

Partnership Creates New Scenic Touring Maps

for Little Missouri National Grassland in North Dakota



Little Missouri National Grassland



- ▶ Over 1,000,000 acres of public lands!
- ▶ Thousands of miles of scenic roads, trails & destinations
- ▶ Diverse scenic badland, canyon, prairie and riverine landscapes
- ▶ Rich history
- ▶ Cultural events and services
- ▶ Diverse outdoor recreation opportunities
- ▶ Ready to explore?



Who Partnered?

- ▶ ND Parks & Recreation Department
- ▶ US Forest Service
- ▶ ND Department of Trust Lands
- ▶ Great Outdoors Consultants
- ▶ Logan Simpson



Contributors

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▶ Great Outdoors Consultants

- ▶ Drew Stoll
 - ▶ Mark Newby
 - ▶ Jim Brewer
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 - ▶ Josh Murrill





Great Outdoors Consultants

...Creating Pathways to Adventure

- ▶ GPS & Photographic Inventory
- ▶ Public Land & Master Planning
- ▶ Travel Management Planning
- ▶ Design: Trails, Trailheads, Camping, Etc.
- ▶ Cartography: Print, Online & Smart Maps
- ▶ Clients: USFS, BLM, State Parks, State Lands, Tourism Agencies, Counties, Private Recreation
- ▶ Base Camp: Woodland Park, Colorado





- ▶ Sister company of Great Outdoors Consultants
- ▶ Pike National Forest Adventures:
 - ▶ Trail Riding: scenery, wildlife, family time
 - ▶ Highway Touring: scenery, historic sites, destinations
 - ▶ E-Bikes: scenery, exercise, go further at altitude
 - ▶ Smart Maps: find routes & stay safe
 - ▶ Tours & Training: trail riding, safety, geography, photography, etc.
- ▶ Fun, Safety, Comfort & Responsibility!
- ▶ GOA Trailhead
- ▶ 5 Star Customer Rated!
- ▶ Family Owned - Opened in June 2018
- ▶ Information & Map Center in Woodland Park



Drew Stoll

- ▶ Started Career at Camp Jern YMCA in Wisconsin
- ▶ Outdoor Recreation Planner for 30 years - U of Wisconsin
- ▶ Peace Corps - Honduras National Parks 1990-93
- ▶ Central America Consultant 1990-2001
- ▶ Master Landscape Architect for 18 years - U of Florida
- ▶ Professional Outdoor Recreation Planner & Consultant
- ▶ Adventure Guide
- ▶ Avid Explorer & Sportsman
- ▶ Fluent in Spanish
- ▶ Family Man!



Why provide scenic touring maps?

- ▶ Direct Grassland visitors to desired experiences and locations
- ▶ Compliment land management objectives and respect private property
- ▶ Scenic routes and loops
- ▶ Visitors travel with confidence and safely
 - ▶ Travel tips, services & information
 - ▶ Emergency and other contacts
 - ▶ Rules, regulations, requirements
- ▶ Clearly map routes with public access
- ▶ Clearly identify dead-end routes
- ▶ Filter out routes with little visitor value
- ▶ Improve access to/from parking, camping, lodging, etc.



What experiences should be promoted?

- ▶ Travel in OHVs and other vehicles on scenic and enjoyable routes to interesting destinations
- ▶ Explore environmental experiences & resources: geology, wildlife, water resources, plants, etc.
- ▶ Experience cultural landscape: history, ranching, Oil & Gas, recreation
- ▶ Opportunities for solitude



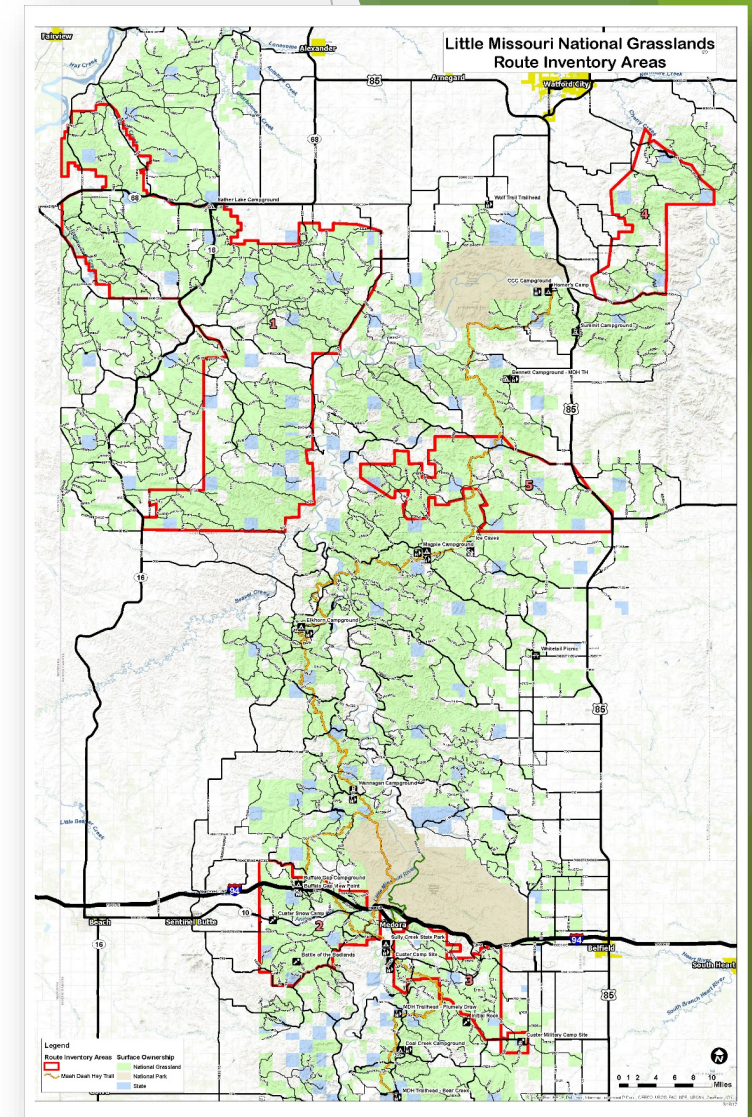
Process to Create Maps

- ▶ Project Planning & Data Collection - 2016
- ▶ Assessment, Inventory & Meetings- 2017
- ▶ Preliminary Routes, Destinations, and Experiences - 2018
- ▶ Scenic Touring Recreation Maps - 2019



