



Limekiln Blowdown

Craig Flentie, Lewistown FO

The “wind event” this past June at the head of Limekiln Canyon in the Judith Mountains probably lasted less than a minute, but it left behind about 200 acres of downed timber on public land managed by the BLM and made a portion of the Limekiln Loop Trail absolutely impassable.

Since then, the BLM forestry and fuels staff (in part, Bruce Reid, Jennifer Walker, and Pat Harty), members of the Central Montana Fire Zone, and the Judith Basin Backcountry Horsemen have been scrambling to make the scenic hiking trail usable again and to address the long term forest health issues created by about 1.5 million board feet of downed and scattered timber.

The downed timber has been cleared from parts of the existing trail and BLM staffers recently completed re-routing a detour along that portion of the trail that cannot be cleared in a timely manner.

With the clearing and re-routing work completed, hikers can once again enjoy the entire loop trail, although extra precautions need to be taken on about a mile of the detoured trail along the ridge that separates Limekiln Canyon and Ruby Gulch.

The BLM and the Montana Department of Natural Resources are working on a longer term plan to address wind damage and several other forest health issues in the Limekiln and Ruby Gulch areas.



Craig Flentie

Pat Harty, a BLM fuels specialist, examines a portion of the Limekiln Loop Trail after it had been cleared of downed timber.

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“One of our major concerns is the high fire risk this blow down presents to several drainages in the Judith Mountains. We have some ideas, but certainly want the benefit of public involvement before we determine how to approach these issues. We’ll be hosting a public scoping meeting in mid to late September and will be advertising the date, time and location as quickly as we have the details in place,” offered Bruce Reid, a BLM forester in Lewistown.

State Director's Notes – Changes and Accomplishments

Here we are again – summer is almost over, and fall (and most importantly–hunting season!) is just around the corner. As I write this, our fire season has been relatively calm, locally. The season started early, however, especially in California. As is the norm, many of our folks have stepped up to assist with the firefighting efforts there.

Along with the ever changing weather and ever changing seasons, we also have ever changing business practices. Off the top of my head, I can think of several – GovTrip; FBMS; organizational changes such as NOC and three tier; changes resulting from court decisions, etc.

Sometimes it seems overwhelming and we lose focus of what we are trying to accomplish; we tend to focus on the process rather than the product. At times like these, it's important to realize that our goals are the same. The changes serve to improve efficiencies and take advantage of new technological capabilities, and at times, they are an evolution in the interpretation and understanding of laws and regulations.

Whatever the reason, these types of changes will always be with us. We need to be aware of them and adjust to them, and not become overwhelmed in the process. Keeping focused on our mission and goals can help us do that. That mission is, "To sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations."

Many of you are involved in our watershed assessment efforts, either by doing on the ground evaluations or supporting the efforts in some other fashion. These assessments of the health of the land, be it uplands, riparian, or forest health, and the subsequent identification of changes in management or projects to improve conditions, are just some of the many things we do to achieve our mission.

The various BLM staffs–contracting, procurement, budget, radio shop, human resources, administrative support, and the list goes on–each play a role in ensuring that the

assessments are accomplished. I know you may get tired of hearing the term, but it is a team effort, and the team of folks we have working in Montana and the Dakotas is second to none. Hats off to you from Howard and me!



As we wrap up this fiscal year, I'd like to reflect on some of our accomplishments. On the resource management planning front, we have made major progress on several efforts: the Missouri River Breaks National Monument RMP is currently in the protest resolution phase; the Powder River Basin Supplemental Environmental Impact Statement proposed final is in D.C. for review; the Butte proposed RMP/final EIS has been reviewed and is being printed; and the Miles City, Dakotas and Malta resource management plans are moving towards draft.

And there's more. The Billings Field Office has made major progress in addressing the management of the Pryor Mountain wild horse herd. The Dillon Field Office made us proud with its representation of the organization in the Healthy Lands presentation. The Missoula Field Office continues to make headlines in its outreach and public education efforts featuring Garnet Ghost Town. And the Great Falls Field Station worked hard to bring to a close some of the remaining issues on the Rocky Mountain Front while continuing to process energy proposals.

So it is with pride and appreciation that Howard and I thank you for a job well done! And remember: Be Safe Out There!

Gene R. Terland

Still Wet and Wild on the Madison

Susan James, Dillon Field Office

Established in October 1983 as part of the Lee Metcalf Wilderness, the Bear Trap Canyon Unit became the BLM's first entry into the National Wilderness Preservation System. It remains the only BLM-administered wilderness in the state of Montana. The 6,347-acre wilderness is renowned for its outstanding natural and scenic values. Towering 1,500-foot cliff walls, formed by the abrading action of the Madison River, offer a spectacular backdrop. Holding untold stories of the past, the area shows evidence of use as far back as 11,000 years by the Folsom Culture and other early peoples.

Dedication Day: Wet and Wild on the Madison. That was the header on an article featuring the dedication of the Bear Trap Canyon Wilderness in the August 1984 edition of *The Quarterly Steward*. The article reads, "On Friday June 1, Interior Secretary William Clark traveled to Bear Trap Canyon to dedicate BLM's first wilderness. The dedication was preceded by a lively float trip."

On June 9th of this year, the BLM celebrated the 25th anniversary of the Bear Trap Canyon's wilderness designation. It too included a lively float trip. Although accompanied by less fan-fair this time, I couldn't help but find similarities between the two events even though 25 years had passed.

