



Predicting Herbage Mass in Irrigated Orchardgrass (*Dactylis Glomerata L.*) Pastures

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The prediction of pasture herbage mass can give producers estimates of stocking rate, stocking density, and regrowth rate. Data to predict herbage production of forage species on irrigated pastures in the Northwest are needed. Five rotationally-grazed, irrigated pastures were sampled in Idaho in 2006 and 2007. The mixed grass and legume pastures were primarily composed of orchardgrass (*Dactylis glomerata L.*), with some smooth brome (*Bromus inermis Leyss.*), and perennial ryegrass (*Lolium perenne L.*) in mixtures with *Medicago spp.* and *Trifolium spp.* Sward height, density, and herbage mass were determined once per week in three replications within 3 canopy densities per pasture during the growing season. Grasses were sorted by species, weighed, and oven dried. Orchardgrass herbage dry matter medians + or - 1 standard deviation were 167 +/- 51, 168 +/- 58, and 177 +/- 49 kg/cm of sward height for high, medium, and low sward density, respectively. These regression functions will enable pasture managers in the West to predict and allocate pasture mass based on sward height measurements.

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