



Photo by Dennis Lingohr

BLM COMMEMORATES THE HOMESTEAD ACT

Mary Apple, Montana State Office, with information compiled by the National Park Service, BLM, and Wikipedia

How many of you live where you do because of the 1862 Homestead Act and its successor laws? Perhaps some of you live on land homesteaded by a family member or have a homesteader in your family tree. Many of you rural dwellers may live on a piece of land that was originally patented by a homesteader and was subsequently sold or divided. If you live by a river or creek, it's more than likely your property was once part of a homestead. Don't feel like you're part of a select group though; 93,000,000 people alive today (or rather in 2007 when the stats were compiled) are descendants of homesteaders.

The year 2012 is the 150th anniversary of the Homestead Act, an occasion we're celebrating in the BLM. Why? The BLM's precursor, the General Land Office (which has its 200th anniversary in 2012), was the administrator of homesteads, and many of those records now reside with the BLM. Some of the BLM-managed public lands were once homesteads that were abandoned or returned to the government. So we as an agency have a homesteading legacy too.

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Three Homestead Acts

The Homestead Act of 1862 has been called one of the most important pieces of legislation in the history of the United States. Signed into law in 1862 by Abraham Lincoln after the secession of southern states, this act turned over vast amounts of the public domain to private citizens. Under the act, homesteaders claimed and settled over 270 million acres, or 10 percent of the area of the United States.

Because much of the prime low-lying alluvial land along rivers had already been homesteaded by the turn of the twentieth century, a major update called the Enlarged Homestead Act was passed in 1909. It targeted land suitable for dryland farming, increasing the number of acres to 320. In 1916, the Stock-Raising Homestead Act targeted settlers seeking 640 acres of public land for ranching purposes. The Taylor Grazing Act of 1934 substantially decreased the amount of land available to homesteaders in the West. Because much of the prime land had been homesteaded decades earlier, successful homestead claims dropped sharply after this time.



Photo by Dennis Lingohr

Compiled by Homestead National Monument of America Historian Todd Arrington, April 24, 2007

- 10:** Percentage of U.S. land given away under the Homestead Act.
- 24:** Presidential administrations during which the Homestead Act was in effect (Lincoln to Reagan).
- 30:** Number of states in which homestead lands were located.
- 40:** Percentage of homesteaders that “proved up” on their claims and earned the deed from the federal government.
- 45:** Percentage of Nebraska’s acres distributed under the Homestead Act [Largest percentage of any state].
- 123:** Years the Homestead Act was in effect (1863-1986).
- 160:** Number of acres in a typical homestead claim.
- 4,000,000:** Approximate number of claims made under the Homestead Act.
- 11,000,000:** Acres claimed in 1913, the peak year of homestead claims.
- 93,000,000:** Estimated number of homesteader descendants alive today.
- 270,000,000:** Total number of acres distributed by the Homestead Act.

The Homestead Act remained in effect until it was repealed in 1976 by the Federal Land Management Policy Act, the BLM’s “organic act.” However, FLPMA included provisions for homesteading in Alaska until 1986. Alaska was one of the last places in the country where homesteading remained a viable option into the latter part of the 1900s.

The Homestead Act of 1862 had an immediate and enduring effect

on America and the world that is still felt today. Agriculture, industrialization, immigration, American Indian tribes, and prairie ecosystems-all were somehow impacted and forever changed by the implementation of this revolutionary land law.

Research Your History

Over the course of the Act’s 123-year history, more than two million individual homestead claims were made. Each and every one of these claims generated a written record known as a case file that was kept by the U.S. General Land Office. Today, these case files exist only as paper originals and nearly all are stored in the National Archives in Washington, D.C. The complete collection of case files created under the Homestead Act contains more than 30 million individual pieces of paper. Homestead case files are treasure troves

of historical and genealogical information. Within them can often be found information about a homesteader's date and place of birth, the names of children that lived on the homestead, naturalization information about immigrant homesteaders, notations regarding military service, the types of crops planted on the homestead, the value and kinds of homes and other buildings on the site, and more.

For more information on obtaining homestead records, visit <http://www.nps.gov/home/historyculture/requesting-homestead-records.htm> or www.archives.com.