As with the dedication float, the water was above normal; in fact, this spring brought the most sustained high water flows I had seen in my 12 years working on the Madison River. The heavy winter snows and a cool wet spring made for weeks of high water. The rainy/snowy weeks leading up to the anniversary were concerning. Despite its relatively small size, the Bear Trap Wilderness is a well protected and isolated parcel of public land.

It isn't easy to access from any direction and the whitewater can challenge even the most experienced river runners. Would the weather be good? Would the water be too high to float? What are the alternatives? Should we float another section of river, hike the trail, drive to an overlook? Posed with all these questions and challenges, I realized these same wild and unpredictable characteristics are what made our predecessors choose the Bear Trap Canyon to become the first BLM administered wilderness area.

Montana Whitewater (one of only two outfitters authorized to conduct river trips in the Bear Trap) was contracted to supply rafts and guides to escort our group of dignitaries safely down the river. The group included BLM director Jim Caswell, our own state director Gene Terland, and Dillon Field Manager Tim Bozorth as well as representatives from a broad perspective of wilderness and land conservation organizations, local and state governments, the Forest Service, and a reporter from the Dillon Tribune.

In 1984 the weather for the trip was described as "cooperating" but the river experience was evidently wild.

"By the week of the dedication, the Madison was running at 5800 cfs...the Kitchen Sink was passed up by the main party as being too dangerous...While the raft was being soloed through the big rapids...one flipped over and gave [guide] Andy Lundstrom an unexpected bath."

In 2008 the weather was more than cooperative and so was the water. As we began to count down the days leading up to the Anniversary we watched the river drop - 5000, 4800, 3600, 3100 cubic feet per second. Although 3,100 cfs wasn't ideal, it certainly was safe to run.

This would be Montana Whitewater's first trip on the Bear Trap this year. They agreed to run the trip provided all passengers walk around the notorious "Kitchen Sink" rapid. While I watched the experienced guides solo the rapids, using all of their might to stay upright, I couldn't help but think once again about the similarities between the two trips.

The group met at the Trail Creek Recreation Area in the upper Bear Trap Canyon. This site was constructed in partnership with PPL Montana, the owner of the dam and power generating facility upstream of the wilderness

“A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and community of life are untrammelled by man, where man himself is a visitor who does not remain.”



Susan James

A river outfitter navigates through the notorious “Kitchen Sink” rapid on the Madison River. Because the water was so high and fast, his passengers hiked around it.

boundary. Here we had a nice breakfast and philosophized about the last 25 years of wilderness and where the next 25 years may take us. Then it was onto the river.

After suiting up in lifejackets, helmets and river gear, the guides gave us a safety spiel that helped to raise the excitement level for what lay ahead. While we waited for our guides to maneuver the raft beneath the low hanging foot bridge, we shared stories about our past rafting experiences. This was the first time I can recall having run the river as a passenger, and I have to admit that this fact made me a bit nervous. As always the canyon was beautiful; eagles watched us above Whitehorse rapid, and kingfishers and pelicans flew all around us. The winds were unusually calm and we saw few other people. As we floated along

we discussed the challenges of managing wilderness and our predecessors’ foresight. I heard many people remark about how much they loved their jobs.

The rapids were exciting, but without the threat of rowing the Kitchen Sink my adrenalin was somewhat subdued. Whitehorse rapid went off without a hitch although we all got wet. At Kitchen Sink, we watched from the bank as the guides entertained all of us with exciting runs. Although the decision to walk around Kitchen Sink was unpopular with some, most agreed that it was best left to the professionals. And the namesake Green Wave rapid was in full color – one group had a closer look than they may have liked.

We lunched at Bear Trap Creek where a miner’s cabin once stood. After lunch, seasoned Bear Trap

veteran “Bullet Bob,” one of our guides, entertained us with stories about his experience guiding the dedication float 25 years ago.

As the day came to a close and we drifted toward the Warm Springs boat launch, the feel of the canyon began to change. The quiet of the canyon was replaced with the sound and site of excited floaters blowing up inflatable crafts of all shapes and sizes weighted down with people and coolers embarking on a much different kind of adventure. Once again I had to thank the foresight of our predecessors for having preserved such a small and meaningful place. Because of them, we are still able to experience BLM’s first wilderness as it had been experienced 25 years ago.

Collar Gulch Creek – Just Below the Surface

Craig Flentie, Lewistown FO

COLLAR GULCH CREEK is a short, clear, cold mountain stream that flows between steep mountain slopes and wind-swept grassy ridges in the Judith Mountains, about a dozen miles north east of Lewistown, Mont.

It ripples its way through about two miles of public land managed by the BLM before it goes subsurface in the course-rock valley bottom.

In many stretches, a person can jump across Collar Gulch Creek or walk through it with several steps and not get wet much above the ankle. Most consider it small in size.

However, in recent years Collar Gulch Creek has become the focal point of a cooperative effort between the BLM and Montana Fish, Wildlife and Parks (MFWP) to benefit a rare fisheries gem that inhabits this relatively short piece of water.

A genetically pure population of westslope cutthroat trout (an extreme rarity on BLM-managed land in central Montana, and increasingly rare across the Northwest) inhabits this two-mile stretch of Collar Gulch Creek. These trout were once common across the American West, but due to several factors (primarily habitat changes and hybridizing) the remaining pure strains are now largely relegated to a few isolated headwaters.

The Collar Gulch Creek colony is the easternmost population of westslope cutthroat trout documented in the nation. The westslope cutthroat is a state species of special concern and the subject of continual discussions about its potential for listing under the Endangered Species Act (all of which tends to emphasize the uniqueness of this isolated population).

