



NATIONAL CONSERVATION LANDS

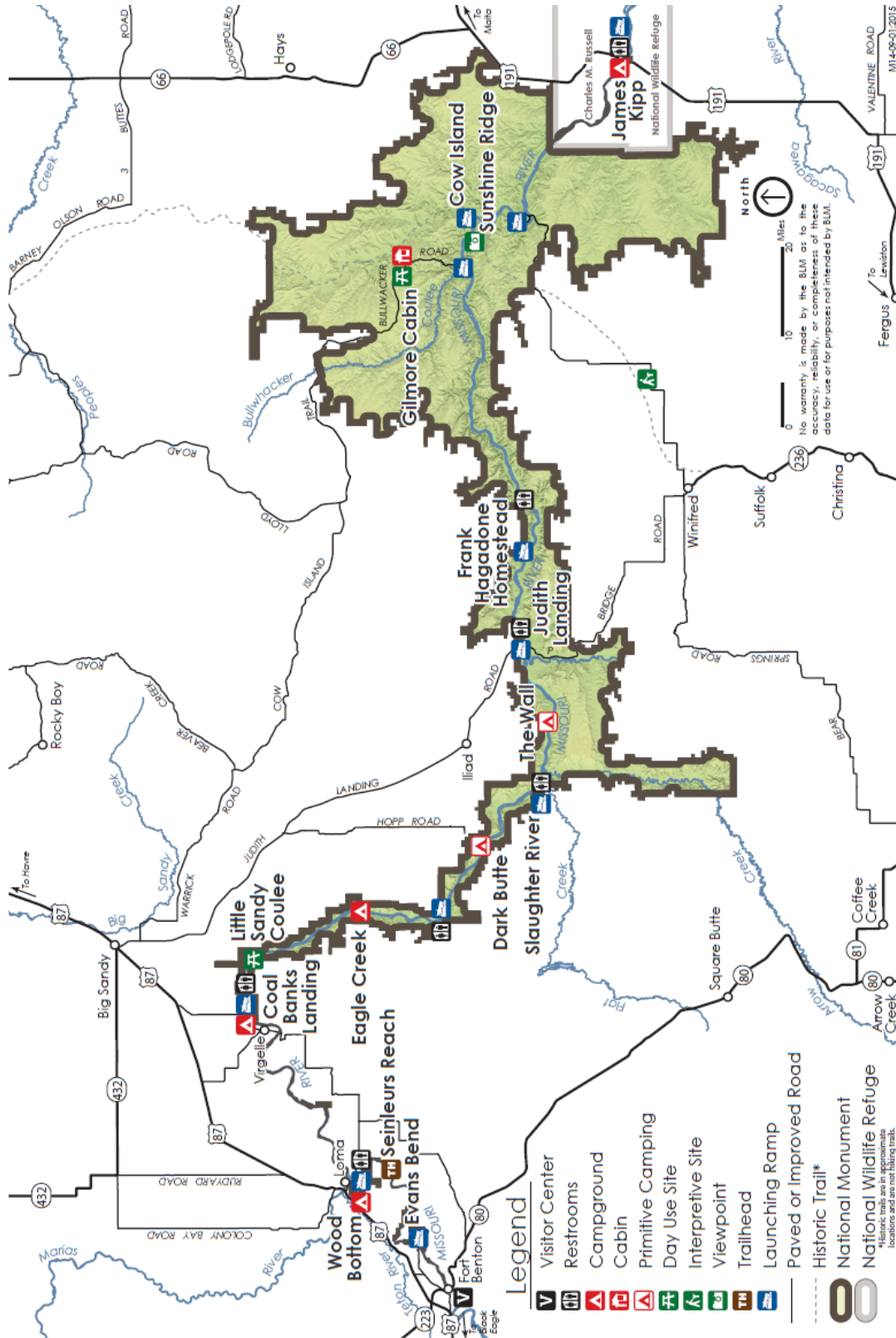
Montana
2021: Annual Manager's Report

Upper Missouri River Breaks

National Monument



Map



Accomplishments

Happy 20th Anniversary to the Upper Missouri River Breaks National Monument! Fiscal Year 2021 witnessed the completion of the exhibits upgrades in the Missouri Breaks Interpretive Center, including an interactive canoe display and enhanced displays focused on the objects of the Monument. After twenty years as a Monument and 45 years as a wild and scenic river, BLM has a new warehouse supporting our recreation program. This stunning building is situated in the heart of the Fort Benton National Historic Landmark, and features a façade designed to support the 1880s frontier riverfront theme.



