

LOCATION LINSLAW

OR

Established Series  
Rev. WRP/DRJ/RWL  
08/2006

## LINSLAW SERIES

The Linslaw series consists of very deep, somewhat poorly drained soils that formed in loamy glaciolacustrine deposits and clayey alluvium. These soils are along drainageways, on terraces and on colluvial fans. Slopes are 0 to 8 percent. The mean annual precipitation is 50 inches and the mean annual temperature is 52 degrees F.

**TAXONOMIC CLASS:** Fine, mixed, superactive, mesic Aquultic Haploxeralfs

**TYPICAL PEDON:** Linslaw loam, pasture and woodland. (Colors are for moist soil unless otherwise noted.)

**Ap**--0 to 5 inches; very dark grayish brown (10YR 3/2) loam, light brownish gray (10YR 6/2) dry; moderate fine granular structure; slightly hard, friable, slightly sticky and slightly plastic; many fine roots; common fine irregular pores; strongly acid (pH 5.4); abrupt smooth boundary. (4 to 8 inches thick)

**A**--5 to 16 inches; dark brown (10YR 3/3) loam, pale brown (10YR 6/3) dry; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common fine roots; many very fine tubular pores; common black stains in pores; common fine faint brown (10YR 5/3) masses of iron accumulation; strongly acid (pH 5.4); clear smooth boundary. (6 to 12 inches thick)

**Bt**--16 to 28 inches; pale brown (10YR 6/3) clay loam, very pale brown (10YR 7/3) dry; moderate medium subangular blocky structure; hard, firm, moderately sticky and moderately plastic; few fine roots; many very fine tubular pores; few fine faint light brownish gray (10YR 6/2) iron depletions and common medium prominent yellowish red (5YR 5/6) masses of iron accumulation; few distinct clay films; strongly acid (pH 5.3); clear wavy boundary. (9 to 15 inches thick)

**BCt**--28 to 42 inches; light olive brown (2.5Y 5/3) clay loam, very pale brown (10YR 7/3) dry, moderate fine prismatic structure; hard, firm, moderately sticky and moderately plastic; few fine roots; many fine and very fine tubular pores; many medium faint light brownish gray (2.5Y 6/2) iron depletions and prominent yellowish brown (10YR 5/6) masses of iron accumulation; light gray (2.5Y 7/2) silt and/or sand coatings on prism faces; few distinct clay films in pores and on surfaces of peds; strongly acid (pH 5.3); abrupt wavy boundary. (10 to 18 inches thick)

**2C1**--42 to 56 inches; variegated yellowish red (5YR 5/6), yellowish brown (10YR 5/6), and

gray (10YR 6/1) clay; massive, very hard, very firm, moderately sticky and very plastic; few fine roots; common very fine tubular pores; strongly acid (pH 5.4); clear wavy boundary. (12 to 16 inches thick)

**2C2**--56 to 60 inches; grayish brown (2.5Y 5/2) sandy clay loam, light gray (2.5Y 7/2) dry; massive; hard, friable, slightly sticky and slightly plastic; common very fine tubular pores; many coarse prominent strong brown (7.5YR 5/6) masses of iron accumulation; moderately acid (pH 5.6).

**TYPE LOCATION:** Lane County, Oregon; approximately 1 1/4 miles south of Fern Ridge Reservoir, north of Perkins Road; 1,200 feet south and 2,200 feet east of the northwest corner, section 5, T. 18 S., R. 5 W., W.M. Veneta, Oregon USGS quad. Latitude 44 degrees, 02 minutes, 15 seconds N.; Longitude 123 degrees, 19 minutes, 14 seconds W.; NAD 27.

**RANGE IN CHARACTERISTICS:** Soils are usually moist but are dry between depths of 4 and 12 inches for 45 to 60 consecutive days following the summer solstice. The mean annual soil temperature is 52 to 55 degrees F. The depth to bedrock is greater than 60 inches. The thickness of the solum ranges from 30 to 48 inches. Depth to aquic conditions with chroma of 2 or less with redox concentrations ranges from 10 to 20 inches. The pscs has 35 to 45 percent clay and 0 to 5 percent rock fragments.