The BLM's General Land Office (GLO) Records Automation website (<http://www.gloreCORDS.blm.gov/>) provides live access to federal land conveyance records for the public land states,

Montana (151,600 homesteads)
— most of any state; 30,000 more than runner-up North Dakota
Total acreage: 93,155,840
Total homestead acreage: 32,050,480—most of any state by 10 million acres
Total percentage: 34%

North Dakota (118,472 homesteads)
Total acreage: 44,156,160
Total homestead acreage: 17,417,466
Total percentage: 39%—second of all states

South Dakota (97,197 homesteads)
Total acreage: 48,573,440
Total homestead acreage: 15,660,000
Total percentage: 32%



Ignatz Mrizek in the 1930s near Camp Crook, South Dakota.

including image access to more than five million federal land title records issued between 1820 and the present. It also has images related to survey plats and field notes dating back to 1810. Due to the organization of documents in the GLO collection, the site does not currently contain every federal title record issued for the public land states.

Share Your History

To demonstrate the impact of homesteading in Montana and the Dakotas, we're asking you to send in a brief vignette of your homesteading history in these three states (hopefully we don't get one from all 93 million descendants). We'll publish as many of these as we can throughout the year in the Quarterly Steward and/or post them on our webpage. Please email them to aboucher@blm.gov or mail them to Ann Boucher, Bureau of Land Management, 5001 Southgate

Drive, Billings, MT 59101. Electronic copies are much preferred over paper ones. Please note in your submission whether we can publish your name.

Here's my Montana/South Dakota homesteading history to get the ball rolling.

About all I knew about my great-grandfather and mother Ignatz and Marie Mrizek, immigrants from Bohemia, was that they had homesteaded in Harding County, S.D., very near Capitol, Mont. After working for the BLM for several years and learning that some of my family history might reside in the Montana State Office (which has jurisdiction over North and South Dakota), I started my research. Through the information access center (commonly known as the public room), I obtained a copy of my great-grandfather's land patents. From this information I could pinpoint on a map the heretofore unknown to me location of the homestead. I then wrote to the

National Archives and Records Administration for a copy of the case files. After wading through many pages of affidavits, applications, reports, and petitions, I came across a big surprise—my grandfather Earl Newell’s signature. He vouched for my great-grandfather Ignatz on one of the applications. Earl was also married to Ignatz and Marie’s daughter Ann. Earl and Ann eventually moved to Sheridan, Wyo., and lo and behold, I was born (my parents entered the picture at some point). Thank you homesteaders!

From the National Archives case file, I also learned the following: the Mrizek homestead consisted of 320 acres patented under the Enlarged Homestead Act of 1909 and another 320 acres patented under the Stock-Raising Homestead Law of 1916. Ignatz entered the homestead in 1911, moving into the house in 1912. Between 1912 and 1918, when he received the first patent, he planted from 10 to 56 acres a year in corn, oats, barley, and wheat. In 1917, most of the crops failed because of “drouth.” He built a four-room house, two barns, a chicken house, a work shop, a hog pen, granary, hay corrals, outside cellar, two miles of two-wire fencing, and three shallow wells. The improvements totaled \$1,300. He described the land in his homestead entry as “high and rough, cut up with draws, rocky, uneven, very rough.”

Ignatz received the second patent in 1927. The GLO inspector reported that on the original homestead, “He and his wife care for 42 head cattle, 12 horses, 39 hogs and some chickens. . . . Entryman is a naturalized citizen and a successful farmer and stock raiser.” The land was described as “rolling to rough, the soil is a hardpan gumbo.” Ignatz wrote, “I have broken up 65 acres on my original entry, a few acres each year, and have planted crops each year, and have always cut the grain and corn for hay and fodder, and have never made a grain crop that could be considered a successful crop.” His three wells were too shallow to provide any irrigation water, and the land contained no flowing water. Furthermore, “That because of high altitude, short season, lack of rainfall, hot winds, and hard, compact soil, this land is not suitable for grain farming, and is chiefly valuable for grazing and raising forage crops.”

At some point he sold the homestead and moved to Sheridan, but he is buried near Capitol in a very small cemetery.