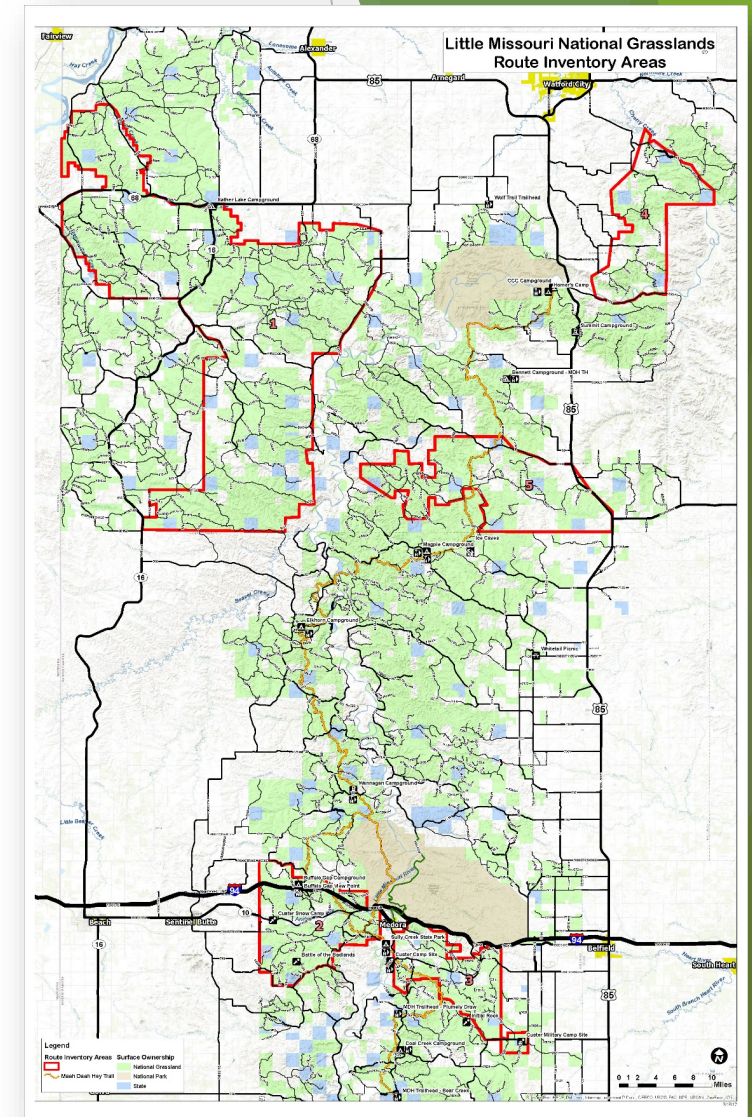
Assessment & Field Inventory

- ▶ What areas to inventory?
 - ▶ Areas with good road access
 - ▶ Extensive and interconnected road network
 - ▶ Interesting landscape with more topography
 - ▶ Significant amount of connected public lands
 - ▶ Roads in the area follow the natural terrain and are more curvilinear (rather than straight)
- ▶ Sather Lake Area in McKenzie County
- ▶ Southeast of Watford City in McKenzie County
- ▶ West of the Town of Grassy Buttes in McKenzie County
- ▶ East and south of Medora in Billings County
- ▶ Buffalo Gap Area West of Medora in Billings and Golden Valley Counties



Assessment

- ▶ Major rivers & streams (barriers)
- ▶ Interstate Highway
- ▶ Private lands
- ▶ National Park
- ▶ Inventoried roadless areas
- ▶ Areas suitable for wilderness
- ▶ Backcountry non-motorized recreation zones
- ▶ Special interest areas
- ▶ Research natural areas
- ▶ American Indian traditional use areas
- ▶ Big Horn Sheep habitat
- ▶ Black-footed Ferret reintroduction habitat
- ▶ Non-motorized trails (Maah Dah Hey & Buffalo Gap)
- ▶ Extensive Oil & Gas Fields



Field Inventory

- ▶ What was inventoried?
 - ▶ Roads/ trails on public lands (Grassland, BLM, State)
 - ▶ Dispersed recreation sites (i.e. campsites)
 - ▶ Scenic vistas
 - ▶ Rangeland with diverse natural-appearing landscapes
 - ▶ Public recreation facilities (campgrounds, trailheads, interpretive/historic sites)
 - ▶ Private recreation facilities (campgrounds, resorts, services)
 - ▶ Barriers



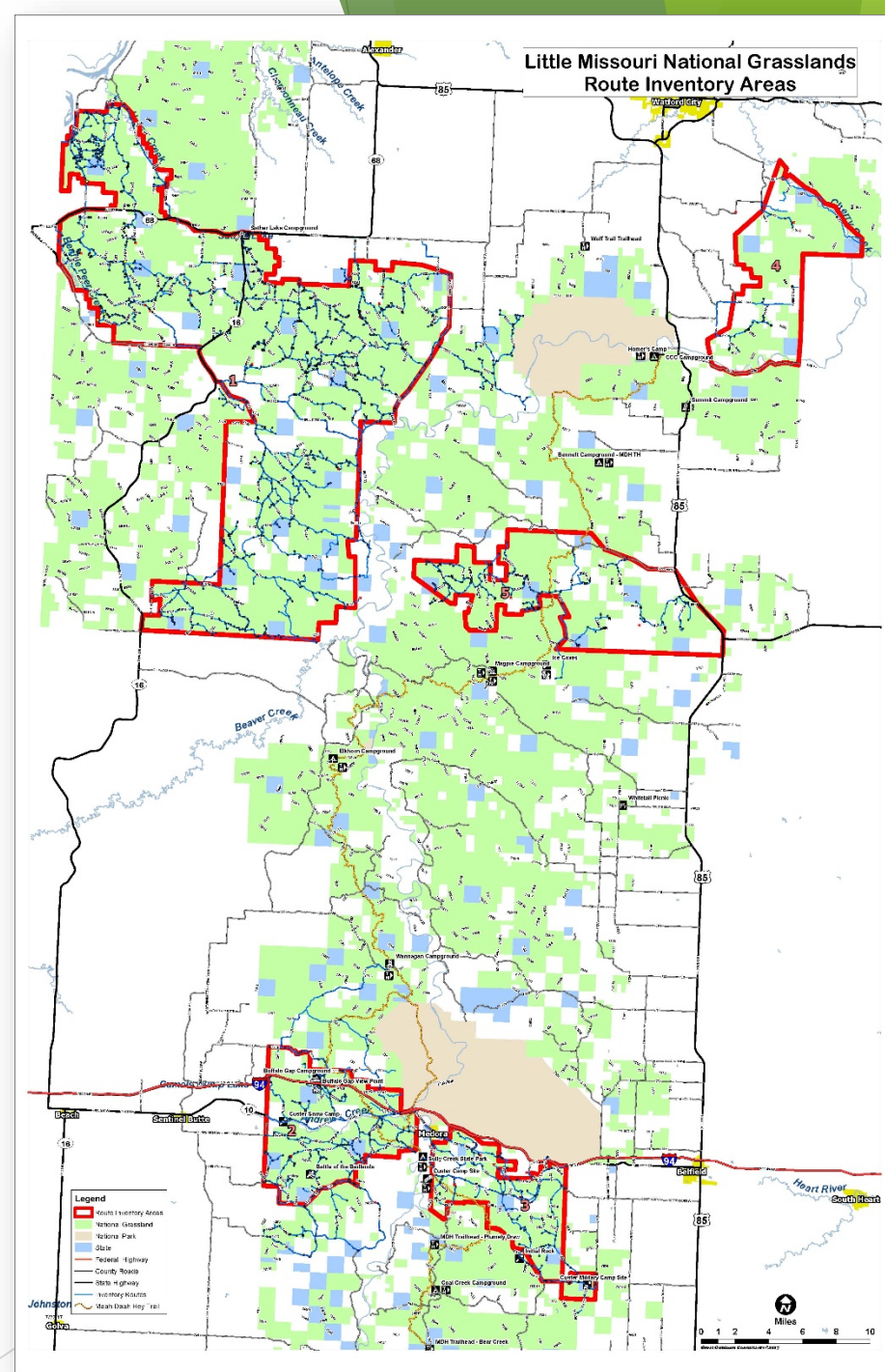
Field GPS Inventory: Routes

Summary of Inventoried Routes

Surface Material	Miles
Asphalt	15
Gravel/ Scoria	378
Native Soil	379
Vegetation	32
Total Miles	798
Condition	Miles
Good	567
Fair	183
Poor	45
Fail	3
Total Miles	798
Condition	Miles
Challenge	Miles
Easy	561
Moderate	181
Difficult	52
Extreme	4
Total Miles	798