Needless to say, the presence of these westslope cutthroat trout has elevated Collar Gulch Creek's stature far beyond its size.

Because of the sensitive nature of the westslope cutthroat and the habitat it requires, the BLM and MFWP are taking

measures to ensure the continued existence of both in Collar Gulch Creek.

Since 1994, the BLM has managed this two-mile segment of Collar Gulch Creek and 1,618 acres of public land surrounding it as an area of critical environmental concern (ACEC). An ACEC is a public land area that requires special management attention to protect specific resource values; in this case, the westslope cutthroat trout and its habitat.

The ACEC designation closed these public land acres to motorized vehicles and requires that any management activity be compatible with protecting the cutthroat habitat. The designation has certainly helped manage the area in a manner that protects this unique population of westslope cutthroat trout.

However, the Collar Gulch cutthroats are not exactly secure and their future is complicated by a man-made structure that's more than 125 years old.

OVER A DOZEN DECADES AGO

For several years in the early 1880s, the Collar Mine, which was located near the creek in the canyon bottom, filled Collar Gulch with miners, equipment, ore, commerce, activity and noise common to the industry of the day.

A year or so into the promising operation, miners built a log crib dam across Collar Gulch Creek to divert water to a nearby 20-stamp mill where the mined ore was crushed. About 15 feet long, five feet wide, six feet high, the dam is constructed of notched logs similar to a small, rectangular log cabin with the



A surviving wall from the old Collar Mine stamp mill of the early 1880s.

interior filled with rocks and other fill material.

For a short time, the Collar Mine was quite a going concern in central Montana. It was a contributing factor in the development of other historical notables of the area such as the Carroll Trail and Fort Maginnis.

However, the mine was short-lived; the vein soon played out and the promise of riches fell drastically short. In 1885, the mine and its associated equipment were abruptly sold via a sheriff's auction.

With closure of the mining operation, Collar Gulch fell silent of man-made noise; filled again only by the natural sounds of flowing water, wind rushing down the canyon, and the wild things that live there.

Time and weather have taken a toll on the mill and other remaining structures; 123 years later, portions of several walls and the foundation are about all that remain.

The condition of crib dam is another matter. While time, weather and water have all taken their best shots, it still stands today mostly intact in what was Collar Gulch Creek's primary channel. However, as most streams will do with time, Collar Gulch Creek is cutting its way around the old dam and slowly creating a large head cut that's creeping upstream.

The crib dam and the building remains are important cultural and historical reminders of that era in central Montana's development. However, a flood event of even moderate proportions could blow out the old dam; greatly increase the sediment load downstream; and destroy a significant portion of the remaining westslope cutthroat population and habitat. In addition, the crib dam and the growing head cut around it limit the ability of fish to move upstream.

Another challenge to the Collar Gulch cutthroats is that the creek lacks several important structural characteristics. There are few deep pools which allow fish to grow to a larger size, and the creek generally lacks large overhanging cover to protect fish from predators and increase the number of fish surviving from one year to the next.

MANAGEMENT CHALLENGE

Public resource managers are often challenged with conflicting issues and values such as this: the histor-



Will Sheftall measures and gathers general health data on a Collar Gulch Creek westslope cutthroat trout.

ical importance of the crib dam vs. the wildlife importance of this population of westslope cutthroat trout. Finding all inclusive solutions--and the money to fund them--often requires partnerships among resource managing agencies and the private sector.

Securing and improving the westslope cutthroat trout habitat in Collar Gulch Creek is a good example of such a partnership.

In 2004, the BLM and MFWP began joint studies to refine the information at hand concerning the Collar Gulch cutthroats.

Over the next 24 months, Joe Platz, a BLM fisheries biologist who was stationed in Miles City; Fred Roberts a BLM wildlife biologist in Lewistown; and Anne Tews, a fisheries biologist with MFWP in Lewistown, made numerous visits to Collar Gulch Creek. They documented and monitored the condition of the old crib dam and head cut, and conducted fish population studies.

Their findings supported their suspicions. They found that the Collar Gulch cutthroats were at best hanging on, and that a large portion of the existing cutthroat population consisted of small fish.

THE REMEDY

Platz, Tews and Roberts began formulating ideas for solving the issues facing this isolated population of westslope cutthroat trout and involved other agency managers and staffers at the onset of their discussions.

The BLM felt that installing wooden stream structures (logs roughly 12 inches in diameter and

long enough to extend across the creek) at select locations in this stretch of Collar Gulch Creek would be an inexpensive, yet effective first step toward increasing the number and depth of pools.

The biologists also roughed out a somewhat more exotic idea. They felt re-channeling approximately 300 feet of the creek around the old crib dam would help prevent a potentially catastrophic blowout, stop additional head cutting, and would certainly improve the odds of keeping this cutthroat population stable. Re-channeling would also help ensure the stability of the historical crib dam.

There was room in the canyon bottom to parallel the original channel with a new water-route about 30-40 feet to the west, and the more the biologists refined their re-channeling concept, the more feasible it appeared.

Agency managers greeted the re-channeling idea with unanimous, but measured enthusiasm, pending more detailed analysis. In March 2006, the BLM completed an environmental assessment analyzing the impacts of constructing such a bypass.

The assessment found that with the exception of felling approximately 40 Douglas-fir trees to clear a path for excavating a new channel, there would be no detrimental impacts as a result of the effort. To mitigate the impact of cutting these trees, the assessment recommended using all of the fallen Douglas-fir to create wooden stream structures; placing them as overhanging cover along the new channel; installing them in the stream bank to increase stability; or spreading them as ground cover across the potential worksite.

