RANGE SITE CRITERIA

Range sites are kinds of rangeland that differ from each other in their ability to produce a significantly different kind or amount of climax or original vegetation. Only natural grasslands are classified as range sites. In order to fully designate a range site, a soil-group name is combined with the precipitation zone and geographic location; e.g., Sandy, 10-14" p.z., Glaciated Plains, Montana.

The following range soil-groups are listed in presumed order of natural productivity, considering total air-dry weight of all herbage produced through the entire year by all seed plants per unit of area, in ordinary years under climax plant cover.

I. Soil-groups that can produce more herbage than ordinary range uplands because of plainly superior soil moisture availability.

WL - WET LAND: Lands where seepage, ponding, etc. raises the water table to above the surface during only a part of the growing season. Too wet for cultivated crops but too dry for common reed, cattails, or true aquatics.

Sb - SUBIRRIGATED: Lands with an effective subsurface ground water table and water rarely over the surface during the growing season.

SL - SALINE LOWLAND: Subirrigated and overflow lands where salt and/or alkali accumulations are apparent and salt tolerant plants occur over a major part of the area.

Ov - OVERFLOW: Areas regularly receiving more than normal soil moisture because of run-in or stream overflow.

II. Soil-groups with no obvious soil or moisture limiting factors. The vegetation can make a normal response to climate.

Sa - SANDS: Sands and loamy sands more than 20 inches deep.

Sy - SANDY: Coarse to fine sandy loams more than 20 inches deep.

Si - SILTY: Soils more than 20 inches deep of very fine sandy loam, loam, or silt loam. This includes soils with two inches or more loam or silt loam over clayey subsoils.

Cy - CLAYEY: Granular clay loam, silty clay loam, silty clay, sandy clay or clay more than 20 inches deep.

III. Soil-groups with characteristics or topographic features that limit moisture-holding capacity or affect infiltration rates.

TH - THIN HILLY: Loamy or clayey soils on steep or hilly landscapes with a thin A horizon and weak or no structure in the subsoil,

but with significant root penetration deeper than 20 inches. It is usually calcareous but contains less than 15 percent calcium carbonate.

St - STONY: Soils more than 20 inches deep with cobbles or stones occupying 40 to 80 percent of the surface.

Ly - LIMY: Soils more than 20 inches deep that are nearly white and very limy (15 percent or more calcium carbonate) within four inches of the surface.

SwC - SHALLOW CLAY: Shallow granular clay soils that are 10 to 20 inches deep to underlying shale or nearly impervious clays.

SwG - SHALLOW TO GRAVEL: Soils that are 10 to 20 inches deep to sandy gravel. Few roots penetrate deeper than 20 inches.

Sw - SHALLOW: Soils 10 to 20 inches deep to hard rock or soft beds of decomposed granite, siltstone or sandstone. Few roots penetrate deeper than 20 inches.

Ps - PANSPOTS: Areas of silty, clayey or sandy soils in complex with shallow depressions of hard clays or other nearly impervious materials at or near the surface. The shallow depressions occupy 20 to 50 percent of the site.

DC - DENSE CLAY: Relatively impervious deep nongranular clays--may be overlain by thin ineffectual layers of other materials. The dispersed layer is very hard to extremely hard when dry and very sticky when wet.

TB - THIN BREAKS: Mixed soils of various depths with hard rock or other resistant bed outcroppings at different levels on steep irregular slopes. Trees may occur locally above outcrops.

Gr - GRAVEL: Coarse textured soils with more than 50 percent gravel and cobbles underlain by loose sand and gravel at less than 20 inches.

VS - VERY SHALLOW: Areas where few roots can penetrate deeper than 10 inches. Outcropping of gravel or bedrock is characteristic. Joints in bedrock may develop deep soil pockets usually marked by tall grasses, shrubs, or stunted trees.

SU - SALINE UPLAND: Soils more than 20 inches deep with salt and/or alkali accumulations. Salt tolerant plants occur over a major part of the area.

Sh - SHALE: Readily puddled uplands where some unweathered angular raw shale fragments are exposed at the surface and little, if any, soil profile development is evident.

Bl - BADLANDS: Nearly barren lands broken by drainages intermingled with small grazable areas.

LIST OF PLANT SPECIES

Botanical Name	Common Name
Grasses & Grass-Like Plants	
Agropyron dasystachyum	Thickspike wheatgrass
" smithii	Western "
" spicatum	Bluebunch "
" subsecundum	Bearded "
" trachycaulum	Slender "
Agrostis scabra	Ticklegrass
Andropogon scoparius (Schizachurium scoparium)	Little bluestem
Andropogon hallii	Sand bluestem
Aristida fendleri	Fendler threeawn
Aristida longiseta	Red threeawn
Bouteloua curtipendula	Sideoats grama
Bouteloua gracilis	Blue grama
Bromus marginatus	Mountain brome
Bromus pumpellianus	Pumpelly brome
Calamagrostis montanensis	Plains reedgrass
Calimovilfa longifolia	Prairie sandreed
Carex filifolia	Threadleaf sedge
Danthonia intermedia	Timber Danthonia
Elymus cinereus	Basin wildrye
Festuca idahoensis	Idaho fescue
" scabrella	Rough fescue
" octiflora	Six-weeks fescue
Koeleria cristata	Prairie junegrass
Melica spectabilis	Purple oniongrass
Muhlenbergia cuspidata	Plains muhly
" montana	Mountain muhly
Oryzopsis hymenoides	Indian ricegrass
Phleum alpinum	Alpine timothy
" pratense	Common timothy
Poa ampla	Big bluegrass
" cusickii	Cusick bluegrass
" secunda	Sandberg bluegrass
Sitanian histrix	Bottlebrush squirreltail
Sporobolus cryptandrus	Sand dropseed
Stipa columbiana	Columbia needlegrass
" comata	Needleandthread
" richardsonii	Richardson needlegrass
" viridula	Green needlegrass

Botanical Name	Common Name
Shrubs & Half-shrubs	
Artemisia tridentata	Big sagebrush
" tripartita	Threetip sagebrush
" frigida	Fringed sagewort
" cana	Silver sagebrush
" ludoviciana	Cudweed sagewort
Atriplex confertifolia	Shadscale saltbush
Chrysothamnus nauseosus	Rubber rabbitbrush
" viscidiflorus	Green rabbitbrush
Eurotia lanata	Winterfat
Gutierresia sarothrae	Broom snakeweed
Juniperus scopulorum	Rocky Mountain juniper
Phlox species	Phlox
Potentilla fruiticosa	Shrubby cinquefoil
Rhus trilobata	Skunkbrush sumac
Ribes cereum	Squaw current
Rosa arkansana	Arkansas rose
Sarcobatus vermiculatus	Greasewood
Tetradymia canescens	Grey horsebrush
Yucca glauca	Yucca
Succulents	
Opuntia polycantha	Cactus (prickly pear)
Mammilaria missouriensis	Yellow pincussion cactus
" viviparia	Pink pincussion cactus
Mosses & Clubmosses	
Selaginella densa	Clubmoss