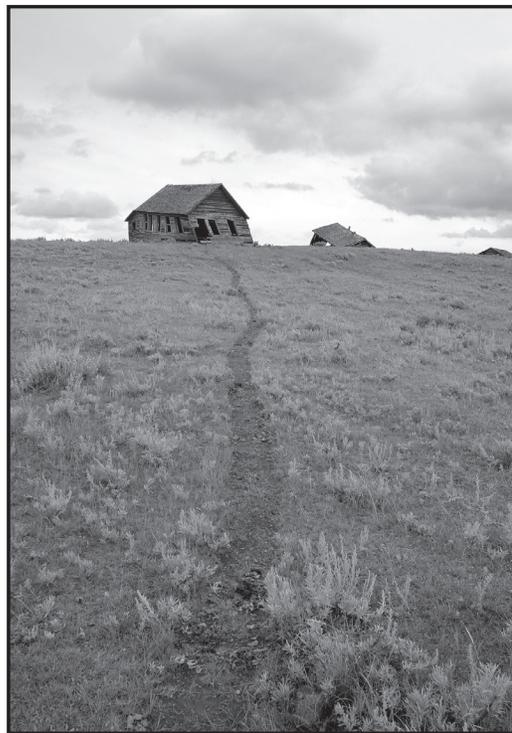


Photo by Dennis Lingohr

For some great stories, both fiction and non-fiction, about the homesteading experience, check out one of these books.

O Pioneers! Willa Cather

Bad Land Jonathon Raban

Letters of a Woman Homesteader Elinore Pruitt Stewart

Little House books by Laura Ingalls Wilder

Giants in the Earth Ole Rolvaag

The Children’s Blizzard David Laskin

When the Meadowlark Sings: The Story of a Montana Family Nedra Sterry

In Open Spaces Russell Rowland

On Sarpy Creek Ira S. Nelson

Land in Her Own Name: Women As Homesteaders in North Dakota H. Elaine Lindgren

900 Miles from Nowhere: Voices from the Homestead Frontier Steven R. Kinsella

The Long Death: The Last Days of the Plains Indians Ralph K. Andrist

Winter Wheat Mildred Walker

BLM Partners with Library to Document Montana Pioneers

*Craig Flentie
Central Montana District*

In preparation for the 150th Anniversary of the 1862 Homestead Act, the BLM, in partnership with the Lewistown Public Library, is gathering and preserving historic documentation of central Montana homesteads.

“We are asking families to bring in historic photos and documents, postcards and letters, so that we can scan them and add them to the Montana Memory Project’s website,” said Archaeologist Zane Fulbright.

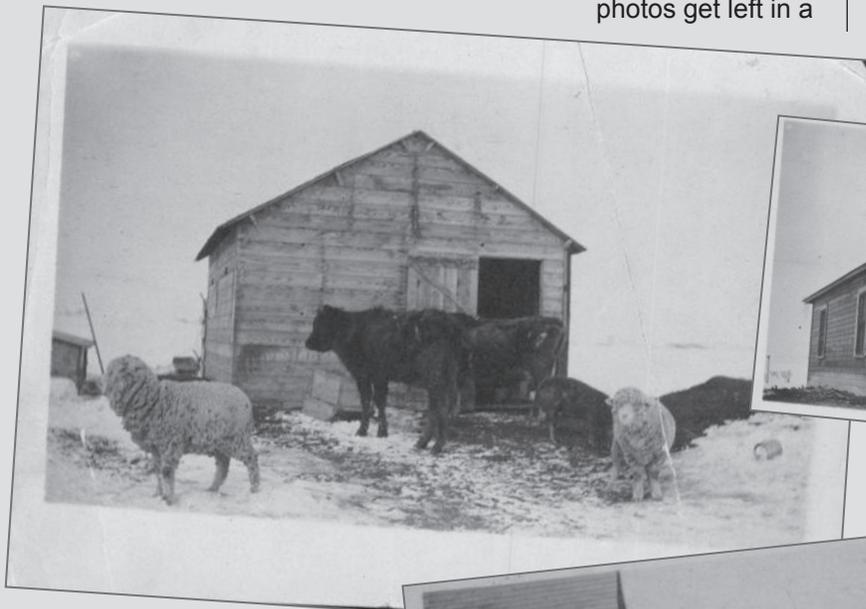
The Montana Memory Project is the Montana Historical Society’s

digital archives and library, and is free and available to the public. Many historic photos documenting life in and around central Montana have already been added to this website, thanks to the efforts of the Lewistown Public Library staff.

