



Protein Supplement Placement Affects Utilization of Weeping Lovegrass by Cattle in Central Arizona

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Protein supplement blocks were used to encourage cattle to utilize weeping lovegrass (*Eragrostis curvula*) on a Forest Service grazing allotment located 24 kilometers northeast of Payson, Arizona. Weeping lovegrass is native to Africa, and has been introduced on Arizona rangelands as a forage grass and for watershed stability. The site burned with severe intensity in 1990, and was seeded with a mix including weeping lovegrass to protect the watershed. This species now dominates the herbaceous layer, with frequencies in excess of 80%. Palatability of weeping lovegrass is relatively low for livestock and wildlife. Two supplement stations were located within a 1580-hectare pasture that was used by 300 adult cattle and 50 yearlings from May through August. Utilization was measured on pace transects running parallel to supplement stations at distances of 46, 91, 183 and 274 meters in two opposing directions from stations. The height-weight method was used to calculate relative utilization of 20 plants along each pace transect, for a total of 160 plants measured proximal to each station. Utilization was measured before supplement placement, at 44 or 47 days after treatment (DAT), and 70 DAT. First-year results show significant ($p < 0.01$) difference between utilization levels before treatment and after treatment. This effect was observed even 274 m from the supplement station. Utilization was nearly constant from 44/47 DAT to 70 DAT. Average utilization prior to protein block placement was light (19%), whereas it was moderate (36-41%) from 6 to 10 weeks after treatment.

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