

# USDA FORAGE HARVEST MANAGEMENT

Conservation Practice Jobsheet

511

Natural Resources Conservation Service (NRCS)

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Landowner \_\_\_\_\_



## WHAT IS FORAGE HARVEST MANAGEMENT

Forage harvest management is the timely cutting and removal of forages from the field as hay, green-chop, or ensilage

### PURPOSE

- Optimize yield and quality of forage at the desired levels
- Promote vigorous plant regrowth
- Manage for the desired species composition
- Use forage plant biomass as a soil nutrient uptake tool
- Control insects, diseases and weeds
- Maintain and/or improve wildlife habitat

### WHERE THE PRACTICE APPLIES

Forage harvest management is applicable on all land uses where machine harvested forage crops are grown.

## OPERATION AND MAINTENANCE

Before forage harvest, clear fields of debris that could damage machinery, or if ingested by livestock, lead to sickness or death. Monitor weather conditions and take action accordingly before and after cutting to optimize forage wilting or curing time to preserve feed quality and prevent forage swaths or windrows from smothering underlying plants. Inspect and repair harvesting equipment following manufacturer's preventative maintenance procedures. Select equipment sizes and capacities that will in a timely and economically feasible manner handle the acreage normally harvested. Operate all forage harvesting equipment at the optimum settings and speeds to minimize the loss of leaves. Regardless of silage/haylage storage method, ensure good compaction and an airtight seal to exclude oxygen and mold formation.

**Table 1. Recommended Hay Harvesting Guide**

SPECIES	MINIMUM HEIGHTS	RECOMMENDED STAGE TO HARVEST	AVERAGE RECOVERY PERIODS <sup>1/</sup>
Bermuda grass, common ( <i>Cynodon dactylon</i> )	2"	Boot to Flower	18-24 days
Bermuda grass, hybrid ( <i>Cynodon dactylon</i> )	3"	15 to 18 inch height for first cutting and subsequent cutting every 4 to 5 weeks or when regrowth is 15"	18-24 days
Bahiagrass ( <i>Paspalum notatum</i> )	2"	Boot to bloom for first cutting; Subsequent cutting every 4 to 5 weeks or when regrowth is 12"	20-26 days
Dallisgrass ( <i>Paspalum dilatatum</i> )	2"	Boot to bloom (usually on one cutting)	18-24 days
Johnsongrass ( <i>Sorghum halepense</i> )	6"	Boot (all cuttings)	21-30 days
Carpetgrass ( <i>Axonopus affinis.</i> )	2"	Boot to Flower	18-24 days
Tall Fescue ( <i>Lolium arundinaceum</i> )	3"	Boot to early headstage for 1st cut; aftermath cuts at 4 to 6 week intervals	21-30 days
Sudangrass ( <i>Sorghum bicolor</i> )	6"	Height of 30" to 40" (all cuttings)	21-30 days
Ryegrass ( <i>Lilium perenne.</i> )	2"	Boot to early headstage (usually only one cutting)	14-21 days
Millet, Pearl ( <i>Pennisetum glaucum</i> )	4"	Height of 30" to 40" (all cuttings)	21-30 days
Small Grains	3"	Boot to early headstage (usually only one cutting)	14-25 days
Big Bluestem ( <i>Andropogon gerardii</i> )	6"	Boot (all cuttings)	21-35 days
Indiangrass ( <i>Sorghastrum nutans</i> )	6"	Boot (all cuttings)	21-35 days
Switchgrass ( <i>Panicum virgatum</i> )	6"	Boot (all cuttings)	24-38 days
Eastern Gamagrass ( <i>Tripsacum dactyloides</i> )	8"	Boot (all cuttings)	24-38 days
Alyce Clover ( <i>Alysicarpus vaginalis</i> )	2"	Early Bloom	18-25 days
Crimson Clover ( <i>Trifolium incarnatum</i> )	2"	Early Bloom	16-24 days
Persian Clover ( <i>Trifolium resupinatum</i> )	2"	Cut at correct stage for companion grass	16-24 days
Red Clover ( <i>Trifolium pratense</i> )	2"	Early Bloom	16-24 days
Subterranean Clover ( <i>Trifolium subterraneum</i> )	2"	Early Bloom	14-21 days
White Clover ( <i>Trifolium repens</i> )	2"	Cut at correct stage for companion grass	14-21 days

<sup>1/</sup> Based on favorable growing conditions for the plant. Longer recovery periods will be needed during stress periods. Shorter recovery periods may be needed during fast growth conditions.

<sup>2/</sup> Do not hay tall fescue from May 15 to September 15. This plant is a cool season perennial and the persistence of this plant can be severely reduced by defoliation during this period.