May 20, 2012, is the actual anniversary date, and May is also recognized as Historic Preservation Month. We would like to have a good collection of historic records scanned by that time so we can create a public display for the commemoration. Once we scan the images we can also create a digital copy for the families for their own personal use. Too often historic photos get left in a

box in the closet and nobody ever looks at them. Then down the road they either get damaged or people forget who’s in the picture. This is an opportunity to preserve the images and capture the personal stories associated with them.

For more information about the Montana Memory Project please contact Nancy Watts at the Lewistown Public Library, or visit <http://cdm103401.cdmhost.com/>. If you would like to schedule a time to scan your photos or documents please contact Zane Fulbright at the BLM at 538-1923, or zane_fulbright@blm.gov.



These photos of the Fulbright family homestead near Ingomar, Mont., have already been added to the Montana Memory Project website. Individuals are invited to bring in their own photos for scanning.

Stranded pelican gets dramatic rescue

By EVE BYRON

Helena Independent Record

NEVADA CREEK RESERVOIR — Jim Sparks first noticed the pelican Oct. 4, when the Bureau of Land Management wildlife biologist came here on a work-related field trip. The pelican was a large spot of white on the brown mudflats at the south end of the reservoir, all alone, having somehow missed the fall migration south. Sparks knew something was wrong.

He studied the bird, and realized it was missing its right wing. The pelican could swim just fine and scoop up fish to eat, but otherwise he wasn't doing so well.

"On land, he can't walk very well even with two wings, and with one he was off balance, sticking his good wing in the air and taking baby steps. He'd try to fly, but there was no way for him to take off. He'd come off the water an inch and splash back in. It was a little heart wrenching," said Sparks, an employee with the Missoula Field Office.

As the days shortened and the temperature dropped to 5 degrees Tuesday night, Sparks knew the pelican wouldn't survive the winter. Besides, pelicans are flock birds that don't do well on their own.

Sparks gathered at the reservoir bank Wednesday morning with three BLM co-workers, two members of the Raptor View Research Institute, two volunteers with Fish, Wildlife and Parks' Montana Wildlife Center and Lisa Rhodin, the Wildlife Center's rehab manager.

By 10 a.m., the temperature had warmed to 18 degrees and winds were calm. The plan — as much as they had one — was to keep the pelican on shore, out of the water, and capture him with a net. No one wanted to go swimming after a wet, injured bird.

They weren't sure how the pelican would react; the wild birds can weigh up to 30 pounds, and grow up to 4-feet tall with a 9-foot wing span.

The pelican was perched on the shore at the edge of the reservoir, where a wide skiff of ice froze overnight, creating a barrier between land and open water. They didn't know if the ice would bear the bird's weight and he would walk across it to the open water and escape.

They weren't sure if they could approach him across the wide-open mud flats, which may or may not be frozen enough to support the rescuers' weight. But armed with one kayak, two canoes, three metal-rimmed nets, a cannon net, a sense of purpose and a lot of enthusiasm, the rescue team quietly sprung into action.

Rob Domenech, executive director of Raptor View, moved along the eastern shore and slid into the kayak, trying to cut off the escape route from the north. Sparks and co-worker John Weinert dragged the canoe down a steep hill and onto the mud flats from the south. Rhodin and the rest of the rescue crew followed, fanning out on the mudflats that held their weight.

The first attempts to net the bird came up empty. As the bird edged toward the open water, Sparks tried one more time — and scooped up the pelican and returned to the shore to a hero's welcome.

"Woohoo! You got him Jim," yelled Tyler Veto with Raptor View.

"Awesome. Nice job, guys," Rhodin added.

As Rhodin tucked the bird into a large dog carrier for the first leg of his permanent southern migration to the Sacramento Zoo, Sparks stood back, proud of the team's successful rescue effort.

For Sparks, the rescue was a thrill. He noted that unlike FWP wildlife biologists who manage and handle bears, mountain lions and other creatures on a regular basis, the BLM wildlife biologists typically manage land and don't usually get close to critters.

"This has got to be the high point of my (30-year) career," Sparks said with a wide smile. "To see the bird a month ago and start thinking about a rescue, then have everything fall into place, is really a special, special thing."