Partnering with The Conservation Fund and using LWCF funding, we were able to acquire 317 acres within the Monument. This parcel connects with landlocked BLM lands within the Upper Missouri National Wild and Scenic River and the Lewis & Clark National Historic Trail.

Continuing our efforts to document the resources within the Monument, we completed 7,268 acres of project-related cultural resource inventory and 2,300 acres of proactive inventory, resulting in documenting 59 previously unknown historic properties. This constitutes an additional 2.5% of the Monument being inventoried. We also completed the inventory of 2,500 acres for the presence of undocumented and rare invasive plants, treated 420 acres for invasive plants, and completed 200 acres of Russian olive removal.

Middle Two Calf Road reconstruction was completed enhancing public access to the uplands. It provides a critical connector through the Monument as part of the Missouri Breaks Back Country Byway. The road, closed for several years because of mass wasting and slumping, is used by private landowners, recreationists, hunters, grazing permittees, utility companies and BLM staff.



Challenges

Drought had a significant impact on the health of the riparian areas and made accessing post-grazing monitoring sites and invasive plant treatments along the river difficult. Drought conditions eliminated prescribed fire possibilities and increased wildfire frequency and severity. Extremely high grasshopper herbivory may have also impacted treated areas and detection of invasive plants. Temporary adjustments including reduced livestock rates and reduced seasons of use were implemented to prevent resource degradation. Grazing rotations were adjusted due to the lack of water in stock reservoirs. Many pastures had unused forage because there was no available water.

Construction, visitor services, and maintenance were affected by supply chain issues in obtaining materials due to the pandemic.

Recruitment and retention of seasonal staff continues to be a problem. Six seasonal employees were hired for the summer of 2021 and three of them left by mid-summer (one individual after the first week). We have been unable to recruit and retain volunteer campground hosts; this year two of our hosts retired just before the end of the season, and one left midseason. Also, the maintenance worker position, vacant for over four years, has yet to be filled.

Visitors

The most visible and popular activity in the Monument is visiting the Upper Missouri National Wild and Scenic River. In 2021, 3,278 people (consisting of 649 separate groups) floated the Upper Missouri National Wild and Scenic River, according to the data collected from the fee envelopes at the boat launch sites. Outfitters and guides (Special Recreation Permits) accounted for 41% of the visitation on the river. Total visitation to the Monument, including day-use river floating and fishing from shore, visits to the Interpretive Center, and those enjoying a scenic drive on the Backcountry Byway, was 34,995 people. The Interpretive Center received 3,495 visitors (consisting of 1,421 groups). Overall, these numbers are consistent with previous years.



Partnerships

Three separate Boy Scout groups volunteered to help stain the split-rail fence at Coal Banks Landing. Students from Fort Benton High School volunteered to help maintain the grounds of the Interpretive Center by pulling weeds and picking up debris.



The BLM has a signed cooperative agreement with a bordering landowner to include private lands with a fuels treatment project area, and is working closely with the Department of Natural Resources and Conservation (DNRC) to treat State of Montana lands.

Law Enforcement continues to mutually assist Chouteau County with patrol and law enforcement and is cooperating with Bureau of Reclamation (BOR) for responses at Tiber Dam and other BOR areas of responsibility in north central Montana.

The Monument maintains a permit with the Corps of Engineers for our administration at James Kipp Recreation Area. This permit grants BLM continued use of federal lands for a 20-year term ending September 30, 2035. We also have MOUs with Montana Fish, Wildlife & Parks for their use of the site. We have other agreements with Montana FWP, particularly Sikes Act agreement for habitat restoration at the Wood Bottom Watchable Wildlife Area, paddlefish season regulation, and data collection of fish migration along the Missouri River.

One of our oldest agreements is with the city of Fort Benton and the River & Plains Society. This agreement supports our interpretive efforts at the Interpretive Center and assists us with grounds maintenance.

In 2021 we entered a new MOU with the Friends of the Missouri Breaks Monument. This is our third five-year agreement with the Friends, whose mission focuses on stewardship, education, and advocacy.



The Monument also benefits from an agreement between BLM and USDA-NRCS to produce and update Ecological Site Descriptions and Reference Sheets. This assists the BLM in conducting and interpreting Indicators of Rangeland Health assessments, and determining compliance with Land Health Standards.

