

■ Range (Ecological) Sites

Author's note: The Natural Resources Conservation Service (NRCS) is presently updating its range site descriptions. The new site descriptions will be called Ecological Site Descriptions (ESD) and will contain more extensive plant community and related data.

An ecological (range) site is a distinctive kind of rangeland based on present or potential natural vegetation, potential productivity, and/or soils and other environmental factors. The kind and amount of vegetation produced on a range site will vary within an area due to soil type differences and landscape position (Figure 1).

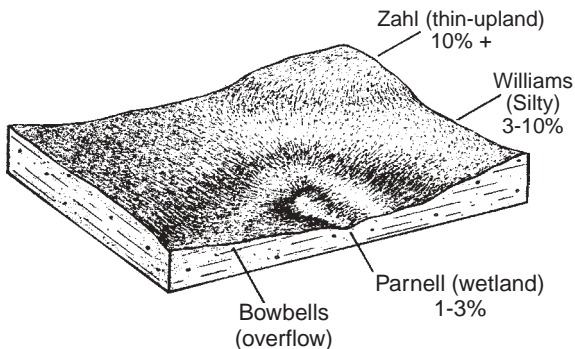


Figure 1. Landscape features and location of all soils types from a common soil sequence.

To help identify ecological sites, the most common sites are illustrated below with location found in the landscape, major vegetation species associated with the site, and recommended stocking rate for sites in high good to excellent condition. Lowest levels are for western North Dakota and highest levels for eastern North Dakota and western Minnesota.

Tip: Actual stocking rates for these sites will vary from ranch to ranch depending on actual site condition.

Overflow

Location: On nearly level swales and depressions receiving additional moisture from adjacent slopes.

Major plant species: big bluestem, switchgrass, green needlegrass, western wheatgrass, porcupine grass, Indiangrass, goldenrod species, cudweed sagewort, American licorice, western snowberry.

Recommended stocking rate: 0.9 AUMs/acre (western North Dakota) – 1.4 AUMs/acre (eastern North Dakota, western Minnesota).

Saline lowland

Location: On saline soils occurring in depressions and along stream channels that receive additional moisture.

Major plant species: western wheatgrass, nuttall alkaligrass, slender wheatgrass, inland saltgrass, foxtail barley, silverweed cinquefoil, pursue seepweed, curly dock.

Recommended stocking rate: 0.9 AUMs/acre (western North Dakota) – 1.2 AUMs/acre (eastern North Dakota, western Minnesota).

Sands

Location: On loamy fine sand textured soils occurring on nearly level to rolling landscapes.

Major plant species: needle-and-thread, prairie sandreed, sand dropseed, blue grama, upland sedges, western wheatgrass, purple prairieclover, green sagewort, Missouri goldenrod, fringed sagewort, prairie rose.

Recommended stocking rate: 0.7 AUMs/acre (western North Dakota) – 1.2 AUMs/acre (eastern North Dakota, western Minnesota).

Sandy

Location: On fine sandy loam textured soils occurring on nearly level to strongly rolling uplands and river terraces.

Major plant species: needle-and-thread, prairie sandreed, green needlegrass, western wheatgrass, blue grama, upland sedges, western wheatgrass, western ragweed, green sagewort, Missouri goldenrod, fringed sagewort, prairie coneflower, heath aster, lead plant, prairie rose.

Recommended stocking rate: 0.7 AUMs/acre (western North Dakota) – 1.1 AUMs/acre (eastern North Dakota, western Minnesota).

Shallow-to-gravel

Location: On medium to moderately coarse textured soils overlying sand and gravel on nearly level to gently sloping uplands and stream terraces.

Major plant species: needle-and-thread, western wheatgrass, blue grama, prairie junegrass, upland sedges, rush skeletonweed, dotted gayfeather, black samson, fringed sagewort, prairie rose.

Recommended stocking rate: 0.5 AUMs/acre (western North Dakota) – 0.7 AUMs/acre (eastern North Dakota, western Minnesota).

Silty

Location: On fine textured soils occurring on gentle undulating to strongly rolling uplands and high stream terraces.

Major plant species: green needlegrass, western western, needle-and-thread, blue grama, upland sedges, western ragweed, silverleaf scurfpea, fringed sagewort, prairie coneflower, western snowberry, prairie rose.

Recommended stocking rate: 0.7 AUMs/acre (western North Dakota) – 1.1 AUMs/acre (eastern North Dakota, western Minnesota).

Thin upland

Location: On medium textured soils occurring on hill tops and steep uplands.

Major plant species: little bluestem, sideoats grama, needle-and-thread, prairie sandreed, western wheatgrass, porcupine grass, plains muhly, blue grama, upland sedges, black samson, dotted gayfeather, Missouri goldenrod, purple prairieclover, prairie rose, broom snakeweed.

Recommended stocking rate: 0.7 AUMs/acre (western North Dakota) – 1.0 AUMs/acre (eastern North Dakota, western Minnesota).

Wet meadow

Location: On poorly drained medium and fine textured soils occurring in swales and depressions of rolling prairies.

Major plant species: prairie cordgrass, northern reedgrass, switchgrass, fowl bluegrass, lowland sedges, baltic rush, common wild mint, tall white aster, curly dock.

Recommended stocking rate: 1.6 AUMs/acre (western North Dakota) – 1.8 AUMs/acre (eastern North Dakota, western Minnesota).

Wet Land

Location: On poorly drained fine textured soils occurring in shallow basins and depressions of upland prairies.

Major plant species: common reedgrass, prairie cordgrass, cattails, reed canarygrass, northern reedgrass, lowland sedges, baltic rush, smartweed species, curly dock, willow species.

Recommended stocking rate: 2.0 AUMs/acre (western North Dakota) – 2.6 AUMs/acre (eastern North Dakota, western Minnesota).