

MONITORING GRAZING IMPACTS FROM RECREATIONAL STOCK

Standards for the grazing by recreational stock of uplands, wet meadows and riparian areas along streams in the A-P Wilderness are derived from prescription guidelines in the Bitterroot, Deerlodge and Beaverhead Forest Plans; the Beaverhead Forest Plan Riparian Amendment; the USFS Region One Soil and Water Conservation Practices Handbook; and accepted Forest Service pack/saddle stock practices.

Land managers will apply the appropriate type of standard and monitoring frequency according to site-specific need.

These standards are as follows:

1. Forage Utilization

a. Forage utilization on wet meadows and riparian sites will not exceed 50% of the total annual growth of grasses, sedges and other herbaceous forage when measured at or projected to the end of the growing season. A more restrictive standard may be applied to sites that are trending downward or are identified as having a lower than desirable ecological condition.

A simple visual technique can be taught to the general public and used as a guideline to encourage the frequent movement of stock. The stockhandler should count on leaving at least 2/3 of the plant height that was on the site when they arrived. This will help insure that a site will not be overgrazed by successive users over the remainder of the season and serves as a minimum guarantee for maintaining plant vigor and preventing the development of bare soil patches.

b. On riparian sites associated with streams containing bull trout and westslope cutthroat trout, forage utilization will not exceed 35% to 45% of the herbaceous growth when measured at or projected to the end of the growing season. Identify these areas for your outfitters, wilderness rangers and general users and emphasize the need to graze these sites lightly. A rule of thumb would be to leave 3/4 of the forage present on the site when the party arrives.

c. Upland site utilization (those grazeable areas, dominated by species such as elk sedge) and not influenced by groundwater) will not exceed 50% of the total annual growth. More restrictive standards may be assigned to sites that are trending downward or are identified as having a less than desirable ecological condition.

d. No more than 15% of the surface area of any forage site for stock may exceed the above utilization standards. Forage sites in the A/P may vary from a fraction of an acre to fifty acres or more.

e. Estimates of forage utilization can be arrived at by using clipping and weighing inside and outside small enclosure cages, grazed plant transects, comparison with ungrazed sites, etc. Sampling methodologies are explained in FSH 2209.21 and "Sampling Vegetation Attributes", 1996, an Interagency Technical Reference.

2. Stubble Height Standards for Perennial Streams and Associated Vegetation

a. Average leaf length of grasses and sedges in the bankfull zone (immediately adjacent to streams) will not be shorter than 4" at the end of the growing season.

b. Average leaf lengths after grazing of the grasses and sedges in the floodplain zone will not be shorter than 3" at the end of the growing season. This standard applies to those floodplain zones on which sedge species, tufted hairgrass, alpine timothy or other species that typically grow leaf lengths well in excess of three inches.

Stubble height standards may not apply to some community types, such as Kentucky bluegrass, that at high elevations may not attain leaf lengths much greater than three inches. Employ utilization standards on these sites.

- c. Stubble height measurements are taken along representative stream segments within the forage site.
- d. More restrictive stubble heights may be prescribed for sites that are trending downward or that are in a less than desirable ecological status.

3. Streambank Alteration

- a. Riparian sites along streamcourses require other types of stock impact monitoring. The amount and kind of streambank trampling by stock hoof action should be tracked so that riparian function is maintained. Forage sites along streams or stream segments classified as "functioning-at-risk" (using hydrologic/ecological condition rating) or non-functioning may need seasonal limitations or closure to grazing in order to establish an improving trend in streambank and vegetation condition. This need will be determined on a site-specific basis.
- b. Some streambank alteration resulting from stock crossings or watering sites are inevitable, however, their number and size should be small for any forage site. An increase in size or number of crossings and watering sites that may affect the function of the stream will warrant management action to control and mitigate the resource impacts.

4. Willow/Aspen/Other Browse Species Management

- a. Managers should monitor browse intensity of deciduous woody species such as willow and aspen by recreational stock to insure that the plant stands/communities within forage sites are maintaining "height growth". The accepted method for determining the health of woody browse stands is contained in Browse Evaluation by Analysis of Growth Form (Keigley and Frisina, 1998)
- b. Corrective management action on problem sites, where the sustainability of browse stands is affected by stock impacts, may include seasonal grazing limitations, closures or fencing.