

Montana Glaciated Plains (17,806,106 acres)



Figure 31. Montana Glaciated Plains Focus Area

The Montana Glaciated Plains area is dominated by level to rolling till plains covered by sagebrush grasslands and mixed short-grass prairie and croplands. This area also encompasses two island mountain ranges: the Bears Paw and Highwood mountains. The major river drainages of the area include the Milk, Missouri, Marias, and Musselshell. In the east, this focus area is characterized by prairie that is dissected by badlands of the major tributaries to the Milk, Missouri, Marias, and Musselshell drainages. From the bluffs dotted with ancient tepee rings, one can observe numerous prairie wildlife species. To the west, the area is characterized by the numerous rugged breaks that support diverse assemblages of ponderosa pine and cottonwoods depending on the availability of moisture. This area also is considered very fertile wheat growing country, most notable in the Golden Triangle to the west.

Landscape Characteristics

This area consists of plains, terraces, fans, and floodplains that formed in glacial till, gravel deposits, and alluvium over clay shale, sandstone, and siltstone. Elevations range from 1,800 to 7,500 feet in the Highwood and Bears Paw mountains. Drainage density is moderate and glacial potholes are common, especially in the northern part of the subsection. Mean annual precipitation ranges from 10 to 15 inches, with about 20 to 30 percent falling as snow. The soil temperature and moisture regimes are frigid and aridic ustic. Primary natural disturbances are drought and fire. Another important natural disturbance regime is prairie dog complexes. Land use is predominantly livestock grazing and dryland farming. The breakdown for land stewardship in the Montana Glaciated Plains area is as follows:

U.S. Federal Agencies: 3,394,302 acres, or 19.1% of total area, which include:
 BLM: 3,003,010 acres, or 16.9% of total area
 USFS: 62 acres, or less than 0.1% of total area
 USFWS: 283,492 acres, or 1.6% of total area
 NPS: 247 acres, or less than 0.1% of total area
 State Agencies: 1,253,566 acres, or 7% of total area
 Tribal Lands: 1,141,133 acres, or 6.4% of total area
 Private: 11,995,485 acres, or 67.4% of total area
 County and City: 494 acres, or less than 0.1% of total area

Associated Habitats

Habitat	Habitat Tier	Percentage of Area
Wetland and Riparian	I	3.22
Moderate/High Cover Grasslands	I	3.38
Altered Herbaceous	II	4.33
Sagebrush	I	4.67
Very Low Cover Grasslands	I	4.79
Agricultural Lands - Irrigated	III	13.87
Agricultural Lands - Dry	III	20.19
Low/Moderate Cover Grasslands	I	33.66

Note: A total of 88.11% of the Montana Glaciated Plains area is represented; 11.89% is made up of a combination of other habitat types.

Associated Species of Greatest Conservation Need (Tier I Species)

There are a total of 364 terrestrial vertebrate species that are found within the Montana Glaciated Plains Focus Area. Tier I species are listed below. All associations can be found in Table 34.

Amphibians: Northern Leopard Frog

Reptiles: Snapping Turtle, Spiny Softshell, Western Hog-nosed Snake, and Milksnake

Bird: Common Loon, Bald Eagle, Greater Sage-Grouse, Yellow Rail, Whooping Crane, Piping Plover, Mountain Plover, Long-billed Curlew, Interior Least Tern, Black Tern, and Burrowing Owl

Mammals: Spotted Bat, Townsend’s Big-eared Bat, Black-tailed Prairie Dog, Black-footed Ferret, and American Bison

Conservation Concerns & Strategies

Conservation Concerns	Conservation Strategies
Conversion of native prairie to small grain production	Policy-based approaches that encourage the conservation of natural communities, rather than support their conversion
	Support public and private conservation programs/activities that encourage and support private land use stewardship
	Increased cooperative efforts to maintain ecological features or processes on public, private, and tribal lands
	Implement practices (economic and ecological) that sustain ranching profitability and promote public access
Petroleum exploration and development impacts	Work with corporations, land owners and other agencies to reduce impacts of exploration
	Education and research on fossil fuel development and its impacts on natural landscape
	Evaluate ecological implications of road development as well as reservoir and pit retention construction related to petroleum development
Invasive or exotic plant species	Cooperative efforts to reduce the abundance of exotic plant species
Disruption of natural fire disturbance processes and hydrologic regimes	Work with other agencies, tribes and private organizations to restore the natural disturbance processes
Loss of natural wetlands	Maintain existing structure and functional uses of wetlands on private and federally managed lands

References

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