STRUCTURES, ROCK WALLS AND A BYPASS

In 2006 and 2007, the BLM installed nearly 30 wooden stream structures in this two-mile stretch of Collar Gulch Creek. Each one required placing two or three sections of Douglas-fir across the creek in strategic locations. Installation required chainsaws, a winch, block and tackle and the most basic of construction equipment: strong backs. The structures paid immediate dividends by increasing the number and depth of pools available for the westslope cutthroats.

Then in 2007, the BLM and MFWP successfully secured the funds necessary to award a contract for the design and construction work on the 300-foot creek diversion around the crib dam.

Confluence Consulting, Inc. out of Bozeman, Mont., was awarded the contract for the project design and oversight assistance on the actual construction work. Confluence offers a variety of water resource planning and restoration services throughout the Northwest and has completed a number of water and habitat improvement projects in Montana, Wyoming and Idaho.

Mike Sanctuary, a stream restoration specialist with Confluence Consulting, Inc., was assigned the task of completing the design for the new diversion channel, which would include constructing six deep pools along the new 300-foot water route. Each pool would provide valuable habitat (similar to cutthroat condominiums) and would serve to slow the water velocity during runoff events. Mike would also be onsite during the contract to direct the work and to help construct the rock walls that would form the upstream portion of each pool.

The excavation portion of the construction work was subcontracted to Bridgeford Industries/Kodiak Construction in Lewistown, Mont. In September



Mike Sanctuary of Confluence Consulting, Inc., and Mike Munsford of Kodiak Construction complete the rock wall portion of what will become a deeper pool in the newly diverted Collar Gulch Creek channel.

2007, Clint Huck and Mike Munsford, equipment operators with Kodiak Construction, walked a small backhoe and a skid steer down the steep slopes sheltering Collar Gulch Creek and into the worksite. Kodiak left the equipment in place through the duration of the project to avoid disturbing the creek with daily crossings.

Earthen plugs (about three feet of undisturbed soil between the original channel and the upstream and downstream ends of the newly excavated channel) were left in place to prevent water from running



Joe Platz's left foot rests on the top of a rock wall at the upstream end of a deep pool in the new diversion channel.

into the work area. This allowed the equipment operators to work in dry conditions.

It only took about four days for Huck and Munsford to excavate the new channel diversion in the thinly-soiled, rocky canyon bottom. On average, the new bypass is six feet wide by two feet deep and 300 feet long.

According to Mike Sanctuary, "both equipment operators were extremely capable and the excavation work could not have gone better."

Perhaps the most time-intensive portion of this habitat improvement project was constructing the six pools. Designed to provide deeper water, the pools will allow the Collar Gulch cutthroats to live longer and grow to a larger size.

Each pool was built by first excavating a large rectangular divot (about 12 feet long, seven feet wide and 3-foot deep) along the new water course. The next step was to construct a slightly curved rock wall 10-12 feet long at the upstream end of each depression. The top of each wall was constructed to a grade that will allow water to flow over the top and into the excavated divot.

Mike Sanctuary selected specific rocks for these walls. Each rock was placed by hand to ensure the walls would appropriately channel water at normal and peak flows. Natural fill material (gravel, small rock and dirt) was packed among the rocks in each wall to seal them and ensure that water would run over the wall and into the pool rather than seeping

downstream through the wall.

The new channel, rock walls and pools were designed to blend naturally with the other geologic features of the canyon. However, with no water in or around them, they appeared somewhat like abstract works of art in the canyon bottom.

Flowing water would be the litmus test for the entire project.

SHOCK 'EM ALL

The day before diverting Collar Gulch Creek into the newly excavated route, Anne Tews and Toby Tabor from MFWP, and Joe Platz, A. J. Donnell, and Will Sheftall with BLM, set about shocking, collecting, measuring and moving the cutthroats from the section of the Collar Gulch Creek that would soon be



Toby Tabor, Anne Tews, A.J. Donnell and Joe Platz form a sh line in Collar Gulch Creek.



Joe Platz bu stunned Collar Gulch

After carefully measuring the conductivity of the water and setting the backpack electrofishing unit to deliver a mild electronic shock to temporarily stun the fish, the crew set about their task. The shock crew consisted of one person operating the electrofishing unit and sweeping the probe from side to side through the water; two people with dip nets to collect

the stunned fish; and a fourth person bringing up the rear with a bucket of water to hold the captured fish, where they regained their composure.

With scattered rocks ranging in size from a baseball to a microwave in the creek bed and a variety of overhangs, the Collar Gulch cutthroats had plenty of places to escape the mild electric shock that would temporarily render them immobile. After a fish was shocked, it usually floated to the surface, but only for a five-count or so before it gathered its senses enough to dart back beyond the reach of the dip nets.

After a stunned fish was netted and placed in the hold bucket, it took less than a minute for it to fully recover from the predictably unsettling experience.

The shock crew made four sweeps through the original channel to be confident they had captured the vast majority of the cutthroats present. On their first trip they captured 38 westslope cutthroats; 21 on their second trip; 12 on their third trip; and 10 on their fourth sweep through the creek.

The fish ranged from 2-7 inches in size and all appeared to be in good condition. After being measured they were released back into the creek, either above or below the new diversion channel. Containment nets reinforced with straw bales across the creek above and below the new diversion prevented fish from moving back into the water that had just been shocked.

About six days into the construction project, the new diversion channel was finished, the pools had been constructed and the Collar Gulch westslope cutthroat trout had been moved from the section of creek to be dewatered.

