vegetation needed by ground squirrels and jackrabbits, both of whose populations are in decline.

Interruption of the food chain has a domino effect, explains Fuller. As the native plants disappear, so do Townsend ground squirrels or black-tailed jackrabbits, both of whom are dependent on the

native vegetation for food or shelter. They in turn are the food source for golden eagles and prairie falcons, two raptor species whose numbers also are down.

Already land managers and users are implementing measures to help balance the damage done by fire and other disturbances. The Idaho Army National Guard is doing an environmental impact study to find ways to reduce its effects on the area. The BLM is starting controlled fires to burn out potential fuels and researching ways to prevent cheatgrass from spreading so quickly.

The study is important too, Fuller says, because it can be applied to other areas in the West that are much larger than the Snake River Birds of Prey, and because it linked several ideas of the food chain theory that had been documented by scientists nearly 30 years ago.

"From a conservation of species and biodiversity standpoint, one would expect these dramatic environmental changes to affect the distribution and abundance of native plants," Fuller says. "There are decreases in the number of animals, and now it becomes a policy and manager's issue of 'what do we want to save?' Our contribution has provided decision makers with much more information and I hope a better understanding of the links among plants and animals." □



Fuller: We don't know the consequences of losing all these native plants and the overall effect on the production of the ecosystem.

CHUCK SCHERER PHOTO

ANTHROPOLOGIST DOCUMENTS LIVES OF RANCHING FAMILIES

By Janelle Brown

They wear cotton shirts buttoned at the neck, flat-brimmed “Petan” hats, scuffed leather boots. Handwoven *riatas*, used to rope cattle, hang from their saddle horns. They take great pride in the work they do.

The Shoshone-Paiute ranchers who live on the Duck Valley Indian Reservation on the Idaho-Nevada border share a rich tradition of buckarooing, storytelling and craftsmanship. It’s a tradition not well-known outside the reservation’s borders, even as the mythology of the West continues to grow.

But as these ranching families pass their skills and stories from one generation to the next, there is a growing realization that these personal histories should be preserved.

Boise State anthropologist Robert McCarl is working to do just that. With a grant from the State Board of Education, McCarl is documenting the lives of ranching families on the reservation located about 100 miles south of Boise. He plans to organize the photographs, interviews and other documents into computerized archives for both a BSU collection and for use by the tribes.

“There is this incredible cultural diversity right next door to us, that for the most part we’re not even aware of,” says McCarl.

“I think the primary value of this project is that it recognizes cultural strengths and contrasts that largely go unnoticed.”

McCarl, who was a folklorist for the Idaho Commission on the Arts before joining Boise State in 1994, began his project last summer by poring over

historical photos at the University of Utah in Salt Lake City, organizing them into computerized archives and interviewing families on the reservation. This summer, he plans to make a number of trips to Duck Valley for more interviews.

He’ll talk with people like Reggie Sope, a third-generation rancher, former buckaroo, ceremonial drummer and tribal council member. During a recent visit to the reservation, McCarl asked Sope about the early days of ranching in Duck Valley, what it was like to grow up there and to ride the rodeo circuit.

“Reggie has an amazing way of working with horses,” says McCarl, describing an incident that occurred one day when he visited the rancher’s property. While McCarl watched from outside a corral, Sope threw a rope loop around the back foot of a frantic horse, pulled it tight and gentled the horse down.

“Then he patted the horse like it was a big puppy and talked to it until it was calm,” says McCarl, who took notes while Sope was at work and later asked him how he learned this technique.

McCarl is also documenting the work of Duck Valley’s artisans and skilled craftspeople. He’s visited saddlemaker Spider Teller in his shop in Owyhee, Nev., and talked with him about the unique, handmade tools he uses to build and repair saddles for working buckaroos.

When a prominent Duck Valley family gathered for spring branding, McCarl documented the event, focusing on one of the family’s middle-aged daughters who was working the herd from horseback and who also joined in branding and castration. He even sampled the delicacy of the day — the euphemistically named “prairie oysters,” also known as calf testicles — and managed not to choke.

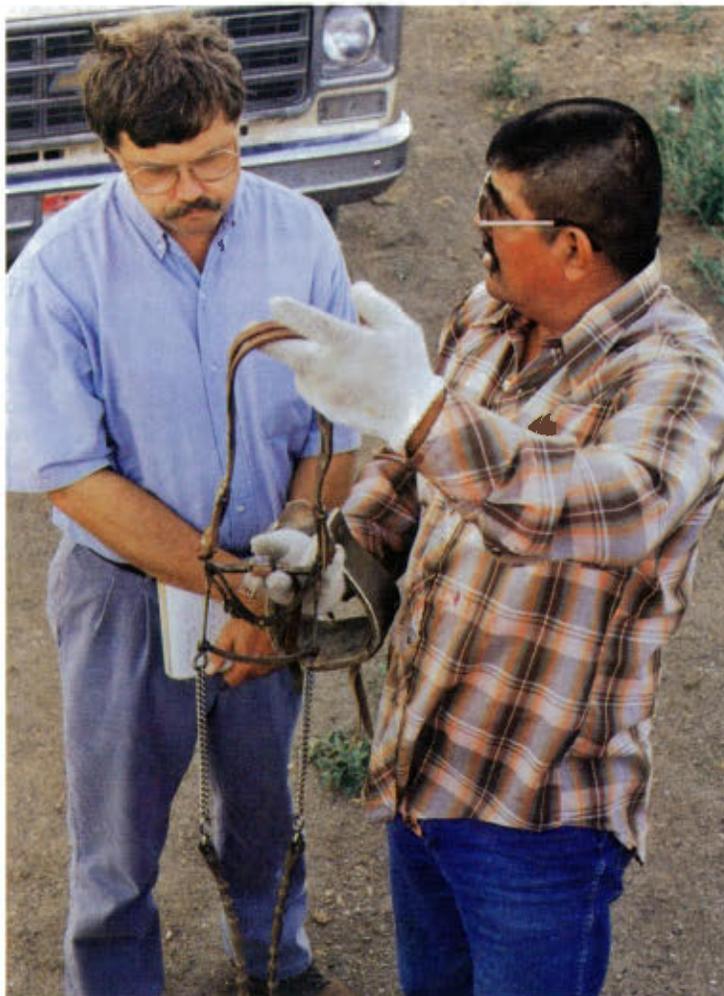
“There is a tremendous amount of communal labor,” says McCarl, when asked what surprised him about reservation life. “Those ranching families start at 5 a.m., seven days a week. They work till dark and beyond with no letup.”

The work can be dangerous and violent, McCarl adds. “People are constantly getting cut, run over, stepped on. Some of them spend the entire day in the saddle.”

McCarl hopes his project will provide Duck Valley families with accurate descriptions of their work and lives that they will want to share with the next generation.

The reservation currently has no archival center, but McCarl says there are tentative plans to create a place where documents could be housed.

“These conversations reveal a marriage of artistry, tenacity and skill that is the result of more than 100 years of struggle by Shoshone-Paiute ranchers to retain their culture while adapting to the economic realities of the West.” □



IAN BOLES/PHOTO

Teller is among the many Shoshone-Paiute natives interviewed by McCarl.