Lisa Rhodin, FWP wildlife rehab expert and Jim Sparks, a BLM wildlife biologist, hold an injured wild pelican they rescued from Nevada Creek Reservoir. The bird is missing part of a wing and missed its flock's southern migration. Instead it will be sent to the Sacramento Zoo in California. *Photo by Eve Byron, Helena Independent Record*

Historical artifacts donated to museums

*Ann Boucher
Montana State Office*

After two decades in storage at Pompeys Pillar National Monument, a relic from the Civil War and four historical horse-drawn wagons are now at home in two Montana museums.

An 1863 ordnance rifle (cannon) used by federal troops during the Civil War is on permanent loan to the Rocky Mountain Museum of Military History in Missoula. A historical water wagon, field wagon, farm wagon, and log/ore wagon are at the Big Horn County Museum in Hardin.

“These pieces of our country’s history belong in a place better suited for their display and interpretation,” said Irv Leach, who was the acting Monument Manager when the transfers took place. “They’ll be great additions to the museums.”

How did a Civil War cannon wind up in storage at Pompeys Pillar? The Rocky Mountain Museum’s Fall 2011 newsletter says that it was manufactured at the Phoenix Iron Works in Phoenixville, Penn., for the New Jersey State Militia a few months after the 1863 Gettysburg battle. The cannon, also known as a “Griffin Gun” after its designer John Griffin, was part of a shipment to the New Jersey State Arsenal in Trenton, N.J., where it likely remained until the 1900s. At that point, according to New Jersey National Guard Militia Museum historian Joseph Bilby, the cannon was sold to Bannerman’s Military Surplus in New York City. Bannerman’s was the sale point for much of the nation’s Civil War surplus and active into the 1950s.

The newsletter goes on to say that the Foote family of Billings purchased the cannon and displayed it-- along with the four wagons -- in its frontier collection at the base of Pompeys Pillar.

The display remained there until 1991 when the BLM acquired the Pillar and was tasked with preserving and interpreting the site as a segment of the Lewis and Clark Expedition. At that time, the cannon and wagons went into storage on the property.

In an effort to find a more suitable home for the cannon and wagons, David K. Wade, museum curator for the BLM Billings Curation Center, contacted all the museums in Montana. Of the seven that expressed interest, two had the facilities to store and display the items in enclosed buildings. Protecting them from further deterioration was a primary concern, said Carolyn Sherve-Bybee of the Billings Field Office.

The Rocky Mountain Museum of Military History seemed the logical home for the cannon. Dedicated to promoting the commemoration and study of the U.S. armed services, the museum is now restoring the cannon to its original appearance and firing condition. Once finished, it will be put on display with the rest of the museum’s extensive collection.

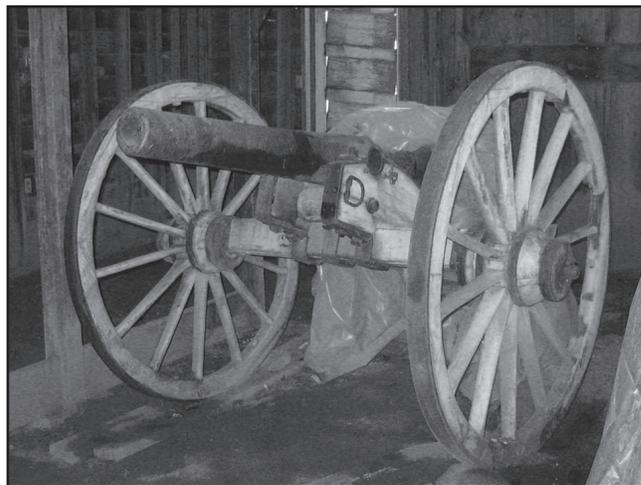
The wagons went to the Big Horn County Historical Museum in Hardin, where they are now on display in an enclosed building. Museum Director Diana Scheidt said that all the wagons have structural issues and need some repair, but that the goal is not to restore them to pristine condition. Instead, the museum will replace missing pieces and restore structural integrity, striving to use historically accurate parts and maintain original design. Meanwhile, museum staff is researching the wagons’ history and will eventually add that information to the display.

“We’re very excited to add these wagons to our collection,” said Scheidt.

Special thanks go to Fire Management Officer Irv Leach and Planning and Environmental Specialist Carolyn Sherve-Bybee (Billings Field Office); David K. Wade; and Property Manager Betty Thompson (Montana State Office) for facilitating the donations.



