

Powder River Basin/Breaks/Scoria Hills (2,095,021 acres)



Figure 33. Powder River Basin/Breaks/Scoria Hills Focus Area

Much of this unglaciated area extends across Montana's border into Wyoming. The flat to rolling mixed-grass prairie contains considerable areas of sagebrush grassland as well as ponderosa pine and juniper woodlands that are broken by occasional rugged breaks. The Powder River cutting through the area provides significant riparian habitat for many species. This area supports irrigated and dryland crops.

Landscape Characteristics

This subsection consists of dissected plains and hills, terraces, and fans with some river breaks and badlands that formed in alluvium and colluvium from sandstone, shale, and siltstone. Elevations range from 2,100 to 4,980 feet. Drainage density is moderate to high. Mean annual precipitation ranges from 10 to 14 inches, with about 20 percent falling as snow. The soil temperature and moisture regimes are frigid and aridic ustic. Summers are dry. Primary natural disturbances are drought and erosion. Another important natural disturbance regime is prairie dog complexes. Land use is predominantly livestock grazing and irrigated and dryland crops. The breakdown for land stewardship in the Powder River Basin/Breaks/Scoria Hills area is as follows:

U.S. Federal Agencies:	503,292 acres, or 24% of total area, which include:
BLM:	197,993 acres, or 9.5% of total area
USFS:	304,928 acres, or 14.5% of total area
NPS:	371 acres, or less than 0.1% of total area
State Agencies:	90,873 acres, or 4.3% of total area
Tribal Lands:	313,824 acres, or 15% of total area
Private:	1,186,909 acres, or 56.7% of total area

Associated Habitats

Habitat	Habitat Tier	Percentage of Area
Very Low Cover Grasslands	I	2.70
Mixed Mesic Shrubs	II	3.31
Sagebrush	I	5.30
Wetland and Riparian	I	6.21
Mesic Shrub Grassland Associations	I	7.42
Low Density Xeric Forest	II	8.15
Mixed Xeric Shrubs	I	10.04
Ponderosa Pine	II	11.60
Low/Moderate Cover Grasslands	I	31.86

Note: A total of 86.59% of the Powder River Basin/Breaks/Scoria Hills area is represented; 13.41% is made up of a combination of other habitat types.

Associated Species of Greatest Conservation Need (Tier I Species)

There are a total of 299 terrestrial vertebrate species that are found within the Powder River Basin/Breaks/Scoria Hills Focus Area. Tier I species are listed below. All associations can be found in Table 36.

Amphibians: Northern Leopard Frog

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

Birds: Common Loon, Trumpeter Swan, Bald Eagle, Greater Sage-Grouse, Whooping Crane, Long-billed Curlew, Black Tern, and Burrowing Owl,

Mammals: Spotted Bat, Townsend's Big-eared Bat, Black-tailed Prairie Dog, Meadow Jumping Mouse, Black-footed Ferret, and American Bison

Conservation Concerns & Strategies

Conservation Concerns	Conservation Strategies
Loss of habitat as a result of conversion of native habitat to agriculture	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
Fragmentation of habitat due to fossil fuel exploration and development activities	Education and research on fossil fuel development and its impacts on natural landscape
	Work with corporations, land owners and other agencies to reduce impacts of exploration
	Careful study impacts of road development and retention pond construction as a result of coal bed methane development in both Montana and Wyoming
Invasive or exotic plant species	Cooperative efforts to reduce the abundance of exotic plant species
Range or forest management practices	Support government and private conservation activities that encourage and support sustainable land management practices (example; rest and rotation schedules)
Disruption of natural disturbance processes, especially fire	Work with other agencies, tribes and private organizations to restore the natural disturbance processes

References

The Nature Conservancy. 1999. Ecoregional Conservation in the Northern Great Plains Steppe. Northern Great Plains Steppe Ecoregional Planning Team. 76 pp.

U.S. Fish and Wildlife Service. 2004. Conservation Focus Areas of the Great Divide: a vast region encompassing the Upper Missouri, Yellowstone and upper Columbia watersheds. Publisher: USFWS, Benton Lake Wildlife Refuge, Great Falls, MT. 77 pp.