Summary of Inventoried Routes

Width	Miles
Wide Road - 12+ft	372
2 Track - 8-12ft	400
ROV - 5-8ft	20
ATV - 3-5ft	2
Single-track - 0-3ft	4
Total Miles	798
Use Level	Miles
Heavy	350
Moderate	137
Light	294
None	17
Total Miles	798
Route Recreation Experience	Miles
Excellent	147
Good	313
Fair	220
Poor	98
None	20
Total Miles	798



Field GPS Inventory: Features & Photos

Summary of Photo Points

	Number
ROUTE	1,219
CATTLE GUARD	232
UNLOCKED GATE	210
OTHER (i.e. infrastructure)	142
STOCK TANK	132
ROUTE END	120
OIL WELL	119
UNABLE TO FIELD OBSERVE	108
SIGN GUIDE INFO	99
OVERLOOK	62
STOCK POND	48
ANIMAL TRAIL	39
POSTED PRIVATE	29
MARKER VERTICAL	26
SIGN OTHER	25
EROSION	23
RECLAIMING	22
RUTTED	21
SIGN REGULATORY	21
NATURAL FEATURE	19
STEEP	19
MARKER HORIZONTAL	16
WATER CROSSING	15
WASH	14

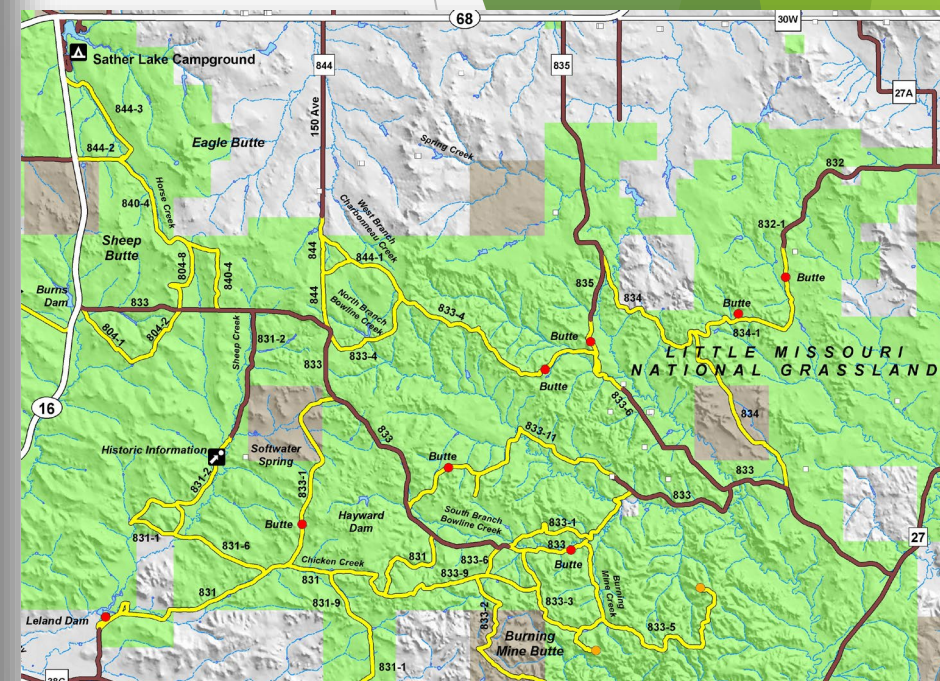
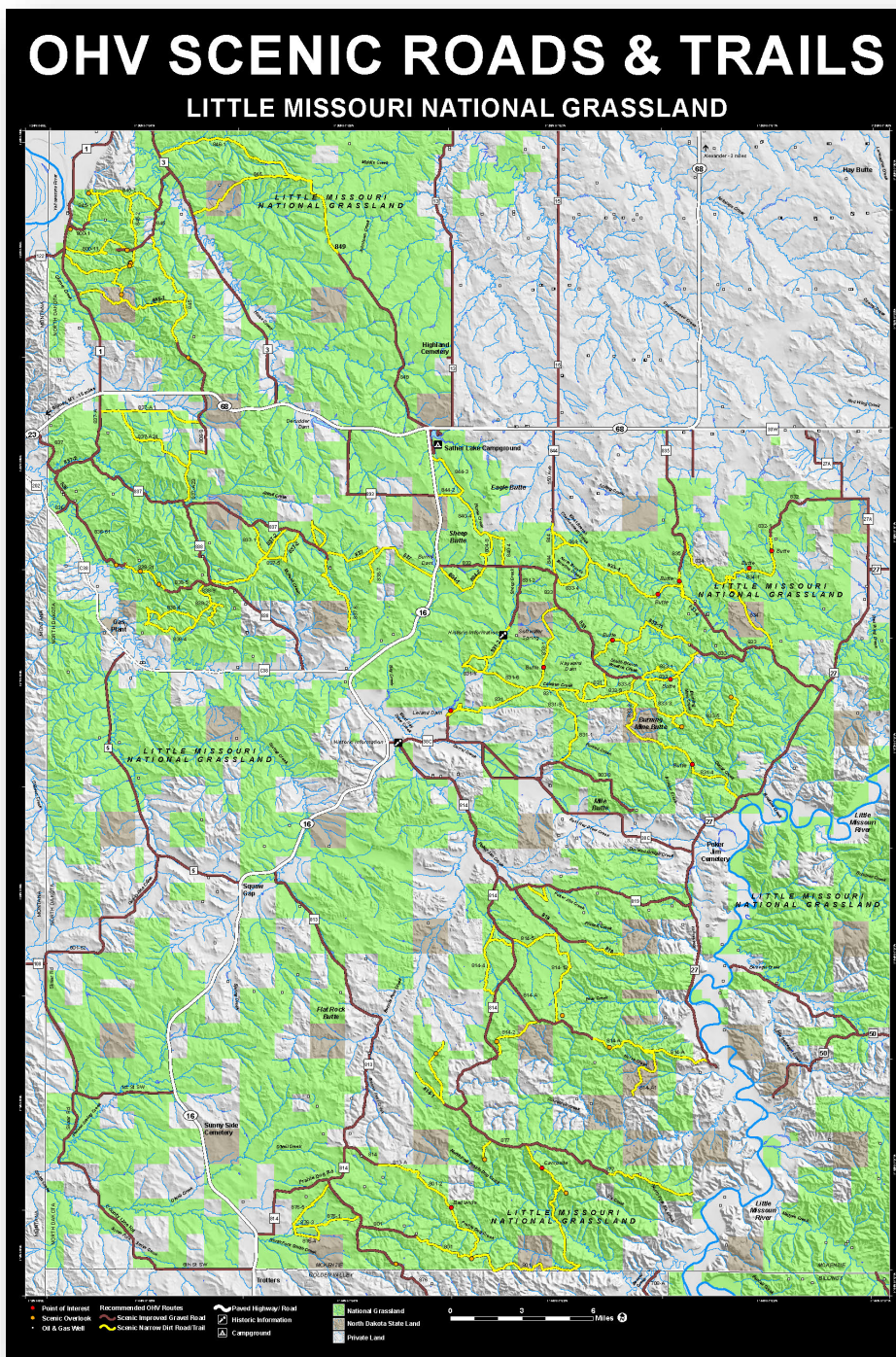
Summary of Photo Points

