

SWAN VALLEY



SPECIES



GEOGRAPHIC BOUNDARY

The Swan Valley linkage area is located east of Flathead Lake between the Swan Range and the Mission Mountains. This long linkage area spans the Swan Valley from the Seeley-Swan divide near Summit Lake to the southern portion of Swan Lake. The Swan River State Forest is located in the northern portion of the linkage area. There are numerous lakes in the linkage area. Highway 83 runs north-south through the center of the linkage area. The town of Swan Lake is located in the northern portion of the linkage at the foot of Swan Lake.

IMPORTANCE OF LINKAGE AREA

The Swan Valley linkage area connects the Swan Range and Mission Mountains. It links the Bob Marshall Wilderness complex with the Mission Mountains wilderness areas. The linkage area also provides north-south linkage from the Northern Continental Divide Ecosystem to the Salmon-Selway and Greater Yellowstone ecosystems. It is both linkage habitat and occupied habitat by carnivores and ungulates. Biologists gave the Swan Valley linkage area the highest rating in the Crown of the Continent conservation area.

ECOLOGICAL SETTING

This linkage includes the Swan River valley above Swan Lake. This forested valley is characterized by widespread timber harvest and road networks. The checkerboard pattern of land ownership has resulted in a broad mosaic of harvested and unharvested forest, interspersed with natural openings, and river riparian and wetland habitat. Some forest openings have been converted to pasture land. Highway 83 bisects the linkage. Residential development is

scattered along the highway along with the small communities of Condon and Salmon Prairie. Abundant precipitation in the Swan Valley and adjoining mountains supports a widely diverse and highly productive forest environment. Engelmann spruce (*Picea engelmannii*), western red cedar (*Thuja plicata*) are the dominant conifers in the river floodplain, along with Douglas-fir (*Pseudotsuga menziesii*), lodgepole pine (*Pinus contorta*), aspen (*Populus tremuloides*) and black cottonwood (*P. trichocarpa*). A wide variety of shrub species is present in the understory including red alder (*Alnus rubra*), water birch (*Betula occidentalis*), and various currants (*Ribes* spp.), roses (*Rosa* spp.), and willows (*Salix* spp.). Adjoining mountain slopes support mixed stands of Douglas-fir, grand fir (*Abies grandis*), western hemlock (*Tsuga heterophylla*), Engelmann spruce, lodgepole pine, and subalpine fir (*Abies lasiocarpa*) depending on site and elevation. Elevations in the linkage range from 3,200 feet to over 8,000 feet.

WILDLIFE

The Swan Valley linkage area offers numerous swaths of contiguous, undeveloped habitat with low road density and low levels of human development. The valley contains a rich forested, pothole habitat complex. Four high quality linkage areas have been developed by the U.S. Fish and Wildlife Service and Plum Creek for grizzly bear movement. Year round, grizzly bears and black bears are known to not only move through, but occupy, the Swan Valley linkage area. There is concentrated grizzly bear use of the Many Lakes area, the Seeley-Swan Divide, the Lost Lake/Silly Creek area, the Glacier/Elk Creek areas, Lion Creek Hill, and Lindburgh

CONSERVATION OPPORTUNITIES

Lake. Carnivores and ungulates move east-west across the Seeley-Swan divide. They also move north-south and funnel through areas around the lakes. The Swan Valley linkage area contains numerous, high-quality **bull trout** drainages. Lynx occupy the Swan Valley, but because there is less snow, it is not the stronghold that the Seeley/Clearwater area is. **White-tailed deer** and **elk** move seasonally through the linkage area to the Bob Marshall Wilderness complex. There are **wolverine** trapping records documenting their historic presence in the area and biologists still suspect they use the linkage area. Large and small carnivores cross near the Seeley-Swan Divide, moving through Owl and Beaver Creeks. **Grizzly bears** move from Swan Lake to Porcupine Creek; this is the northernmost connection between the Swans and the Missions. There is a high rate of roadkill on Highway 83 at this crossing area.

CONSERVATION THREATS

The Swan Valley has the most significant problem with bears and sanitation issues in the Northern Continental Divide ecosystem. Since 2004, there have been four female grizzly bears killed due to human-caused mortality from food, garbage and other attractants that bring bears into human interactions. Increasing subdivision and development in the Swan Valley area will likely increase these conflicts. By far, the greatest threat to wildlife connectivity comes from the possible development of Plum Creek Timber Company lands. Plum Creek is the major private landowner in the area; their land has been and could continue to be converted from industrial timberlands to subdivisions as the company divests itself of many of its land holdings in western Montana. Section 19 was identified as critical wildlife connectivity habitat that is owned by Plum Creek and threatened by divestment and development. Public intolerance of carnivores threatens grizzly bears, wolves, and black bears moving through the linkage area. Highway 83 is receiving increasing local and commuter traffic and higher speeds; it remains a concern for both humans and wildlife because of a high rate of animal-vehicle collisions.

Highway crossing structures, such as wildlife underpasses or overpasses, are an opportunity to improve wildlife movement across Highway 83. There are opportunities for the Seeley-Swan area to be an ecological mitigation banking area for the Montana Department of Transportation, where conservation mitigation can be initiated as mitigation for projects outside of the area. Reducing traffic speeds on the highway is another opportunity to reduce animal-vehicle collisions and improve human safety. Land acquisition and conservation easements could maintain wildlife security and movement on key blocks of private lands. Several conservation groups and state and federal agencies are working with Plum Creek to acquire key lands; there are opportunities to target conservation in the Swan Valley linkage area because of the large amount of Plum Creek holdings. There are a block of conservation easements near Lindbergh Lake that could be further built upon to make a permanently secure habitat linkage in that area. Additional education and outreach efforts about sanitation issues and conflicts with bears are needed to decrease the number of attractants for bears around houses and restaurants. There are other opportunities, such as cooperatively funded sanitation and fencing projects, that may help people live with wildlife more successfully. There are numerous collaborative efforts and working groups in the Swan, such as the Clearwater-Swan Working group, programs through the Swan Ecosystem Center, and the Swan Conservation Agreement. Montana Fish, Wildlife and Parks bear specialists are working on attractant reductions. There is landowner interest in conservation and there has been a lot of money and attention given to conservation projects in the Swan, which increases the opportunities for additional conservation.