The historical water wagon en route from Pompeys Pillar to its new home in Hardin. *Photo courtesy of Big Horn County Historical Museum*



This Civil War ordnance rifle was recently donated to the Rocky Mountain Museum of Military History in Missoula. *Photo by Jack Conner*

Museum websites:

www.fortmissoula.org

www.bighorncountymuseum.org

Fire's effects on range health studied

Mark E. Jacobsen
Eastern Montana/Dakotas District

MILES CITY, Mont. --- Local BLM firefighters recently completed the last of a series of prescribed burns in Prairie County which were part of a range research experiment designed to gauge the effect of fire in restoring balance to eastern Montana rangelands.

The purpose of the fire experiment, headed by Fort Keogh researcher Dustin Strong, was to monitor the effect on the native bunchgrass “purple three-awn” (*Aristida purpurea*). The burn was a component of a cooperative project among the BLM, the Fort Keogh Livestock and Range Research Laboratory, and North Dakota State University.

Three-awn is a native perennial bunchgrass common across the continent and a frequent element of the Montana prairie. Three-awn seeds have three long whisker-like “awns” which give it its moniker –and

which irritate the mouths of grazers. In addition, the plant provides little nutrition if grazed once and even less if clipped twice—by pulling nutrients back into its root system rather than reinvesting them in any new growth. Livestock and wildlife eventually move on to more palatable forage.

Meanwhile, three-awn reinvests in itself and takes over more ground. Typically, it's the imported exotic weed that is considered the interloper, not a native grass, said Strong. However, sometimes a native can take over and establish a single-species “mono-culture” on the range.

Strong, with the help of fellow researchers and BLM fire crews carefully set fire to a series of delineated plots populated with native grasses –dominated by three-awn– on BLM-managed lands a few miles south of Terry.

Thermocouples draped in water-soaked gunny sacks recorded temperatures at ground level as the flames swept through the grasses, encouraged by a light breeze.

Fire staff used drip-torches to ensure an even burn, right up to the water-soaked mowed edge of each plot. As soon as one section was done, the thermocouples were snatched up and others moved to the next area. In a couple of hours, only a checkerboard of smoldering squares remained.

Initially, 60 to 70 percent of the plant composition on these pastures was comprised of three-awn. According to Strong, the process of plant succession had been arrested and dominated by this bristly bunch grass. As part of his experiment, Strong has been attempting to “release succession” by using fire and adding nitrogen as “successional stimulants.”

Strong said his goal is not to develop strategies that will totally remove three-awn from the ecosystem, but rather to focus on what will restore ecosystem function, nutrient cycling, and plant diversity. The desired end product is a decision matrix that will assist the BLM in the selection of land management options to increase native plant diversity.

“The BLM has broad landscapes where three-awn is a dominant species,” said Jesse Hankins, biologist in the BLM Miles City Field Office. “Investigation is needed to determine effective management treatments that could help us increase the native diversity in these three-awn dominated plant communities. That’s where Fort Keogh and their research can really help us out.”

“Although our main objective is to help the BLM, we also hope this research will be of use to private landowners in Montana and throughout the country,” said Strong. “Personally, I hope this research will showcase the benefits of prescribed fire and encourage landowners to consider using fire strategically to manage their rangelands when appropriate.”



A BLM firefighter watches as fire moves through an experiment plot on BLM land in Prairie County Sep. 9. Nine plots were burned as part of a summertime burn experiment to determine fire's effect on local range where the grass purple three-awn is common. *Photo by Mark E. Jacobsen*

Strong applied the first series of prescribed burns and nitrogen treatments during the summer and fall of 2010. The last burn session was completed Oct. 31. He noted that the effects have been readily apparent.

“On the first site we applied fires to three-awn, biomass has decreased 92 percent and 70 percent on summer and fall fires, respectively,” he said. “By the fall of 2012 we should have a strong grasp on how fire affects purple three-awn and the surrounding plant community.”

Strong says he will continue working on the three-awn research sites after the project concludes, even if it’s just monitoring.

Nationally, the BLM administers nearly 18,000 permits and leases held by ranchers who graze their livestock, mostly cattle and sheep, at least part of the year on more than 21,000 allotments under BLM management. Of this, the Miles City Field Office administers 1,630 grazing permits --representing 584,995 AUMs-- on 2,729,645 acres of eastern Montana federal land--more than any other single field office in the BLM.