SINGLE USE	13
SIGN WARNING	13
WASHED OUT	13
MULTIPLE ROUTES	13
CLOSED SIGN	10
HAZARD	10
LOCKED GATE	9
SIGN BOUNDARY	9
BRIDGE	7
HAZARDOUS	7
WATER WELL	6
CAMPGROUND	4
PRIVATE	5
PARKING	5
FENCE LINE	5
TRASH SITE	5
DESIGNATED CAMPSITE	4
ACCESS BARRIER	4
PICNIC AREA	3
TOILET	3
DISPERSED CAMPSITE	2
DEEP RUTS	1
WET AREA	1
WINDMILL	1
Total	2,934



Print & Smart Phone Map

- ▶ 24"x36"
- ▶ 100K scale
- ▶ 1,000+ miles of categorized OHV routes
- ▶ Highways
- ▶ Communities

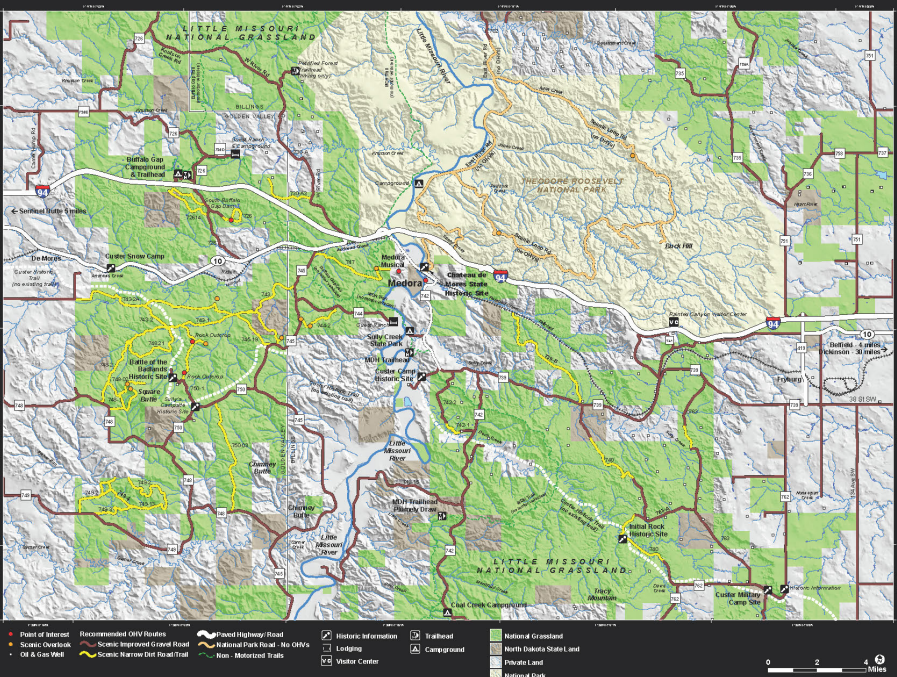


- Point of Interest
- Scenic Overlook
- Oil & Gas Well
- Recommended OHV Routes
- Scenic Improved Gravel Road
- Scenic Narrow Dirt Road/Trail

- Paved Highway/ Road
- Historic Information
- Campground
- National Grassland
- North Dakota State Land
- Private Land

Print & Smart Phone Map

- Scenic & Other Destinations
- Facilities
- Public lands
- Topography
- Streams & Rivers



Legend:

- Point of Interest
- Recommended OHV Routes
- Scenic Improved Gravel Road
- Oil & Gas Well
- Scenic Narrow Dirt Road/Trail
- Non-Motorized Trails
- Historic Information
- Lodging
- Visitor Center
- National Grassland
- North Dakota State Land
- Private Land
- National Park

Scale: 0 2 4 6 Miles

TREAD LIGHTLY

- Travel responsibly on land by staying on designated roads and trails. Go slow and around, obstacles to avoid widening trails. Create streams only at designated forks. When possible, avoid wet, muddy trails.
- Respect the rights of other recreational users, avoid sports owners and their livestock. Close all gates behind you.
- Yield to those passing you or going uphill. Motorized vehicles yield the right-of-way to pedestrians, bicyclists and horses. Share trails with everyone.
- Avoid sensitive areas such as meadows, wetlands and streams. Stay on designated routes. This protects wildlife habitats and conditions soils from damage. Do not disturb historical, archeological or paleontological sites.
- Do your part by modeling appropriate behavior. Leave the area better than you found it, properly dispose of waste, minimize the use of fire, avoid the spread of invasive weed species and repair degraded areas.

RIDE NORTH DAKOTA

Pembinas Game State Recreation Area
This area has become a big destination for adventure seekers throughout North Dakota and the surrounding states. The Pembinas Game State Recreation Area encompasses over 1,000 acres of public land, with steep valley cliffs towering over small, isolated prairies and pocketed wetlands surrounded by the rugged, undulating hills of the Missouri River. The area is a naturalist's dream, with over 30 miles of trails, the Pembinas Game provides visitors with an exceptional outdoor experience.

Rough Rider OHV Trail
The trail is located 30 miles south of Mandan on Highway 1800. The trail begins at the Fort Rice Campground, and extends north for 18 miles on an old railroad bed and ends at Little Missouri National Park.

Turtle Mountain State Recreation Area
The fully forested and heavily wooded cover provides a unique landscape in North Dakota. With over 10 miles of trails, the Turtle Mountain OHV vehicle area is open to motorized vehicles like dirt bikes, all-terrain vehicles and side-by-side as well as non-motorized trail users and equestrians. The OHV area is a youth trail and parking area is located about 6 miles northwest of Bismarck and provides ample parking for trucks with large trailers.

National Wildlife Recreation Area
Also known as "The Desert", this 400-acre area is managed by the U.S. Army Corps of Engineers and is located 8 miles south of Bismarck.

IN THE AREA

Theodore Roosevelt National Park
Theodore Roosevelt National Park lies in western North Dakota, where the Great Plains meet the rugged Badlands. A habitat for bison, elk and antelope, the sprawling park has three sections linked by the Little Missouri River. The park is known for the South Fork's ruggedly beautiful canyon and the Malheur Cross Cuts, where President Roosevelt overhauled The Snake Lake Game winds past several overlooks and trails.

Medora
Step back in time when cattle were king on the prairie and Old West towns like Medora were gathering places for the people brave enough to settle in the rugged Badlands. Medora still maintains the charm of the "hot" days and draws them with thousands of visitors each year. Its quiet downtown area offers shopping, dining, lodging and stagecoach rides. It is the gateway to the South Fork of Theodore Roosevelt National Park and home of the Medora Musical and world-famous Bull Pup Café Tour.

Maah Daah Hey Trail
The Maah Daah Hey Trail is a 144-mile non-motorized single-track trail through the Badlands of North Dakota. It is a rugged, challenging and relaxing and always amazing. International Mountain Biking Association (IMBA) has designated the Maah Daah Hey as a premier trail as one of the top mountain biking trails in the United States.

GO EXPLORE

Ready for an adventure of a lifetime? Western North Dakota is an extraordinary landscape of colorful and diverse badlands, canyons, lakes, rock outcrops and rugged terrain shaped by wind and water. This expansive landscape offers endless scenic overlooks and room to roam. Discover the many dispersed natural wonders such as geysers, springs, small reservoirs, along with the mighty Little Missouri River.

The landscape has hosted many people and historical events you can check out including Native American settlements, the Custer Trail, Theodore Roosevelt, and other events, cemeteries and railroads include a visit to the Custer Battlefield National Monument and Theodore Roosevelt National Park, offering services such as a wilderness, museum, shops, fuel stations, great food and lodging.

There are over 1,000 miles of scenic country roads to explore in a variety of topography. These roads wind through beautiful prairie, native badlands and even bring you to the top of Sully's Butte with amazing views. Be sure to respect ranching activities by closing gates and keeping space between your vehicle, livestock and ranch property.

