

# Line Creek Plateau Research Natural Area

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On June 29, 2000, the Regional Foresters of the Northern and Rocky Mountain Regions of the U.S. Forest Service signed a landmark decision that greatly advanced the protection of biological diversity and natural areas in Montana and Wyoming -- they officially designated the Line Creek Plateau Research Natural Area (RNA). The decision was subsequently appealed, but was affirmed earlier this year. Ecologists and managers on the Custer and Shoshone National Forests deserve a huge amount of credit for their diligence in securing this important designation.

The Line Creek Plateau RNA lies in the Beartooth Mountains, and encompasses a spectacular array of alpine and montane plant communities. In the Montana portion of the RNA, one shrubland, nine alpine, and seven conifer forest vegetation types are protected, fulfilling a total of 17 plant community and habitat targets needed for the Northern Region RNA network. These targets include alpine grasslands, alpine wetlands, snowbed communities, dry and moist forests, and a representation of the mountain big sagebrush/Idaho fescue shrubland (*Artemisia tridentata vaseyana/Festuca idahoensis*). Two of the alpine plant communities in the RNA, Idaho fescue/Ross's avens (*Festuca idahoensis/Geum rossii*) and greenleaf willow/tufted hairgrass (*Salix glauca/Deschampsia cespitosa*), are not found elsewhere in Montana.

In addition, Line Creek Plateau RNA permanently protects numerous rare plant populations. A total of 24 species of vascular plants tracked by the Montana Natural Heritage Program (19 species) and the Wyoming Natural Diversity Database (5 species) are known to occur in the RNA. These include disjunct populations of such arctic and circumboreal species as *Draba porsildii* (Porsild's

draba), *Pedicularis oederi* (Oeder's lousewort), and *Eriophorum callitrix* (beautiful cottongrass). The RNA also contains one of only two populations of *Salix barrattiana* (Barratt's willow) in the continental U.S. A total of 531 vascular plant species have been recorded. Habitat for several threatened, endangered or sensitive animal species, such as the gray wolf, grizzly bear, lynx, and wolverine, is present as well. Line Creek Plateau RNA has the distinction of being the largest designated natural area in the U.S. Forest Service RNA network, nearly twice the size of the next largest RNA in Alaska.

The area protects a total of 22,422 acres, with 19,369 acres lying on the Custer National Forest in Montana, and 3,053 acres on the Shoshone National Forest in Wyoming. Nationally the Forest Service has designated approximately 450 RNAs, encompassing a total of over 570,000 acres. The Northern Region manages 104 RNAs, totaling approximately 147,350 acres.

The next time you travel over the Beartooth Highway, which traverses the Line Creek Plateau RNA, you can enjoy the incredible alpine scenery and know it is protected in perpetuity by its inclusion in this fabulous network of federal natural areas.