“The BLM is committed to maintaining or restoring healthy rangelands and appreciates opportunities to partner with others in those efforts,” said Reyer Rens, BLM Miles City Field Office range supervisor. “Current science, like this study, enables range managers to make better, more informed decisions for our rangelands.”

Dillon FO takes care of the Russians

*David Abrams
Western Montana District*

The Russians had to go.

At least that was the expert opinion of the Dillon Field Office staff as it considered the Russian olive trees which had sprung up along the lower Madison River. The Russian olive, known as *Elaeagnus angustifolia*, is an invasive species introduced to the U.S. in the late 1800s from its native central and western Asia. When found, it must be dealt with quickly and decisively.

So, on Aug. 20, Ed Coon and other members of his Dillon Field Office team went out to Trapper Springs Campground, chainsaws in hand, to take care of the invading Russians.

“The Russian olives had been planted in the campground more than 30 years ago to shade campsites, but as of late they have been a problem because of their rapid spread and takeover of native species,” Coon said.

A total of 16 trees were removed, he added, and the stumps were painted with herbicide. They were then loaded onto a trailer and taken to a local county dump for proper disposal.

To the best of his knowledge, Coon said, these were the only Russian olives in the Dillon Field Office’s area of responsibility....but they may not be the last.

“There will most likely be new growth in the spring to re-treat,” he said.

If so, Coon and crew are ready for the coming invasion.



Ed Coon of the Dillon Field Office cuts down a Russian Olive tree at the Trapper Springs Campground. *BLM photo*



James Rose of the Dillon Field Office paints the cut stumps with herbicide. *BLM photo*

Trout stream renovation

Story and photos by Ernest McKenzie
Billings Field Office

Biologists hope that a small but hardy population of Yellowstone cutthroat trout will benefit from a project in Piney Creek in the Pryor Mountains.

The fall of 2010 found BLM biologists, range specialists, and fire crews dragging logs through the sage brush terrace and into Piney Creek. By placing logs in and around the stream bed,

biologists hoped to enhance the complexity of Yellowstone cutthroat trout (YCT) habitat and boost the numbers and health of a small but pure and aboriginal population rare to any stream this far east.

Piney Creek is a tributary to Sage Creek, which drains into the Shoshone River in Wyoming and eventually Big

Horn Lake. It is a small, spring-fed stream on the southwest flank of the Pryor Mountains. With only 5-9 inches of annual precipitation, this area is among the driest, most desert-like places in Montana. There, any water source is an oasis. The nearest consistent water sources are Sage Creek and Crooked Creek, 10 miles to the north and east respectively. Incredibly, this native population of YCT has persisted for many years, inhabiting only three-quarters of a mile of stream with marginal habitat conditions.

Using logs to increase habitat complexity in small streams is a technique commonly used by BLM and other agencies with great success. The logs and log structures break up the regular flow of water in stream channels, slowing it in some places and speeding it up in others. The results include scoured-out pools in the streambed where fish can rest in deeper water out of fast currents; sorted gravel

beds deposited from the scour where fish can spawn; organic debris traps that retain nutrients from fallen leaves and other detritus; overhead cover that protects fish from predators; and sediment deposits on the channel margins, which reduces the stream width and allows for a more vigorous riparian community to shade the water and keep it cool.

The project location extended from the Forest Service boundary on upper Piney Creek through BLM and state ownership, and on through private lands owned by a very helpful and cooperative ranch family, the Loynings. During discussions with the BLM on how to improve riparian and habitat conditions on Piney Creek, Paul Loyning suggested fencing the stream and excluding it from grazing in exchange for the BLM helping him develop some off-site stock water. When the issue of losing fish into the irrigation system came up in discussions with Montana Fish, Wildlife & Parks specialists, Mr. Loyning was willing to allow them to rebuild his reservoir and irrigation intake system to make it "fish friendly." The Loyning ranch was running along just fine without us, but Paul Loyning and his family recognized the value of Piney Creek and its YCT population and willingly made some changes and a few sacrifices to help protect this special resource.

In the end, about 55 logs were placed in 20 structures over half a mile of the stream; three-quarters of a mile of fence was constructed by the Loyning ranch to exclude livestock grazing from the entire fish-bearing reach of Piney Creek; three water troughs were placed to aid in livestock dispersment across the adjacent range; and the Loyning reservoir was deepened to 11 feet with three screened outlets for irrigation intake.