Diverse topography, wildlife, and scenic views make the Little Missouri National Grassland one of the best off-highway vehicle and scenic touring destinations in North Dakota.

OHV SCENIC ROADS & TRAILS

Little Missouri National Grassland

PERMITS

North Dakota Residents
With some exceptions, OHVs operated on public land must be registered with the North Dakota Department of Transportation at any of their statewide offices. Information needed to fill out the registration form includes: owner's name, address, make, year and serial number.

The registration fee is \$20 and covers a two-year period that renewable every number years.

Out-of-State Visitors
Out-of-state visitors must purchase a non-resident public lands and trails access permit, at the cost of \$10 per year. Permits can be purchased at:
www.nd.gov/ndot/transportation

For OHV Information & Regulations:
North Dakota Parks & Recreation
701-222-7399
www.nd.gov/ndpr

CAMPING

Visitors are allowed to camp within 300 feet of roads in the Little Missouri National Grassland. It is a requirement to use areas designated for this purpose. Compliance with the registration form includes: owner's name, address, make, year and serial number. Camping is not allowed on state lands unless otherwise posted. A designated campground options see below.

North Trail Section
Battle Lake Campground
Located 20 miles northwest of Watford, ND, North Dakota, 22 miles east of Bismarck, Montana on Highway 1800, the campground has space for approximately 50 people. There is a paved loop that offers picnic tables with shade, fire grates and two vault toilets on the north end of the area.

South Trail Section
Buffalo Gap Campground
Located seven miles west of Medora, North Dakota, this campground is first-come, first-served. Camping is open year-round, with limited services during the winter. Parking spots are up to 10 feet long. There are no showers in the day-use trailhead parking area.

Bully Creek State Park
Located in the heart of the North Dakota Badlands, Sully Creek State Park is just minutes away from the historic town of Medora and Theodore Roosevelt National Park. This seasonal park (May-October) offers a great escape from these popular tourist destinations.

REGULATIONS

Anyone operating an off-highway vehicle is OHV in any public lands in the North Dakota must comply with state regulations.

State or North Dakota Regulations

- Anyone operating an OHV must have a current registration and permit.
- Anyone operating an OHV must have proof of liability insurance.
- No person under the age of 16 may ride or otherwise be propelled by an OHV without a DOT approved safety helmet.

Federal Regulations

- During winter months off established roads and trails to motorized vehicles is prohibited in the Little Missouri National Grassland.

State or North Dakota Laws and Safety Guidelines

- Anyone operating an OHV must have a current registration and permit.
- Anyone operating an OHV must have proof of liability insurance.
- No person under the age of 16 may ride or otherwise be propelled by an OHV without a DOT approved safety helmet.

Federal Regulations

- During winter months off established roads and trails to motorized vehicles is prohibited in the Little Missouri National Grassland.

WELCOME TO THE LITTLE MISSOURI NATIONAL GRASSLAND

The Little Missouri National Grassland is located in western North Dakota at 1,023.27 acres, it is the largest grassland in the United States. Enclosed within its borders is Theodore Roosevelt National Park. Prominent features of the National Grassland are the colorful and beautiful badlands and rugged terrain extensively eroded by wind and water. It is a mixed grass prairie, with abundant wildlife and scenic views with a rich history. The National Grassland is the largest block of public land in the state providing extensive opportunities for:

- OHV riding
- Hiking
- Camping
- Hunting
- Handicapped riding

This map illustrates the miles of roads and trails open to scenic touring and motorized recreation. Learn more at www.nd.gov/ndpr

FOR CONTACT INFORMATION:

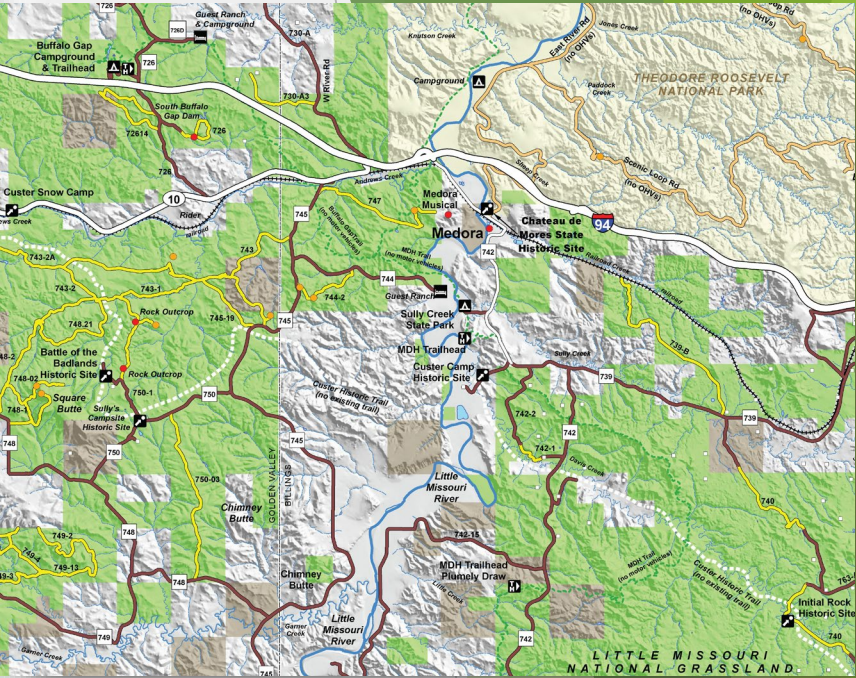
US Forest Service
701-222-7399
www.nd.gov/ndpr

For OHV Information & Regulations:
North Dakota Parks & Recreation
701-222-7399
www.nd.gov/ndpr

CALL 911 FOR EMERGENCY

This map is available as a free download (image link).

The North Dakota State and Recreation Department's facilities, programs and equipment are available to the public. For more information, please contact the North Dakota State and Recreation Department at 701-222-7399 or visit our website at www.nd.gov/ndpr. This map is available as a free download (image link).



- Point of Interest
- Scenic Overlook
- Oil & Gas Well

- Recommended OHV Routes
- Scenic Improved Gravel Road
- Scenic Narrow Dirt Road/Trail