The next step was to open the new channel to water.

LET THE WATER FLOW

The individual components of this project looked great. The engineering and design were solid, the construction work went by the text book, and shocking and relocating the westslope cutthroat trout had been successful. Still, everyone involved with this project felt a little anxious when it was time to remove the upstream plug and let this section of Collar Gulch Creek run down its new course. Like many endeavors in life, work and habitat improvement projects, all the individual components have to work well together to be successful.

As the small backhoe clawed out the upstream plug, Collar Gulch Creek quickly ran down about 60 feet of its new channel, over the rock wall and into the first pool. When that pool had filled, the water again rushed down the next segment of the new channel, over the rock wall, and into the second pool. This process repeated itself until all six pools and the new channel were flowing water from top to bottom, where it re-entered the original creek channel.

In a matter of minutes, the presence of water converted the new channel, the rock walls and pools from somewhat abstract features to a natural appearing segment of Collar Gulch Creek.

The research, ideas, analysis, design and the newly excavated bypass were working perfectly together and Collar Gulch Creek was flowing comfortably down its new route. The short-term turbidity created by water rushing thorough a new channel soon settled out or was caught by straw bales that were staked into position where the diversion re-entered the original channel.

After pausing for a brief moment to enjoy the efficiency of their work, it was time for Mike Sanctuary and the contractors to start closing up this project.

The disturbed area was broadcast seeded, mulched and hand planted with water-birch seedlings. The containment nets and straw bales, at the upper and lower end of the construction project, were removed. After a couple of trips over the worksite to dress it up, the contractors, equipment, and biologists scrambled their way up and out of Collar Gulch; confident that the Collar Gulch cutthroat trout would soon be exploring their new habitats.

With the closure of this habitat improvement project, Collar Gulch fell silent of man-made noise; filled once again only by the natural sounds of flowing water, wind rushing down the canyon, and the wild things that live there.

However, this time as the people and equipment pulled out of Collar Gulch Creek they left behind a more secure habitat for its most sensitive of wild things, the westslope cutthroat trout.

Photos by Craig Flentie

NEW FACILITIES ENHANCE CAPABILITIES

Greg Bergum, MSO

Several Montana/Dakotas BLM offices have moved to new locations in the last few years, allowing for greater energy efficiencies and a better ability to serve the public.

In 1999 when their previous leases expired, the Billings Field Office and Montana State Office moved to the same building on Southgate Drive in Billings. Among other benefits, being at the same location allows the two offices to share vehicles and warehouse space.

Since then, additional new buildings have been constructed or existing buildings remodeled to accommodate changing needs across the three states.

In Dickinson, the BLM North Dakota Field Office now shares an office with the Forest Service as part of the Service First initiative. In Miles City, a new facility better accommodates the increased staffing and responsibilities associated with the expanding oil and gas industry of eastern Montana.

When leases expired in Havre, Lewistown and Glasgow, those offices moved to new or remodeled facilities better suited to their needs. The new Jordan Fire Station replaces several old mobile homes that had been used for years as the office and quarters for

the fire staff. The new facilities are much better suited to accommodate wildland firefighting responsibilities in eastern Montana.

With the exception of Miles City and Jordan, these new facilities are all leased.

Employees are excited. Laura Federspiel of the Havre Field Sta-

The offices in Glasgow and Havre were constructed by private entities. Central Zone Civil Engineer Mike Montgomery handled the day-to-day construction inspection and coordinated the design layout with the leasing staff in the National Operations Center. Laura Federspiel and Jody Miller

were the local contacts for the leases and acted as the construction liaisons for the Havre and Glasgow facilities respectively. Supervisory Property Management Specialist Jack Conner of the MSO coordinated the leases with the National Operations Center.

The Miles City Field Of-

fice and Jordan Fire Station were constructed under a BLM contract. MSO Engineer Lance Brady and Central Zone Engineer Carl Patten provided the construction oversight for the Jordan facility. Rollie Welty and Wendy Warren, Eastern Zone engineers, provided the construction oversight for the Miles City project.

The next locations targeted for new offices are the South Dakota Field Office in Belle Fourche, and the Billings Fire Station, which will be just east of the existing tanker base and dispatch center at Logan Airport in Billings.



BLM photo

The Havre Field Station is among Montana/Dakotas BLM's newest facilities. The staff moved into this recently remodeled building this spring when the lease at their previous location expired.

tion says their new office allows them to hold evening meetings while keeping the rest of the office secure. They also enjoy having an extra project space and a special area designated for seasonal employees.

Glasgow Field Station Manager Casey Buechler is also very pleased with Glasgow's new space. "WOW! This facility is state-of-the-art, and we are truly fortunate to have such an outstanding workplace," he said. "We have materials stored in several locations and field offices, and it will be great to have everything in one spot."

Bringing Back the Buffaloberries

Craig Flentie, Lewistown FO

The BLM Lewistown Field Office (LFO) has undertaken a unique field project designed to reverse a long-term decline in the number of silver buffaloberry shrubs gracing the rangelands of north central Montana.

They've not disappeared, but over the past 30 years buffaloberry have become considerably more difficult to find across our upland ecosystems and in the Missouri River Breaks. Although they can still be found in the riparian habitats associated with many of the perennial streams in the central Montana prairie, the shrubs are not doing well in the upland habitats.