The invasive species program assists and participates in cooperative efforts with local county weed districts. No official partnerships are documented, but Monument staff are often consulted on projects that weed districts are conducting and expertise of county staff is often solicited by BLM to identify and address invasive species issues. In addition, the invasive species crew participates in an annual invasive species crew training put together by the local weed districts. These trainings are attended by county, federal, state, and private entities.

Science

Monument Biologist Jesse Hankins initiated a citizen science project, creating telemetry units to detect radio-tagged pallid sturgeon (biological object) in the Missouri River. BLM staff, the Friends group, outfitters, and others take the unit on the river, and at the end of the trip submit the data to Montana FWP for analysis. Additionally, Jesse

conducted fixed-wing aerial survey of bald eagle nesting activity in the 149-mile river corridor.

Cable and Gist Homesteads had formal assessments and site plans authored by the Forest Service R1 Historic Preservation Team. These identify issues and lay out short- and long-term plans for restoration and stabilization of these historic sites.

The Monument hosts two sites being utilized by the USDA ARS to research classical biological control of leafy spurge to help determine what factors may contribute to success/failure of this treatment method across differing site conditions. Additionally, Montana State University is looking at testing a comprehensive invasive plant treatment monitoring protocol developed for land managers in Montana.



Dr. Ray Rogers of Macalester College continued his 25-year relationship with the Missouri Breaks. Research this year included studying the distribution of the Woodhawk and McClelland Ferry Members of the Judith River Formation, and with University of Georgia colleagues logging the stratigraphic occurrence of plant, invertebrate, and invertebrate fossils to ground truth a model of fossil distribution in terrestrial records. Research presented and published includes:

- Tun, S., J. Ricks, K. Curry Rogers, R. Rogers, and J. Thole. 2021. Fossil eggshell highlights hidden diversity in the Upper Cretaceous (Campanian) Judith River Formation, north-central Montana. GSA Abstracts with Programs.
- Taylor, P. and R. Rogers. 2021. A new cheilostome bryozoan from a dinosaur site in the Upper Cretaceous (Campanian) Judith River Formation of Montana. Journal of Paleontology.

Climate Impacts

Throughout 2021 the Monument experienced increased drought conditions, and much of the area was considered in extreme or exceptional drought. Based on data maintained by NOAA, 2021 in Fergus County in central Montana was the third driest year over the past 127 years of recordkeeping. Coal Banks boat ramp, generally the busiest river launch site in the Monument, was inoperable for motorboat launches throughout the season as the water was too low. Grazing utilization relied on residual

forage growth from previous years. Combined with reduced 2021 forage production, residual ground cover has decreased, which could lead to accelerated soil erosion and reduced soil moisture availability during critical growing periods next spring. To avoid long-term degradation, we are implementing a 30% Animal Unit Month (AUM) reduction south of the Missouri River, and a 25% reduction in AUMs north of the river in most allotments. Those voluntary reductions may be in the form of reduced grazing seasons, reduced animal numbers, permittees taking non-use, or a combination of reductions.

Prolonged and severe drought contributed to an above average fire season in 2021. Overall, there were 12 fires totaling 407 acres within the Monument.



Persistent drought affected well water quality and reduced water availability, causing a loss of public water at James Kipp Recreation Area. Potable water has been available here since before the proclamation.

Climate Resiliency

There are ten wellbores within the Monument boundary. Three Northwestern Energy wells continue to produce, and Northwestern Energy is considered in generally good standing. Six Kykuit wells (federal) are listed on our internal orphaned well list, but have not officially been designated as orphaned wells. We are issuing enforcement actions against Kykuit and have referred them to Treasury for past due penalties. One Kykuit well is a state well.¹

¹ Currently, 22 gas leases exist in the Monument, covering 21,888 acres. Production totals were 18,704 Mcf for three wells in calendar year 2021.

In 2021 the Monument utilized an existing BLM partnership with the National Wildlife Federation (NWF) to restore a prairie stream in northern Fergus County. One of the purposes of the project was to help BLM achieve healthy riparian-wetland and aquatic habitat focused on water quantity, water quality, habitat for terrestrial and aquatic species, floodwater retention, and drought resilience.

Reed Coulee was identified as Functioning at Risk due to historic anthropogenic disturbances and loss of natural structural components (i.e., wood accumulations). The BLM, NWF, Montana Wildlife Federation, Montana Conservation Corps, Montana Trappers Association, and several volunteers gathered over 40 cubic yards of conifer materials and installed beaver dam analogs and post-assisted log structures along the degraded streams. Phase 1 of the project completed 0.5 miles of treatment and staged additional material for Phase 2 to be completed in 2022.