- Paved Highway/ Road
- National Park Road - No OHVs
- Non - Motorized Trails

- Historic Information
- Lodging
- Visitor Center

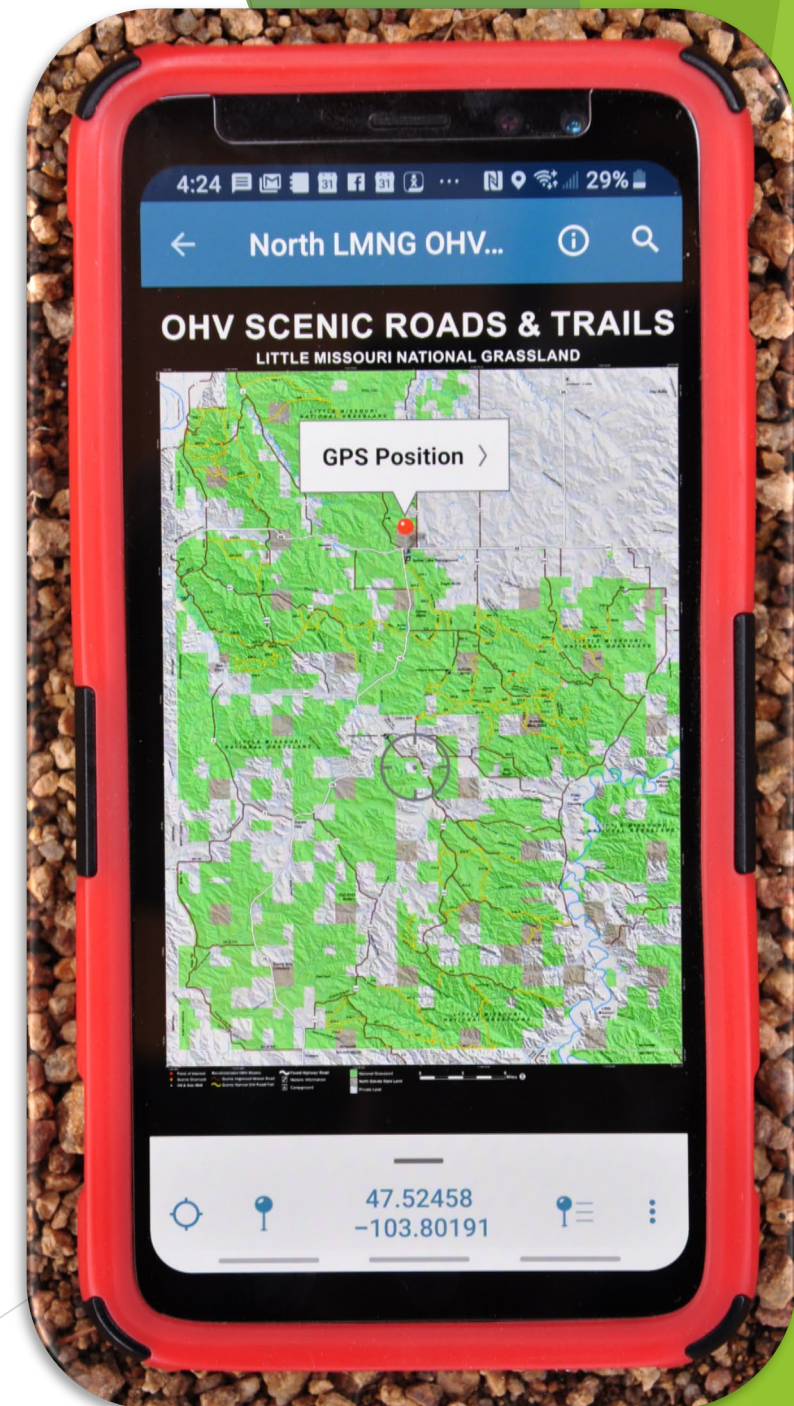
- Trailhead
- Campground

- National Grassland
- North Dakota State Land
- Private Land
- National Park

Using Avenza Maps App

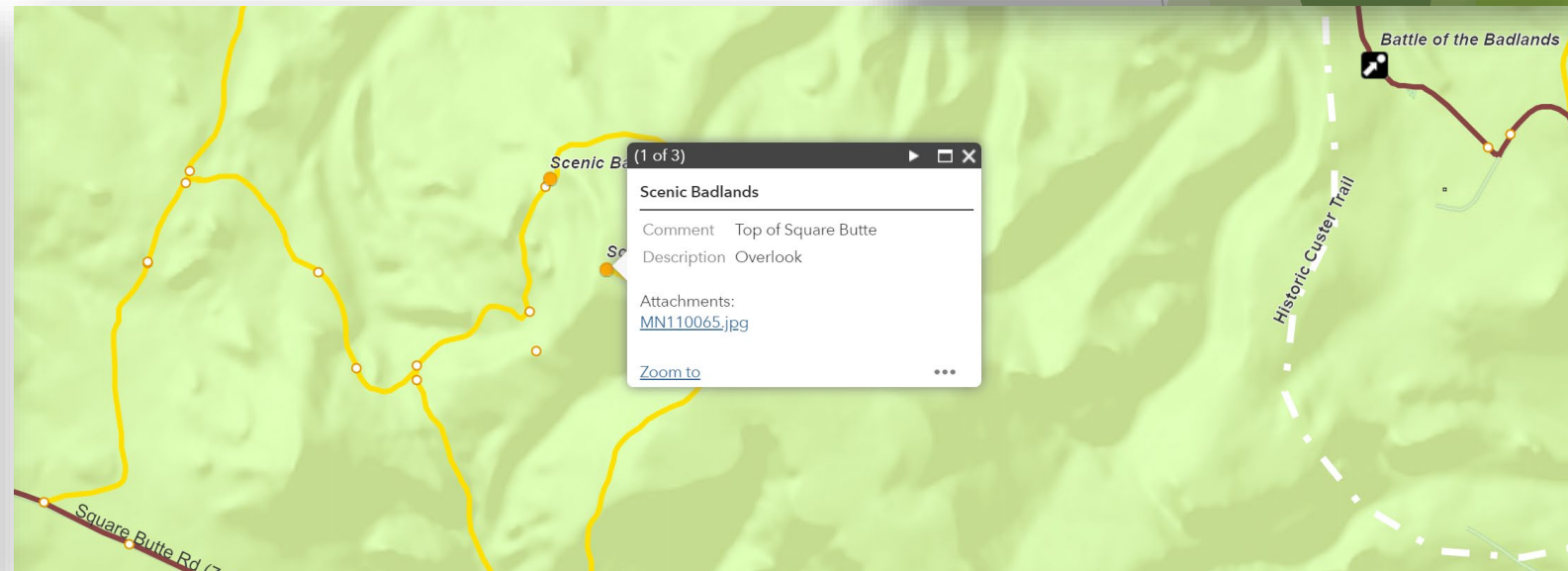
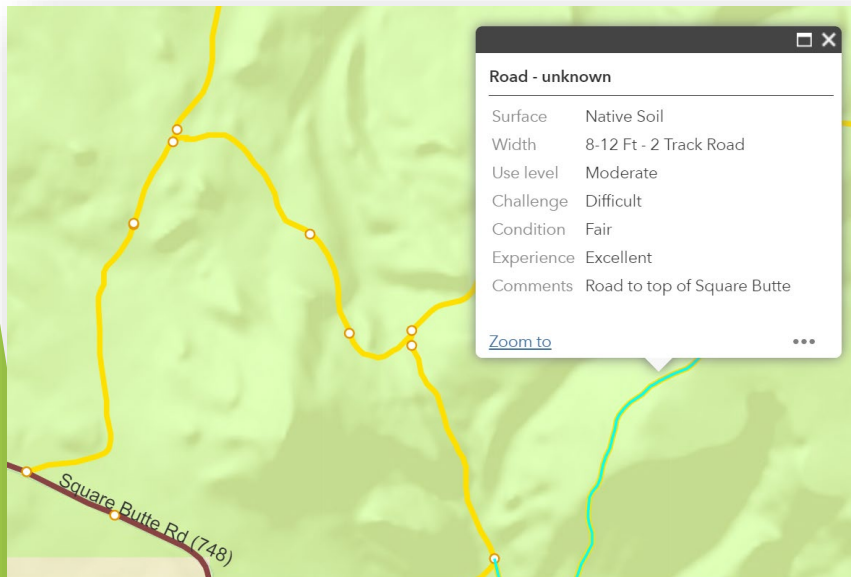


- ▶ Use on smart phone, tablet, laptop
- ▶ Load free app: www.AvenzaMaps.com
- ▶ Link: www.avenzamaps.com/maps/search.html
- ▶ Key Word Search: LMNG OHV Scenic Map
- ▶ Saves the map on your phone!
- ▶ Shows your GPS position
- ▶ Save reference points on the map
- ▶ Plot your photo points
- ▶ GPS your route (track)
- ▶ **Free map to share and explore safely!**