The reasons for this decline are not totally understood, but the downturn is definitely related to a lack of reproduction over an extended time period. The lack of seedling establishment and survival over the last half a century is likely the result of a combination of changing weather patterns (including extreme differences between high and low temperatures and amounts of precipitation), changes in soil moisture, and periods of heavy browsing by wild and domestic animals.

The silver buffaloberry shrub is a deciduous, thorny, thicket-forming native shrub that's drought and winter hardy. Its height ranges from 3-12 feet and it's most commonly found on northwest to easterly facing slopes. Adult plants can live as long as 30 years and produce numerous red berries yearly that can be used to make jams.

However, the plant is probably most notable for its numerous contributions as a component of a productive wildlife habitat.

Young buffaloberry shrubs provide important browse and cover for many wildlife species (white-tailed deer, mule deer, elk, passerine birds and small mammals) and the berries are an excellent winter food source for sharp-tailed grouse and many other birds. Mature plants provide important nesting cover for numerous birds and can provide thermal cover for big game and livestock. The plants are also good soil and bank stabilizers. They can grow into dense, thorny patches which discourage large animals (wild and domestic) from walking on fragile slopes.

Sharp-tailed grouse rely heavily on various brush and tree species that provide berries and buds for forage and woody cover for protection from weather and predation. In a large part of eastern Montana and western North Dakota, silver buffaloberry has been documented as an important component of quality sharp-tailed grouse habitat.

Sharp-tailed grouse populations are thought to be cyclic and their numbers have been relatively low for several years now. The BLM hopes a successful buffaloberry reintroduction program will help reverse that trend.

Under the direction of Dana Harty, wildlife technician, and Fred Roberts, wildlife biologist, the LFO is pursuing a buffaloberry planting program designed to give the plant a jumpstart toward reestablishing healthy stands on our public lands across the central Montana landscape.

Beginning about 18 months ago, Dana (along with several other LFO staffers) started gathering buffaloberry seeds from several different sources. Some of these sources were on private property (with permission from interested landowners) and several were on public land. Some of the seeds were broadcast seeded on public lands following wildland fires last summer. These seeded fire sites will be monitored to determine if this casual approach is an adequate means of starting new buffaloberry shrubs.

However, the majority of the seeds collected were sent to the Special K Ranch in Columbus, Mont., for nurturing. The Special K Ranch is a working residential facility for developmentally disabled adults that provides opportunities for residents to learn vocational skills in horticulture, gardening and general farm maintenance. At the Special K, the seeds were



Craig Flentie

Fred Roberts and Dana Harty are steering the BLM's silver buffaloberry reintroduction project in central Montana.



Crysta Robertson

Dana Harty, Jon Edwards and Fred Roberts (from the BLM's Lewistown Field Office) and Monte Stell (from the BLM's Montana State Office) prepare a silver buffaloberry reintroduction site.

planted, cared for and raised into seedlings ready for replanting in the uplands across eastern Montana.

This past spring, a number of BLM staffers combined their regular work duties with efforts to prepare potential buffaloberry reintroduction plots. Throughout this project, approximately 35 BLM staffers worked with some aspect of the reintroduction effort.

There was nothing casual about selecting the potential reintroduction plots. Close attention was paid to slope, aspect, soil types, soil ph ratings, and soil moisture. Also, sites with the skeletal remains of dead buffaloberry shrubs were considered prime reintroduction sites because the shrubs had previously lived in that precise location.

Then in June, Dana Harty, Fred Roberts, and a dozen or so staffers from the LFO and the Montana

State Office, ventured into the field north of Winnett between rain storms to plant the buffaloberry seedlings in 40 specific introduction plots.

Each plot consists of five buffaloberry seedlings, enclosed by two 16-foot hog panels which are held in a circular or oval pattern with several steel t-posts. Each plot was located in a depression which will protect it from the prairie winds and hopefully collect drifting snow to provide additional protection and spring moisture for the young plants.

Of the 200 buffaloberry shrubs planted, 100 were two-year old plants and 100 were year old seedlings. The success rate of each age group will shed additional light on the methodology for future plantings. These reintroduction plots will be monitored for three to five years to determine their success rate. If the planting project is successful, the panels will be moved to new reintroduction plots and used again to help protect other buffaloberry seedlings until they become established.

In the interim, Dana and various LFO staffers will continue gathering buffaloberry seeds. Some will be broadcast seeded on wildland fire sites, but most will be sent to the Special K Ranch for nurturing. Continued monitoring of both the broadcast seeded fire sites and the carefully selected reintroduction plots will determine the most successful method for BLM to use in future buffaloberry reintroductions.

Hopefully, with a little help from the BLM, the silver buffaloberry will once again find its place among the currents, snowberry, chokecherry, sumac and other native shrubs that add to the diversity and value of our public lands.

Stan Benes Installed as Lewistown Field Manager

Montana State Director Gene Terland congratulates Stan Benes following Stan's recent installation as the BLM's Lewistown Field Manager. Stan's wife, Pat, assisted with the ceremony.

During the ceremony, both Gene and Stan spoke of the importance of customer service, community support and common sense at all levels of the BLM. Stan also mentioned the privilege of working for the public and with our nation's natural resources. Stan and Pat arrived in Lewistown in mid-April.

A good cross section of local residents attended Stan's installation. They were treated to light refreshments, compliments of the Lewistown FO's Wellness Committee.



Craig Flentie

Billings Curation Center – 2008

Presently Preserving the Past

Ann Boucher, MSO

There are treasures in the Billings Curation Center, clues to our collective past. By themselves, they're just pieces, but together, they tell a story – a story that must be pieced together through painstaking study and research.