The A horizon has hue of 10YR or 7.5YR, value of 3 or 4 moist and chroma of 2 or 3 moist and dry. It has weak or moderate granular and subangular blocky structure. Reaction is moderately acid or strongly acid.

The Bt horizon and BCt horizon has hue of 2.5Y or 10YR, value of 4 to 6 moist and 6 or 7 dry. It has faint to distinct iron depletions and distinct to prominent masses or iron accumulation. Texture is clay loam or clay with 35 to 45 percent clay. Reaction is strongly acid or very strongly acid.

The 2C horizon has variegated colors with hue of 2.5Y, 10YR, 7.5YR, or 5YR, value of 4 to 6, 6 or 7 dry and chroma 1 to 6 moist and dry. Texture in the upper part is clay and the lower part is sandy loam or sandy clay loam. Reaction is moderately acid to very strongly acid.

**COMPETING SERIES:** These are the [Dupee](#), [Santiam](#), and [Zing](#) series. Dupee lack the stratified, very firm clayey and sandy 2C horizon and have bedrock at 40 to more than 60 inches. Santiam soils have silty A and upper B horizons, and have 5 to 25 percent partially weathered gravel in the lower part of the B horizon and in the 2C horizon. Zing soils have an umbric epipedon, a neutral Bt horizon, and lack the very firm clayey and sandy 2C horizon.

**GEOGRAPHIC SETTING:** Linslaw soils are along drainageways dissecting old terraces and colluvial fans in the Willamette Valley at elevations of 250 to 800 feet. They have slopes of 0 to 8 percent. The soils formed in stratified loamy glaciolacustrine deposits and clayey mixed alluvium. The climate is characterized by warm, wet winters and hot, dry summers. The mean annual precipitation is 40 to 60 inches. The mean January temperature is 39 to 40 degrees F. and the mean July temperature is 65 to 67 degrees F. The mean annual temperature is 50 to 54

degrees F. The frost-period is 165 to 210 days.

**GEOGRAPHICALLY ASSOCIATED SOILS:** These are the [Noti](#), [Salkum](#), [Santiam](#), and [Veneta](#) soils. Noti soils are poorly drained and dominantly have chroma of 2 or less throughout their profiles, and lack a Bt horizon. Noti soils occur in depressions on terraces. Salkum soils are well drained and lack mottles with chroma of 2 or less above a depth of 30 inches and are on higher convex terraces. Veneta soils lack redox features with chroma of 2 or less in the upper 30 inches of the profile, and occur on linear to concave terraces.

**DRAINAGE AND PERMEABILITY:** Somewhat poorly drained; slow runoff; moderately slow permeability in the Bt horizon and slow permeability in the 2C horizon. When Linslaw soils are in drainageways, they are subject to rare flooding. An apparent water table is at its uppermost level from December to April.

**USE AND VEGETATION:** The primary uses are pasture, hay, row crops and cane berries. Native vegetation is grasses, sedges, willows, and scattered Douglas-fir, Oregon white oak, and ponderosa pine.

**DISTRIBUTION AND EXTENT:** Terraces of the Willamette Valley, Oregon; MLRA 2. The series is not extensive.

**MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE:** Portland, Oregon

**SERIES ESTABLISHED:** Lane County, Oregon, 1981.

**REMARKS:** Diagnostic horizons and features include:

Ochric epipedon

Argillic horizon - the zone from 16 to 42 inches.

Aquultic feature - chroma of 2 or less (redox depletions) within 20 inches of the surface and an argillic horizon with a base saturation (sum) of less than 75 percent in one or more horizons within 30 inches. The Bt horizon has less than 50 percent redox depletions with redox concentrations.

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U.S.A.