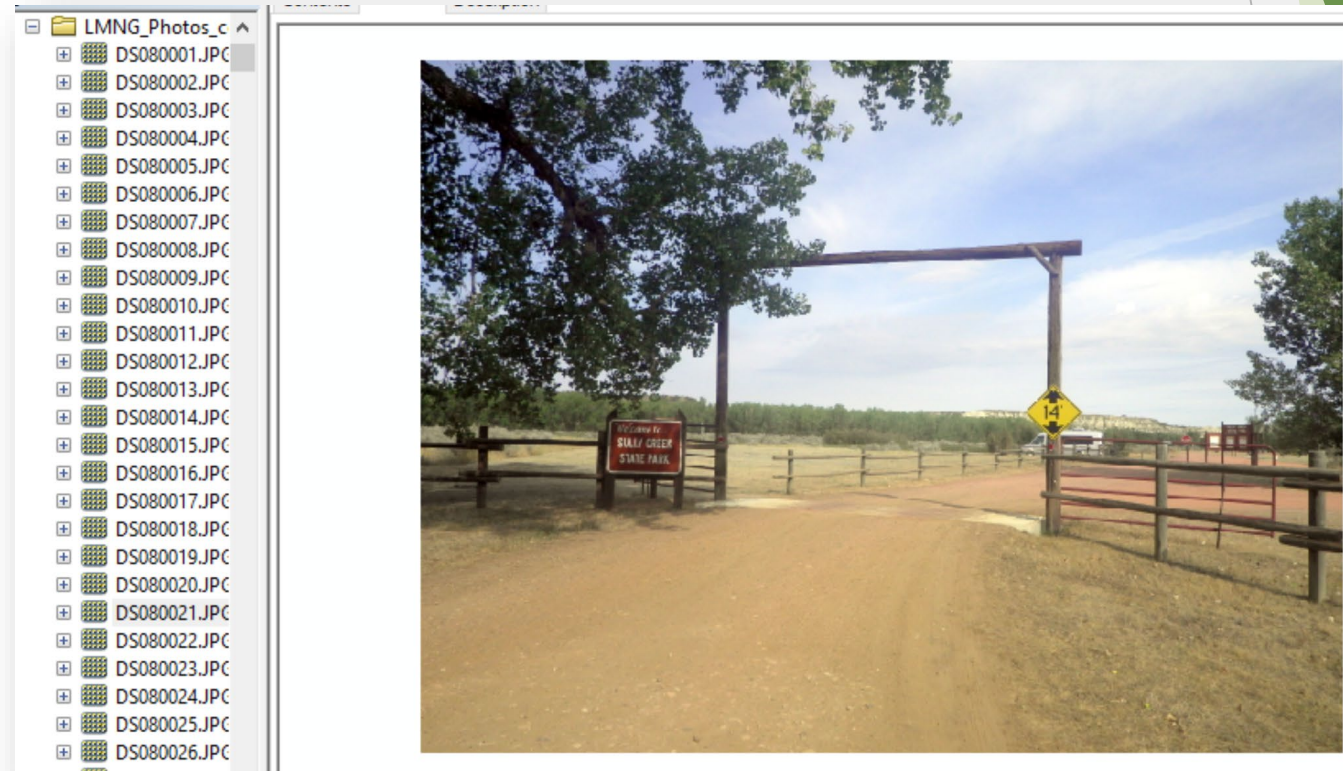
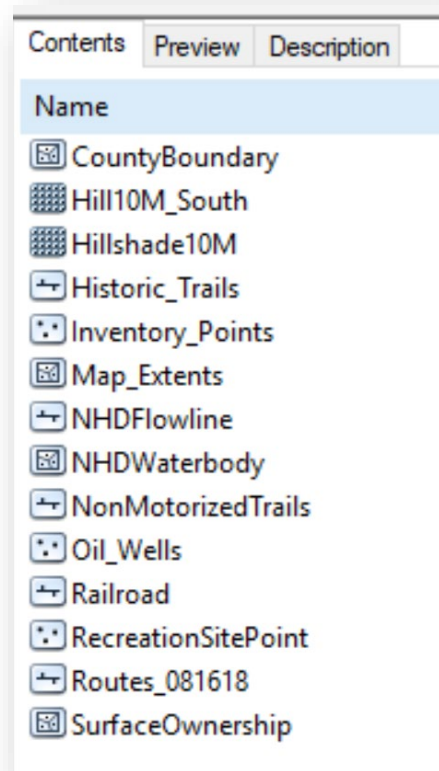


Products: ArcGIS Online Interactive Map

- ▶ Route & point attributes
- ▶ Open geotagged photos
- ▶ Control map layers
- ▶ ArcGIS Online



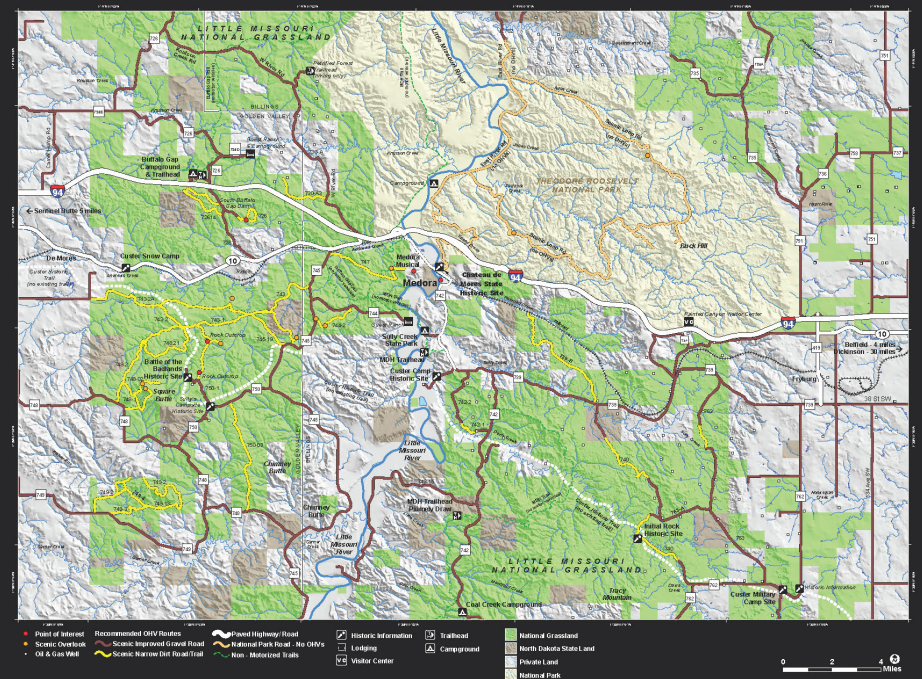
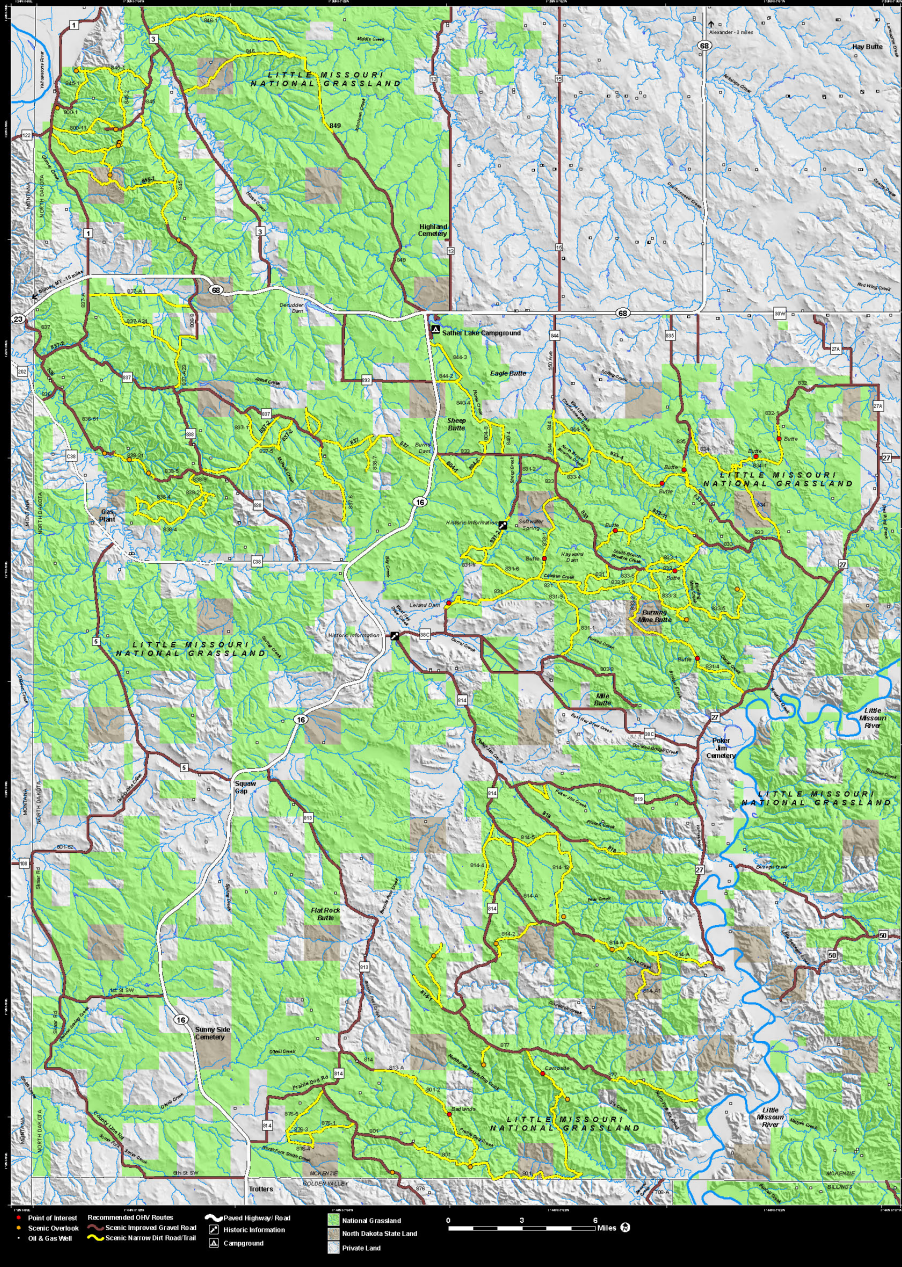
Products: GIS Database & Geotagged Photos