Reed Coulee will be used as a demonstration site to showcase modified low-tech restoration techniques in prairie systems with dispersal clays. NWF partnered with USGS and University of Montana to research impacts of these projects to promote a better understanding of the systems and processes. This restoration project is sparking conversations with local landowners curious about the project.

The Antelope Creek Prescribed Burn and vegetation treatment, initiated in 2021, is designed to restore a healthy, diverse, fire-resilient ecosystem by reducing stand densities, conifer encroachment, and fuel loads. Currently the project area vegetation is overstocked, with high susceptibility to high severity wildfire as well as insect and disease outbreaks. The BLM has partnered with U.S. Fish & Wildlife Service, Charles M. Russell National Wildlife Refuge and will utilize a cooperative agreement with adjoining private landowners to treat 14,374 acres (3,024 of which are BLM-managed lands in the Monument) in 2022.

Environmental/Social Justice

We hosted a Teacher on the Public Lands intern from an elementary school with a high Native American student composition. She continues to work with our lead interpreter to complete a long-term project focusing on native plant uses.

As we do not have a diverse visitor base, one of our summer seasonal park rangers created a Spanish version of our FAQs in an attempt to reach out to a broader sector of the population who may be interested in visiting the Monument. This document is posted on our website.

The Blackfeet and Blood chiefs of the Blackfoot Confederacy, from both the United States and Canada, visited the historic Fort Benton. This is the first time on record that all the chiefs have met at this site, even though historically the fort was a Blackfeet trading post in their homeland. As Monument Manager I participated in this visit. As

part of the official visit the community fired the cannon at the old fort, as they would have marked their visit to the fort 150 years ago.

Events

Three hundred and thirty-one visitors participated in thirteen special interpretive programs throughout the summer, including hosting trivia nights at a local brewery, a Family Explorer Day at the Interpretive Center, and Bat Week, where school groups and visitors took part in short programs and activities.

The Monument staff hosted a 20th Anniversary event that had over 140 participants. There were various educational and informational booths about local wildlife, Monument activities, fire, bear safety, and Pompey's Pillar staff were on site hosting a booth as well. The event included guest speakers throughout the day, an artist workshop, and light refreshments.

Artist in Residence Carol Hartman immersed herself for two weeks to get inspiration for a unique oil painting she would create for the Monument.

Finally, the Monument added a new digital program called Agents of Discovery. This app, that visitors can download on their electronic devices, allows visitors to interact with the Monument by completing activities and games focused on the natural and cultural history of the Monument.



Words from the Staff

In fiscal year 2021 the Monument hired three new permanent employees, including an Outdoor Recreation Planner, Park Ranger-Lead Interpreter, and an Information Receptionist. Two new Range Management Specialists and a Realty Specialist who support the Monument were brought on as well. This new staff, in addition to the existing staff, have brought renewed energy into the Monument and have been able to initiate and complete projects with amazing results. Responding to the challenges thrown at us by the pandemic, we adapted programming and maintenance to respond to the public's expectations for safe and high-quality experiences. With our 20th Anniversary we celebrated the Monument's objects and welcomed the public – a lot of public! – to the Interpretive Center and the rest of the 377,000 (and growing) acres that make up our Monument. The Upper Missouri River Breaks National Monument is open, and our staff continues to provide quality outdoor opportunities.





**NATIONAL
CONSERVATION
LANDS**

Upper Missouri River Breaks National Monument

North Central Montana District Office
Bureau of Land Management
920 NE Main Street
Lewistown, MT 59457
Phone: 406-538-1900

[Flickr](#)

Report compiled by: Zane Fulbright, Monument Manager

The mention of company names, trade names, or commercial products does not constitute endorsement or recommendation for use by the federal government.

The Upper Missouri River Breaks National Monument contains a spectacular array of biological, geological, and historical objects of interest. Located in central Montana between Fort Benton, the nation's inmost port, east to the Charles M. Russell National Wildlife Refuge, the Monument spans 149 miles of the Upper Missouri National Wild and Scenic River, over 377,000 acres of the adjacent Breaks country, and portions of Arrow Creek, Cow Creek, and the Judith River. The landscape has remained largely unchanged since Meriwether Lewis and William Clark traveled through it on their epic journey with the Corps of Discovery over 200 years ago.