# TECHNICAL NOTES

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE
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## RANGE TECHNICAL NOTE NO. 18

## GROWTH CURVES FOR WESTERN OREGON

This Technical Note contains growth curves for pasture, hayland, rangeland, and in some cases, grazed crop aftermaths for MLRAs A1; North Pacific Coast Range, Foothills, and Valleys (Mesic - inland and Isomesic – coastal fog zone), A2; Willamette Valley, and A5; Siskiyou-Trinity Area. The curves were developed by experts in the field and have been tested in conservation planning efforts over the last three years. Not all of the MLRAs in western Oregon have been addressed. There is inadequate data available for developing curves in the A3 and A4 MLRAs. When further data becomes available, this Technical Note will be amended to include additional MLRAs and growth curves. Growth curves are part of Ecological Site Descriptions (ESD) and Forage Suitability Groups (FSG) and each described plant community in a site description will have a characteristic growth curve. Ecological Site Descriptions are available (approved sites) at http://plants.usda.gov/esis.

The curves are arranged by MLRA and are further grouped by soil properties, physiographic position, ecological site, or general plant community. Each curve has a name, a description (which can include the ecological site numbers that use the curve), and a unique number (referenced in the Grazing Lands Applications (GLA) program). There is both a tabular and graphic depiction of percent growth by month (histogram – left y-axis) and percent cumulative growth (line – right y-axis).

Growth curves should be used for facilitating inventory and evaluation, developing initial stocking rates for prescribed grazing, and for communicating with clients about growth patterns of common types of plant communities. These growth curves are used in GLA for determining forage inventory and accumulation over time. Refer to Chapters 3 and 4 of the National Range and Pasture Handbook (NRPH) and Oregon Amendment #1 to the NRPH for more detailed information on the development and use of growth curves.

This data should be used as guidance only. Use of the curves can increase the accuracy of conservation planning but are not appropriate substitutes for site-specific measured data (when available).