

LOCATION REDROB

CO+WY

Established Series

Rev.GB/JPP

03/2003

REDROB SERIES

The Redrob series consists of very deep, somewhat poorly drained soils moderately deep to gravel. Redrob soils formed in mixed alluvium on low terraces and flood plains and have slopes of 0 to 6 percent. Mean annual temperature is about 40 degrees F., and mean annual precipitation is about 16 inches.

TAXONOMIC CLASS: Fine-loamy over sandy or sandy-skeletal, mixed, superactive, calcareous, frigid Fluvaquentic Endoaquolls

TYPICAL PEDON: Redrob loam in native range and scattered stands of cottonwood trees. (Colors are for dry soil unless otherwise stated.)

A1--0 to 4 inches; grayish brown (10YR 5/2) loam, dark brown (10YR 3/3) moist; weak coarse platy structure parting to moderate fine subangular blocky; slightly hard, very friable, slightly sticky; common very fine and fine roots; few very fine tubular pores; slightly effervescent; slightly alkaline; abrupt smooth boundary. (2 to 6 inches thick)

A2--4 to 17 inches; grayish brown (10YR 5/2) loam, very dark grayish brown (10YR 3/2) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly plastic; common very fine and fine roots; few very fine tubular pores; strongly effervescent; slightly alkaline; clear wavy boundary. (6 to 14 inches thick)

ACg--17 to 35 inches; light brownish gray (10YR 6/2) stratified loam, sandy loam and loamy sand, grayish brown (10YR 5/2) moist; faint variegated very dark gray and dark brown strata (10YR 3/1 and 3/3) moist; common fine and medium distinct redox features of strong brown (7.5YR 5/6) and yellowish brown (10YR 5/6) moist; massive; slightly hard and soft, very friable; few fine and medium roots; strongly effervescent; slightly alkaline; clear wavy boundary. (10 to 20 inches thick)

2C--35 to 60 inches; brown (10YR 4/3) very gravelly loamy sand and sand, dark grayish brown (10YR 4/2) moist; few medium distinct redox features of strong brown (7.5YR 5/6) and yellowish brown (10YR 5/6) moist; 45 percent coarse pebbles; neutral.

TYPE LOCATION: Rio Blanco County, Colorado; 150 feet south and 730 feet east of the NW corner of Sec. 29, T. 1 N., R. 93 W. U.S.G.S. Rattlesnake Mesa quad.; Lat. 40 degrees, 01 minutes, 59 seconds N., and Long. 107 degrees, 51 minutes, 17 seconds W.

RANGE IN CHARACTERISTICS: Mean annual soil temperature ranges from 40 to 46 degrees F. The solum ranges from 15 to 40 inches thick over the 2C horizon. The mollic epipedon is 8 to 20 inches thick. Depth to calcareous material ranges from 0 to 6 inches. Mottles range from few to many, fine to large, and distinct or prominent above 40 inches. Rock fragments in the solum range from 0 to 25 percent, and in some pedons they may have enough rock fragments to be a gravelly type. The upper part of the particle-size control section ranges from 18 to 27 percent clay, with fine sand and coarser ranging from 15 to 45 percent. A water table fluctuates within the 2C horizon and rises to within one foot of the surface during peak spring runoff.

The A horizon has hue of 7.5YR through 2.5Y, value of 4 or 5 dry, 2 or 3 moist, and chroma of 1 or 2. It is slightly alkaline or moderately alkaline.

The AC horizon has hue of 10YR or 2.5Y, value of 3 through 6 dry, and 2 through 5 moist. It is stratified loam, sandy loam and loamy sand. This horizon is slightly alkaline or moderately alkaline.

The 2C horizon has hue of 10YR through 5Y. Rock fragments range from 35 to 70 percent and are mainly pebbles but include some cobbles and a few stones. This horizon is neutral through moderately alkaline.

COMPETING SERIES: There are no competing series in this subgroup and family at present.

GEOGRAPHIC SETTING: Redrob soils are on low terraces and flood plains and have slope gradients of 0 to 6 percent. The soils formed in mixed alluvium from a variety of sources. The mean annual temperature ranges from 38 to 44 degrees F., and the mean annual precipitation ranges from 14 to 18 inches. Elevation ranges from 5,800 to 7,800 feet. The frost-free period is 80 to 105 days. In Wyoming annual precipitation ranges down to 12 inches.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Shawa](#), [Straw](#), and [Vanda](#) soils. Shawa and Straw soils are well drained soils on higher terrace and fan positions and lack a sandy and gravelly 2C horizon within the particle-size control section. Vanda soils lack a mollic epipedon and a have a fine particle-size control section.

DRAINAGE AND PERMEABILITY: Somewhat poorly drained; slow or medium runoff; moderate permeability in the solum and rapid in the substratum.

USE AND VEGETATION: The soil is used mainly for hay production, livestock grazing and pasture. Small areas are used for wildlife habitat. The vegetation is cottonwood trees and an understory of western wheatgrass, sedges, basin wildrye, slender wheatgrass, redbud, roses, rushes and willows.

DISTRIBUTION AND EXTENT: Redrob soils are of small extent along major drainages in northwestern Colorado and adjacent parts of Wyoming.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Bozeman, Montana

SERIES ESTABLISHED: Rio Blanco County, Colorado, 1979.

REMARKS: This revision updates the classification from a Fluvaquentic Haplaquoll to a Fluvaquentic Endoaquoll. (1992 Keys to Soil Taxonomy.) Diagnostic features include a mollic epipedon from 0 to 17 inches and sandy-skeletal material at 35 inches. It has stratification in the 17 to 35 inch layer, redox features in all layers below 17 inches; an irregular decrease in organic carbon below 17 inches; an aquic moisture regime; and a frigid temperature regime. Last revised by the state on 4/95.

The superactive cation exchange activity class was added in 03/2003 to the taxonomic classification by the National Soil Survey Center on request of the Lakewood MLRA office, without review of the soil series property data. The remainder of this document has not been updated.

National Cooperative Soil Survey
U.S.A.