The BCC houses a wealth of cultural materials that were collected from public lands, primarily in Montana and the Dakotas. It also holds photos, drawings, and other historical documents. The oldest items stored at the BCC date to about 12,000 B.P. (before present).

Many of these artifacts arrive at the BCC neatly stashed in labeled boxes, but the individual items are often not catalogued in a way that allows for research and reference.

Recognizing an opportunity to accomplish BLM goals while providing hands-on work experience, Museum Curator David K. Wade sought out volunteer interns who are pursuing degrees in cultural sciences. Through carefully placed job announcements, Wade selected four very qualified volunteers to work in the Curation Center this summer.

JEANNE ZEECK – COLORADO STATE UNIVERSITY, FORT COLLINS



Jeanne Zeck is a second year graduate student at Colorado State University in Fort Collins, focusing on archive management and museum studies.

Her project at the BCC this summer is archiving the Thomas H. Lewis collection, an assortment of notes, drawings, and files assembled by a professor of psychiatry and neurology from 1965-2005. While serving in the Navy, Lewis was sent to Pine Ridge,

The Billings Curation Center houses cultural artifacts, which include anything touched or modified by humans. Paleontological items, such as dinosaur and plant fossils, are kept at the Museum of the Rockies in Bozeman.

S.D., to treat members of the Lakota-Sioux Tribe. While there, he furthered his theory that the “medicine men” of the tribe actually suffered from paranoid schizophrenia.

“I think the most interesting part of this collection is his Lakota-Sioux research,” Zeck says. “He left medical files and oral histories that really give a different perspective.”

After he retired, Lewis returned to his home state of Montana where he pursued his interest in Native American rock art. He located numerous rock art sites and even traced some of them onto large pieces of plastic.

Lewis passed away in 2007, leaving his numerous boxes of research files stacked in his small cabin in Boyd, Mont. His sons donated much of his collection to Georgetown University and the Navy, but many items of archeological interest came to the BCC. Zeck is organizing the slides, transcripts, medical files, notes, and drawings so that an archeologist can locate the various sites and properly catalog them.

Zeck says the project fits well with her goal of becoming a museum curator. She is a native of Billings and may volunteer again during her winter break.

APRIL FARMER – OHIO



April Farmer sits at a table, a box of artifacts at her left and a stack of catalog cards in front of her. She's cataloging items that were collected from the Twitchell Site in McCone County, Mont., in 2005.

First she identifies what each artifact is—a piece of bone, an arrowhead, ceramics—and enters that information on a museum card.

“This one is easy,” she says. “Whoever found these things was really good with drawings and descriptions. Some of the other ones, I've had to just figure out myself.”

The card also notes where the item was found, where it is now stored, and a number unique to that artifact. This information will be added to an online database so that it's available to other researchers.

Cataloging is no small task. There are about six boxes of artifacts from Twitchell Site. Another one of her summer projects, the Stark Site in Musselshell County, had 27 boxes of items to examine and catalog.

April has a bachelor's degree in anthropology from Kenyon College in Ohio, but her real passion is archeology. She volunteered for a weeklong dig in Ohio a couple of years ago, but says she prefers the cataloging to the actual digging. She would like to pursue a master's degree in archeology.

MICHAEL MATHEWS – WESTERN KENTUCKY UNIVERSITY, BOWLING GREEN



Michael Mathews is a graduate student in folklore and anthropology at Western Kentucky University in Bowling Green. He applied for the summer position to fulfill an internship requirement.

Like Farmer, Mathews has spent his summer cataloguing and organizing artifacts gathered from various sites. Sorting through items found at the Keaster Site near Zortman, Mont., he identified bison bones and lithics, which are arrowheads and other stone tools fashioned and used by humans. Pouring out the contents of one envelope, he could tell that bone fragments had been cracked open and burned, indicating that the bone marrow had been extracted.

Cataloguing artifacts is a methodical process. The individual pieces are in small envelopes, numbered by the archeologist who collected them. Mathews' job is to identify, count, and re-number each piece according to the BCC's numbering system, then place each piece into a labeled zip-lock bag, and back into the box. Details about each item, including its location when found, are also noted on a catalog card. Information from the card is later entered into an online database

where it is accessible to other researchers.

In addition to the Keaster Site, Mathews also catalogued and organized artifacts from an unnamed site near Miles City, and for the Museum of the Rockies.

SHANE MCCARTEN – MONTANA STATE UNIVERSITY-BILLINGS



This is Shane McCarten's third summer as a volunteer in the Billings Curation Center.

His current project is creating a website with pictures and detailed descriptions of projectile points used throughout history. He has already gathered about 17 points representing different eras, and through partnerships he is pursuing with other agencies, he hopes to get a few more.

Part of his research involves determining each point's approximate age. The oldest point stored in the BCC is the Clovis, which is about 11,000-12,000 years B.P. Points found at the Twitchell Site are estimated to be about 1,000 years B.P. The final step will be photographing the points and creating the website, which will be a valuable tool for researchers.

"I like anything historic," McCarten says. "But my main interest is in the Native Americans of the northern plains."

Pursuing that interest, the Bridger, Mont., native has traveled extensively in the region looking for Native American rock art. He went with Glade Hadden, former Billings Field Office archeologist, to see many known sites, and has even discovered a few on his own.

Shane is a student in environmental studies at MSU-Billings. He plans to pursue a degree in anthropology/archeology at the University of Wyoming in Laramie, with the eventual goal of preserving archeological sites.

A FAIR TRADE

Curator David K. Wade is very pleased with the work done by interns this summer.

