

Southwest Montana Intermontane Basins and Valleys (2,077,477 acres)



Figure 11. Southwest Montana Intermontane Basins and Valleys Focus Area

The area consists of valleys that are located between mountain ranges and typically follow major stream courses. Many small tributary mountain streams flow down the hillsides of these valleys and support wetlands, rivers such as the Red Rock, Madison, Jefferson, and Big Hole, and Red Rock Lakes. The vegetation is a mix of sagebrush grassland on the valley floor, and in the wet valley bottoms, riparian species like sedges and willows are common. Coniferous forest and aspen stands in the wetter microsites dominate the higher elevations. The coniferous forest and adjacent sagebrush communities provide winter habitats for mule deer and elk, while the riparian bottoms provide yearlong habitat for white-tailed deer. These intermountain basins and valleys are highly valued for residential development and are under the imminent threat of habitat fragmentation.

Landscape Characteristics

This subsection consists of intermontane basins and broad valleys that formed in alluvium, glacial deposits, and Tertiary volcanic materials. Elevations range from 4,700 to 7,600 feet. Drainage density is low. Mean annual precipitation ranges from 9 to 20 inches, with about 10 percent falling as snow. The soil temperature and moisture regimes are frigid and aridic ustic. Parts of the Red Rock Basin and Big Hole Valley have cryic temperature regimes. The primary natural disturbances are flooding and fire. Another important natural biotic disturbance is beaver activity in riparian areas. Land use is predominantly livestock grazing, agriculture, and urban/suburban development. The breakdown for land stewardship in the Southwest Montana Intermontane Basins and Valleys area is as follows:

U.S. Federal Agencies: 479,632 acres, or 23.1% of total area, which include:
 BLM: 344,156 acres, or 16.6% of total area
 USFS: 96,180 acres, or 4.6% of total area
 USFWS: 38,610 acres, or 1.9% of total area
 NPS: 680 acres, or less than 0.1% of total area
 State Agencies: 275,028 acres, or 13.2% of total area
 Private: 1,318,307 acres, or 63.5% of total area

Associated Habitats

Habitat	Habitat Tier	Percentage of Area
Very Low Cover Grasslands	I	5.19
Wetland and Riparian	I	6.94
Agricultural Lands - Irrigated	III	9.04
Sagebrush	I	30.19
Low/Moderate Cover Grasslands	I	31.81

Note: A total of 83.17% of the Southwest Montana Intermontane Basins and Valleys area is represented; 16.83% is made up of a combination of other habitat types.

Associated Species of Greatest Conservation Need (Tier I Species)

There are a total of 296 terrestrial vertebrate species that are found within the Southwest Montana Intermontane Basins and Valleys Focus Area. Tier I species are listed below. All associations can be found in Table 17.

Amphibians: Western Toad

Birds: Common Loon, Trumpeter Swan, Bald Eagle, Greater Sage-Grouse, Long-billed Curlew, and Flammulated Owl

Mammals: Townsend’s Big-eared Bat, Pygmy Rabbit, Great Basin Pocket Mouse, Gray Wolf, Grizzly Bear, and Canada Lynx

Conservation Concerns & Strategies

Conservation Concerns	Conservation Strategies
Habitat fragmentation and loss of connectivity as a result of human population growth/development	Identify and prioritize key wildlife linkage areas and work with other state and federal agencies, conservation groups, and landowners to restore wildlife connectivity

	Support strategic conservation easements/protection by conservation organizations or public agencies by providing advice and technical assistance
	Support state/federal tax incentives that discourage habitat fragmentation
	Participate in government and private conservation programs/activities that encourage and support private land stewardship
	Promote and further develop county ordinances that help plan for and manage development
	Support habitat-protecting conservation incentives directed at private landowners
	Manage for the sustainable use of recreational vehicles on public lands
Invasive or exotic plant species	Participate in partnerships to develop and implement weed control strategies, especially strategies that promote plant diversity
Altered fire regime	Work with public and private efforts to restore natural fire regimes to area
Range or forest management practices	Support government and private conservation activities that encourage and support sustainable land management practices (example; rest and rotation schedules)
Streamside residential development	Develop statewide riparian best management principles

References

Fargione, Joseph, Cynthia S. Brown, and David Tilman. 2003. Community assembly and invasion: an experimental test of neutral versus niche processes. *PNAS*. Vol. 100 (15):8916–8920.

Montana Partners for Fish & Wildlife. 2000. Centennial Valley. 4 pp. More information at <http://www.r6.fws/gpv/pfw/montana/mt3c.htm>.

The Nature Conservancy. 2005. Unpublished report.

The Nature Conservancy. 2000. Middle Rockies-Blue Mountains Ecoregional Conservation Plan. Prepared by the Middle Rockies-Blue Mountains Planning Team. 58 pp + appendices.

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.