Small segment of stream before logs were placed. This is a wide, shallow piece of stream that had been used as a livestock crossing. Lack of cover and the shallow nature of this segment made for less than perfect conditions for Yellowstone cutthroat trout.



By arranging some large logs on this segment, biologists hope to create some scour which would increase the depth in this area. The overhead cover the logs provided is an immediate benefit. Long term benefits include the potential narrowing of the stream and the production of sorted gravel beds, where trout could spawn in the early summer.

Butte FO hosts GIS Day for local students

*David Abrams
Western Montana District*

Bradlee Matthews had a message for the 16 high-school-age students gathered in the Butte Field Office conference room: GIS can not only change your life, it can save it.

Going off a list of “10 Ways GIS May Be a Part of Your Life,” the GIS specialist for the Butte Field Office, told the teenagers that Geographic Information Systems is an integral part of our everyday lives—whether we know it or not. It guides our cars through its Global Positioning System, it’s in our bathroom tracking water and sewer monitoring systems, it helps deliver the pizza to our front door, and it can get 911 emergency responders to our house to save us from a heart attack.

Matthews, in other words, is a GIS cheerleader and he was there to get the students from Acadia Montana enthused about pursuing careers in GIS and the Bureau of Land Management.

The students from Acadia, a residential treatment center for young people ages 8-18, visited the Butte Field Office on Nov. 16 as part of the annual GIS Day. Though this is the first time the Butte office has hosted this event, it’s been celebrated on the Wednesday of Geography Awareness Week every year since 1987.

This year, more than 80 countries participated in a truly global event.

Matthews has been with the BLM for four years and said he organized similar events in the public schools in North Dakota. So, when he arrived in Butte in May 2011, it was practically a given that he’d start an annual celebration here in western Montana.

Butte’s GIS Day primarily consisted of a free-form workshop using ArcGIS to map an area of the students’ choice either in teams or as individuals.

“I have found during past GIS Day events that allowing the students to jump right into ArcGIS has proven very educational for them and their creativity really shines,” Matthews noted.

He was assisted by volunteers from within the Butte Field Office who talked about how they use GIS in their day-to-day activities— from mapping to complex analysis of the natural environment.

Matthews said he personally gets a lot of payoff from working with the youth.

“If you can get through to just one student and make them interested in GIS, then the whole day will have been worth it,” he said, then added, “Basically, the theme of the day was ‘Training Replacements,’ because, let’s face it, the BLM has an aging population.”

By the end of the day, Matthews had met his goal. One of the Acadia students said she was already considering a career change into the GIS field.



Bradlee Matthews (in hat) and Vickie Anderson of the Butte Field Office assist students from Acadia Montana with GIS software during the field office’s GIS Day workshop Nov. 16. *Photo by David Abrams*

Attention BLM Retirees

The BLM Retirees Association

Stay in touch! The BLM Retirees Association has a social gathering at 11:30 a.m. on the first Tuesday of even-numbered months at the Windmill (3429 TransTech Way) in Billings. If you would like to receive email or postcard notifications of these meetings, please contact Alice Slagowski at 406-259-9319 or asluggo@bresnan.net.

The Public Lands Foundation

The Public Lands Foundation (PLF) offers new retirees a free one-year membership. If you're interested, contact one of the Montana PLF representatives: David Mari at 406-538-7121 or dmari@earthlink.net; or Kemp Conn at 406-360-9252 or montanakconn@wildblue.net (please note "PLF" on the subject line).

What is the PLF? It works to keep America's public lands in public hands, managed professionally and sustainably for responsible common use and enjoyment.

The goals of the PLF are to:

- Keep lands managed by the BLM in public ownership and open to use by the public.
- Support multiple use management under the Federal Land Policy and Management Act.
- Encourage professionalism by BLM employees.
- Increase the public's understanding of and support for the proper management of the public lands.

Although PLF membership consists largely of retired BLMers, current employees and anyone interested in the goals of the organization are welcome to join.

Employees Leaving Montana/Dakotas BLM:

Roy E. Taylor (retired - 42 years)
Rangeland Mgmt. Specialist
Malta Field Office

Jay P. Springer
Civil Engineering Technician
Central Montana District

Derek C. Enderud
Natural Resources Specialist
North Dakota Field Office

Bureau of Land Management
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Ann Boucher, Editor & Graphic Design

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