"They've done an outstanding job," he said. "They're getting more done than I expected. This is an exceptional group of volunteers."

And the interns have made a huge contribution toward making the BCC's artifacts more accessible. While the BCC isn't a museum with exhibits, one of its primary functions is to loan out items to enhance the exhibits of other facilities. Artifacts from the BCC have been displayed in county historical collections as well as national museums. Some items are not significant from a research standpoint, but they can be handled and are useful for demonstration and comparison purposes. Having more of the collection catalogued and accessible will greatly enhance its usability.

Credit goes to Wade for recognizing and acting on a win-win opportunity. By drawing in highly qualified volunteers, he maximized a limited budget while providing students with some outstanding hands on experience.

Credit also goes to the Montana State Office for its active role in meeting its legal obligation to care for cultural material found on public lands. The roughly 10,000 pieces that were added to the BCC's database this summer will contribute to a greater understanding of the rich cultural history of Montana and the Dakotas.

Photos by Ann Boucher

Wild Horses - Challenging, Rewarding and...Fun!

Christine Tincher, MSO

A few more families are discovering the joys of wild horses and burros this summer.

In Kalispell in late June, 16 wild horses and 10 burros found good homes, and in early August, 14 more horses and six burros were placed during an adoption held in Billings.

Adopting a wild horse or a burro can be a rewarding experience. Ask past adopters why they chose to take home a wild horse or burro and you are bound to get a variety of responses. Some say it is for the romance, challenge, or opportunity to care for a small part of their western heritage. For many the answer is simply because they found it to be the best relationship they've had with a horse.

A few of these past adopters go out of their way to share their experiences and success stories. Often they will ask Nancy Bjelland, BLM adoption coordinator, if they can bring their wild horse back to an adoption event to show people how well the wild horse does with a little TLC.

But adopting is also a big responsibility. Individuals are agreeing to be caretakers of an animal that has had very little interaction with people. To help adopters be better prepared, the BLM offers horse training demonstrations whenever possible.

Attending the Montana adoptions, well known horse trainer Lesley Neuman offers both novice and experienced horsemen her tried and true gentling techniques. As she steps in the corral with a wild horse for the first time, Neuman shares insights from her published works, *The First Touch - Gentling Your Mustang*.



Trainer Lesley Neuman demonstrates gentling techniques at the wild horse and burro adoption in Kalispell.



A past adopter brought her horse to the Kalispell event to show potential adopters how well a wild horse can do with a little time and training.

Recognizing that each horse has its own traits and personality, Neuman sets about getting acquainted with the animal through a series of calm, practiced motions. She patiently demonstrates techniques to the audience that “build trust, not fear” in the horse.

The response from the animal helps determine the next set of steps. Neuman says that when she gets in the pen with a horse, that's all there is, just her and the horse - and the horse tells her what to do. She continually watches for cues from the animal to determine when it is feeling a little stressed, or is gaining in curiosity and is more comfortable with the interaction. In the end, the audience is often in awe, as Neuman makes direct contact with her hand and the animal submits to having the halter removed.

Now residing in Oregon, Neuman has been working with wild horses for about 13 years and has conducted gentling demonstrations for the BLM for the past 10 years.

“A mustang is what I call a ‘real horse,’” says Neuman. “It has to be, or it doesn't survive. If a wild horse has bad feet, or if it doesn't know how to be social, it won't make it in the wild. Once they have learned to trust humans, wild horses make wonderfully intelligent, sensitive, and devoted mounts that can do anything domestic horses can, plus they have built-in savvy and natural good manners.”

The BLM holds wild horse and burro adoptions as a means of finding homes for displaced animals. A land management agency, the BLM follows a multiple-use mandate to care for public lands and its resources. With the passage of the wild free-roaming

Christine Tincher

Christine Tincher

horses and burros act in 1971, the BLM was able to embrace the wild horse and burro as a natural resource. The BLM gathers wild horses and burros from the western range in order to maintain an ecological balance between wild horses and burros, native wildlife and domestic animals grazing on western public lands. The agency works hard to find homes for displaced animals.

To qualify to adopt, individuals must meet facility requirements and have an approved application. The minimum adoption fee, per animal, is \$125. After caring for the animal for one year, the adopter is eligible to receive title or ownership from the federal government. For an adoption application, or for more information on the requirements, call toll free at 866-4 MUSTANGS. General information is available at BLM's website at www.blm.gov.

Attention BLM Retirees

The BLM Retirees Association meets at 11:30 a.m. on the first Tuesday of even-numbered months at Guadalajara in the Riverboat Casino (444 S. 24th St. West) in Billings. If you would like to receive email or postcard notifications of these meetings, please call Shirley Heffner at 259-1202, Cynthia Embretson at 252-1367, or send your address to Cynthia at ceatsage@wtp.net.

The Public Lands Foundation offers new retirees a free one-year membership. Please contact David Mari, Montana PLF Representative, at (406) 538-7121, or email dmari@earthlink.net. If you send an email, please note "PLF" on the subject line.

Please also help us keep our Quarterly Steward mailing list current by contacting Ann Boucher of the External Affairs staff at (406) 896-5011 or aboucher@blm.gov with address changes.

Retired since June 1, 2008:

Louis Hagener - 30 years
Rangeland Management Specialist, Havre FS

Dex Hight - 39 years
Phys. Scientist (HazMat Mgmt.), Miles City FO

Marilyn Krause - 30 years
Public Affairs Specialist - Butte FO

Hal Owen - 35 years
Geologist, Montana State Office

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