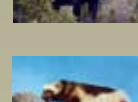


MADISON RANGE



SPECIES



GEOGRAPHIC BOUNDARY

The Madison Range is a broad mountainous area of core habitat extending from the Gallatin River on the east to the Madison River on the west, and from the Spanish Peaks area on the north to Henry's Lake and Raynold's Pass on the south.

IMPORTANCE OF LINKAGE AREA

This is the western edge of the Greater Yellowstone Ecosystem and functions as the first major stepping stone for wildlife dispersing westward out of Yellowstone National Park. It provides significant core habitat for grizzly bear, wolf, mountain lion, and wolverine, and supports major elk, mule deer, moose, bighorn sheep, and mountain goat populations. Critical calving/fawning and winter habitats for all of these big game species occur within or around the edges of this linkage area.

ECOLOGICAL SETTING

The general area is highly diverse and productive in vegetation with abundant water in rivers, streams, small wetlands, springs, and wet meadows. The Madison Range is a rather narrow line of tall, steep peaks that grade off to the east into a broader rolling topography that is deeply dissected with many drainages. Large but discontinuous coniferous forests dominated by Douglas-fir (*Pseudotsuga menziesii*), lodgepole pine (*Pinus contorta*), Engelmann spruce (*Picea engelmannii*) and subalpine fir (*Abies lasiocarpa*) are interspersed with open sagebrush/grasslands and parks. Aspen and abundant wildflowers are seasonal attractions for wildlife and people. Whitebark pine (*Pinus albicaulis*)

marks the treeline in many locations. Montane parkland/subalpine meadows dominate the highest elevations while exposed rocky outcroppings are evident throughout the mountain range. The elevation for this linkage area ranges from 5,000 feet at the base of the mountains to just over 11,000 feet.

WILDLIFE

This area is occupied core habitat for forest carnivores, particularly grizzly bear, wolves, and wolverine. Ongoing research conducted by the Wildlife Conservation Society is confirming long-distance movements by wolverine within this linkage, and between it and the Madison Range, the Gravelly Range, and the Centennial Mountains. The area provides year-long habitat for elk, mule deer, moose, antelope, bighorn sheep and mountain goats. The extremely productive summer habitats in the interior of the linkage are surrounded by major winter ranges at its perimeter, including two Montana Fish, Wildlife and Parks game ranges and the Turner Ranch. Primary elk calving areas occur along the western front of the Madison Range on the Bear Creek Wildlife Management Area, and from S.F. Indian Creek, south to Raynold's Pass. Elk and moose move seasonally from winter ranges near Indian Creek to summer habitats near Cache Creek. Elk and moose use winter range along the east side of the linkage between the Black Butte area (NW corner of YNP) and Big Sky at the north end. Important bighorn sheep habitat occurs along the lower end of the north unit of the Lee Metcalf Wilderness Area between Moose Creek Flats and Dudley Creek.

CONSERVATION THREATS

The checkerboard land ownership pattern (private/Forest Service) creates a significant threat for maintaining wildlife habitat and connectivity. Private land development is a threat everywhere in this linkage area, particularly on the north and east end because of the proximity to Big Sky and the Gallatin Canyon. Increasing human population and expanding human activity in this area is leading to increasing human-wildlife conflicts, particularly with black bear. Some interviewees expressed that this conflict has increased to the point that these areas are mortality sinks for large carnivores. The entire area between Ophir and Moonlight Basin is likely to be developed in the near future. Road development to access private lands is further fragmenting wildlife habitat and movement corridors. Highway 191 in Gallatin Canyon bisects core habitats in the Madison and Gallatin Ranges, and substantial numbers of animal-vehicle

collisions are occurring. Significant mortality in Douglas-fir and lodgepole forests from disease, insect infestations, drought and increased wild fire hazard, threaten forest cover and wildlife habitat quality.

CONSERVATION OPPORTUNITIES

Much of this linkage area is either designated as wilderness or is in public ownership. The Turner Ranch adjoining the Spanish Peaks provides major wildlife conservation support. Numerous conservation easements are in place, and a large conservation capacity exists because of efforts by groups in the Bozeman area and in the Madison Valley, including the Madison Valley Ranchlands Group, The Nature Conservancy, and Wildlife Conservation Society.