The logo for North Dakota Parks & Recreation is a circular emblem. The top half of the circle is green with the words "NORTH DAKOTA" in white, arched capital letters. The bottom half is white with the words "PARKS & RECREATION" in green, arched capital letters. The center of the emblem is divided into four quadrants: top-left shows a green tree silhouette, top-right shows a yellow sun with rays, bottom-left shows blue wavy lines representing water, and bottom-right shows a blue fish silhouette.



LITTLE MISSOURI NATIONAL GRASSLAND



The North Trail Map highlights a remote area that features the rugged beauty of North Dakota Badlands. Services in this area are incredibly limited. Riders may not have cell phone service; please plan accordingly.

Wherever you decide to explore, you won't be disappointed. Happy riding!



For Current Condition
US Forest Service
(701) 227-7000
www.fs.usda.gov/dnc



For OHV Information & Registration
North Dakota Parks & Recreation
(701) 328-6357
www.parks.nd.gov

CALL 911 FOR EMERGENCY



The North Dakota Parks and Recreation Department and its commitment to conservation.

- Travel responsibly on land by staying on designated roads and trails. Go over, not around, obstacles to avoid widening trails. Cross streams only at designated fords. When possible, avoid wet, muddy trails.

Pembina Gorge State Recreation Area
This area has become a top destination for adventure seekers throughout North Dakota and the surrounding states. The Pembina Gorge State Recreation Area encompasses over 2,800 acres of public land. With steep valley cliffs towering over small, isolated prairies and pocketed wetlands surrounded by the largest continuous, undisturbed forest in North Dakota, its stunning beauty is simply unmatched. With over 30 miles of trails, the Pembina Gorge provides visitors with an exceptional outdoor experience.

Theodore Roosevelt National Park
Theodore Roosevelt National Park lies in western North Dakota, where the Great Plains meet the rugged Badlands. A habitat for bison, elk and prairie dogs, the sprawling park has three sections linked by the Little Missouri River. The park is known for the South Unit's colorful Painted Canyon and the Maltese Cross Cabin, where President Roosevelt once lived. The Scenic Loop Drive winds past several overlooks and trails.

The Little Missouri National Grassland is located in western North Dakota. A 1,003,271 acres, it is the largest grassland in the United States. Enclosed within its borders is Theodore Roosevelt National Park. Predominant features of the National Grassland are the colorful and beautiful badlands and rugged terrain extensively eroded by wind and water. It is a mixed grass prairie, with abundant wildlife and scenic views with a rich history. The National Grassland is the largest block of public lands in the state providing extensive opportunities for:

- OHV riding
- Camping
- Wildlife viewing
- Hunting
- Mountain biking
- Hiking
- Horseback riding

This map illustrates the miles of roads and trails open to scenic touring and motorized recreation.



Saskatchewan Residents

The application form includes: owner's name and address, make, year and serial

Visitors are allowed to camp within 300 feet of roads in the Little Missouri National Grassland but it is recommended to use sites already designated for this purpose. Complete

water. Camping is not allowed on state land unless otherwise posted. For a few designated campground options see below.

State of North Dakota Regulation
 Anyone operating an OHV must have current registration and permit.

Federal Regulations

- Driving cross-country off established roads and trails by motorized vehicles is prohibited.

Ready for an adventure of a lifetime? Western North Dakota is an extraordinary land of colorful and diverse badlands, canyons, buttes, rock outcrops and rugged hills, shaped by wind and water. This extraordinary landscape offers endless scenic overlooks and room to roam. Discover the many diverse natural wonders such as artesian springs

This landscape has hosted many people. Historical events you can check out include Native American settlements, the Custer Theodore Roosevelt, and other rail cemeteries and railroads. Include a visit to the City of Medora located adjacent to Interstate Theodore Roosevelt National Park, services such as live entertainment, museums, fuel stations, great food and

Sather Lake Campground
Located 26 miles southwest of Wadford City, North Dakota or 22 miles east of Sidney, Montana on Highway 68, the campground has space for approximately 50 people. There is a paved loop that offers picnic tables, shelters, fire grates and two vault toilets on the north end of the area.

Located seven miles west of Medora, North Dakota. This campground is first-come, first-served. Camping is open year-round with limited services during the winter. Parking spaces are up to 60-feet long. Trailers are allowed in the day-use trailhead parking area.

Sully Creek State Park
Located in the heart of the North Dakota Badlands, Sully Creek State Park is just minutes away from the historic town of Medora and Theodore Roosevelt National Park. The seasonal park (May-September) offers a quiet escape in a rugged landscape. www.nd.gov/parks

minutes away from the historic town of Medford and Theodore Roosevelt National Park. The seasonal park (May-September) offers a quiet escape from the summer months.