

Rinker Rock Creek Ranch General Site Description

University of Idaho Rinker Rock Creek Ranch (hereafter, the ranch) is in the foothills of the Soldier Mountains in Blaine County, Idaho approximately 5.5 miles southwest of the town of Hailey. The ranch comprises approximately 22,000 acres; approximately 10,400 acres of deeded land are under control of the University of Idaho and the remaining approximately 10,000 acres are owned and managed by the Bureau of Land Management and Idaho Department of Lands. The entirety of the ranch is collaboratively managed by University of Idaho, The Nature Conservancy and Wood River Land Trust, with input from an advisory board comprised of many stakeholder groups.

- Vegetation The ranch is dominated by mountain big (*Artemesia tridentata vaseyana*) and low sagebrush (*A. arbsuscula*) interspersed with dry and mesic meadows and stands of quaking aspen (*Populus tremuloides*). Riparian areas typically include willows (*Salix spp.*), cottonwood (*Populus spp.*), sub-irrigated herbaceous meadows or flood-irrigated cattle pastures (O'Sullivan and York 2013).
- Elevation Elevation at the property is 4,855 6,100 ft asl (Rosen 2013).
- Precipitation Mean annual precipitation in the area is 330 mm (30-yr average; U.S. Climate Data, Picabo, ID).
- **Temperature** Mean high temperatures in January and July are -.9°C and 29.6°C, respectively; mean low temperatures in January and July are -13.1°C and 8.8°C.
- **Riparian resources** There are numerous springs and seeps throughout the property. The main stem of Rock Creek is fed by six perennial or intermittent tributaries.

Property uses

The ranch is primarily used for cattle grazing but is also frequently visited by recreationists for hiking, biking and hunting. The ranch participates in the Idaho Fish and Game <u>Access Yes</u> program to provide hunting access for the public; however, greater sage-grouse are excluded from the list of species that can be harvested and trapping is not allowed (O'Sullivan and York 2013).

Ecoregions

The ranch occurs along the intersection of the following ecoregions (McGrath et al. 2002):

- Level III 10.1.8 Snake River Plain; 6.2.15 Idaho Batholith
- Level IV
 - Ecoregion 12c The Camas Prairie ecoregion is a cold, wet valley used for small grain and alfalfa farming, pasture, range and wildlife refuge. It is flanked by the foothills of Ecoregions 12f and 16f. These foothills trap mountain runoff in Ecoregion 12c. Resultant wet soils and flooding occur and are local and seasonal problems. Frigid Mollisols are common and are colder than the soils of the lower Treasure Valley (12a). Wet bottomlands support meadow grasses and sedges. Alluvial fan terraces are covered by grasses and sagebrush.
 - Ecoregion 16f The Foothill Shrublands-Grasslands ecoregion is in the rain shadow of the high mountains. Its hills and benches are dry, treeless, and covered by shrubs and grasses. The vegetation mosaic is unlike the open forests of Ecoregion 16k and the mountain sagebrush/forest mosaic of the lithologically distinct Ecoregion 16d. Land use is mostly grazing but rural residential development is expanding.

Ecological sites

Eight different ecological sites are present on the ranch (USDA 2013; O'Sullivan and York 2013). They include:

- Loamy 12-16 ARTRV/FEID-PSSPS
- Clayey 12-16 ARARL/PSSPS

- South Slope Fractured 12-16 ARTRV/PSSPS
- South Slope Gravelly 12 -16 ARTRV/PSSPS
- North Slope Loamy 16-22 ARTRV/FEID
- Meadow DECA18-CANE2
- Wet Meadow Carex-Juncus
- Dry Meadow 8-15 PONE/PHAL2

Dominant sites on the property are Loamy 12-16 ARTRV/FEID-PSSPS and Clayey 12-16 ARARL/FEID in uplands, and Meadow DECA18-CANE2 in mesic areas (O'Sullivan and York 2013).

Meadow and riparian descriptions

The three most common soil types present in meadow pastures in order of prevalence are Marshdale-Bruneel loam, Bruneel loam and Simonton loam. Wet meadow characteristics are dominant with occasional dry meadow prevalence. Wet meadow carex-juncus (sedge-rush), meadow deca18-cane2 (tufted hairgrass-Nebraska sedge) and loamy provisional ecological sites dominate (USDA and NRCS n.d.).

Plant community composition in meadows and riparian areas varies as a function of historical land use. Mesic meadow plant communities on the main stem of Rock Creek are dominated by meadow foxtail (*Alopecurus pratensis*), timothy (*Phleum pretense*), Nebraska sedge (*Carex nebrascensis*) and willows (*Salix spp*.). Other facultative species that may be found in meadow habitats include western chokecherry (*Prunus virginiana*), quaking aspen (*Populus tremuloides*), common snowberry (*Symphoricarpos albus*), elderberry (Sambucus spp.) and forbs such as prickly lettuce (*Lactuca serriola*), common dandelion (*Taraxacum officinale*), fiddleneck (*Amsinckia spp*.), western yarrow (*Achillea millefolium*), tall tumblemustard (*Sisymbrium altissimum*) and thistle (*Cirsium* spp.).

Noxious weeds

Several species of noxious weeds occur at the ranch, including diffuse knapweed (*Centaurea diffusa*), scotch thistle (*Onopordum acanthium*), Canada thistle (*Cirsium arvense*) and rush skeletonweed (*Chondrilla juncea*).

Wildlife and habitat

The ranch provides habitat for many species of fish and wildlife. Migration corridors used by mule deer (*Odocoileus hemionus*) and elk (*Cervus canadensis*) are present on the ranch (O'Sullivan and York 2013). The ranch is home to at least five active greater sage-grouse leks (T. Johnson, unpublished data), and comprises nesting and brood-rearing habitat. Other species that occur regularly at the ranch include pronghorn (*Antilocapra americana*), moose (*Alces alces*), American black bear (*Ursus americanus*) and mountain lion (*Puma concolor*). A 1989 IDFG survey identified the following fish species in Rock Creek: Sculpin (likely Wood River sculpin; *Cottus leiopomus*), redside shiner (*Richardsonius balteatus*), sucker (likely bridgelip sucker; *Catostomus columbianus*), dace (likely longnose dace [*Rhinichthys osculus*]), hatchery and wild rainbow trout (*Onchorhynchus mykiss*), and brown trout (*Salmo trutta*; O'Sullivan and York 2013).

Fire

Large fires occurred at the ranch in 1992 and 1996. The most recent fire occurred in 2012 and burned only 124 acres in the northeast portion of the property (O'Sullivan and York 2013).

Literature cited

- McGrath, C.L., Woods, A.J., Omernik, J.M., Bryce, S.A., Edmondson, M., Nesser, J.A., Shelden, J., Crawford, R.C., Comstock, J.A., and Plocher, M.D. 2002. Ecoregions of Idaho: Reston, Virginia, U.S. Geological Survey (map scale 1:1,350,000).
- O'Sullivan, T. and K. York. 2013. NRCS GRP Baseline Report: Rock Creek Ranch (Rinker Trust) Blaine County, Idaho. 17 pp.
- Rosen, J. 2013. Phase 1 Environmental Site Assessment of 10,400 acres along Rock Creek: Blaine County, Idaho. 94 pp.