



Natural Resources Conservation Service
CONSERVATION PRACTICE SPECIFICATIONS
PRESCRIBED GRAZING (528)

The information in these specifications supplements the conservation practice standard. Tables 1 through 4 provide additional guidance for assessing the management unit and designing a sustainable grazing system.

TABLE 1: Pasture Intake Rate and Recommended Paddock Rotation Schedule		
Livestock Type	Intake Rate ^{1/} (% of body weight per day)	Paddock Rotation Schedule (days)
Beef Cows - Lactating	2.2 – 2.7%	3 - 7
Beef Cattle - Maintenance	1.8 - 2.2%	3 - 7
Stocker Cattle	2.5 - 3.0%	1 - 3
Ewes - Lactating	3.5 – 4%	1 - 3
Ewes - Maintenance	1.8 – 2.0%	3 - 7
Horses	2.0%	3 - 7
Goats - Lactating	5.0%	1 - 3
Goats - Maintenance	1.8 – 2%	3 - 7
Dairy Cows – Lactating (pasture only)	3%	0.5 - 1
Dairy Cows - Total Mixed Ration (TMR)	2.0 – 4.0%	0.5 - 3
Dairy Heifers	2.3%	1 - 3

TABLE 1 NOTE:

^{1/} Dependent on amount of supplemental feed, hay, grain, TMR, etc. that is fed.

TABLE 2: Grazing Efficiency Guidelines		
Number of Paddocks ^{1/}	Approximate Days on Each Paddock	Grazing Efficiency
1 (continuous grazing)	----	0.40 or less (or 0.80 if overgrazed, low yield)
4 to 6	7 to 9 days	0.40 to 0.55
8 to 10	4 days	0.55 to 0.65
24 to 45	1 day or less	0.70 to 0.80
Hay	----	0.70 to 0.80

TABLE 2 NOTE:

^{1/} In general, as the number of paddocks increase, average paddock size and the number of days on each paddock decreases. Grazing will be more efficient, and more time will be allowed for regrowth in each paddock.

TABLE 3: Recommendations for Grazing Heights, Recovery Days, and Number of Paddocks in Rotational Grazing Systems ^{1/}					
Forage Species	Growth Periods	Height in Inches		Recovery Days ^{2/}	Number of Paddocks ^{3/}
		To Begin	To Stop		
Alfalfa	Spring	6" to bud	2 - 3	30	--
	Fall	12 - 18	2 - 3	--	--
	Winter	12 - 18	3	--	--
Annual Ryegrass	Early Spring	6 - 8	3 - 4	21 - 45	7 - 15
	Spring	8 - 10	2 - 3	Replant in Fall	5 - 10
	Fall	6 - 8	4	30 - 60	10 - 20
	Winter	6 - 8	3 - 4	30 - 90	10 - 30
Bermudagrass (Common and hybrid varieties, plus mixtures with white clover)	Spring	4 - 6	2 - 3	21-30	7 - 10
	Summer	4 - 6	2 - 3	10 - 21	3 - 7
	Fall	4 - 6	2 - 3	20 - 40	7 - 13
	Frosted ^{4/}	2+	2 - 3	120 - 210	10 - 40 ^{5/}
Big Bluestem	Early Summer	12	6	21 - 30	7 - 10
	Mid Summer	12	6	21 - 40	7 - 13
	Early Fall	12	9	120 - 210	10 - 40
Birdsfoot Trefoil - Upright Type	Spring	6 - 18	3	--	--
	Summer	10 - 15	3	--	--
	Fall	10 - 15	3	--	--

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Forage Species	Growth Periods	Height in Inches		Recovery Days ^{2/}	Number of Paddocks ^{3/}
		To Begin	To Stop		
Birdsfoot Trefoil - Prostrate Type	Spring	6 - 15	2	--	--
	Summer	10 - 12	2	--	--
	Fall	10 - 12	3	--	--
Bluegrass	Early Spring	4 - 6	1 - 2	30 - 45	10 - 15
	Spring	4 - 6	1 - 2	14 - 30	5 - 10
	Summer	4 - 6	1 - 2	30 - 60	10 - 20
	Fall	4 - 6	1 - 2	21 - 35	7 - 12
Caucasian Bluestem	Early Summer	8 - 12	4	--	--
	Mid Summer	8	4	--	--
	Early Fall	8	6	--	--
Clover, Red	Spring	6 - 12	2 - 3	--	--
	Summer	6 - 10	2 - 3	--	--
	Fall	6 - 18	2 - 3	--	--
Clover, Red, in mixtures with cool-season grasses	Spring	6" to bud	3 - 4	10 - 21	4 - 7
	Summer	10" to bud	3 - 4	21 - 40	7 - 13
	Fall	Frosted ^{4/}	3 - 4	90 - 120	10 - 20 ^{7/}
Clover, Alsike/Ladino	Spring	4 - 8	2	--	--
	Summer	4 - 8	2	--	--
	Fall	4 - 8	2	--	--
Clover, Common White Dutch	Spring	4 - 7	1 - 2	--	--
	Summer	4 - 7	1 - 2	--	--
	Fall	4 - 7	1 - 2	--	--
Crabgrass and associated warm-season species	Spring	6 - 8	3 - 4	21 - 35	5 - 13
	Summer	6 - 12	3 - 4	14 - 30	7 - 12
	Fall	4 - 6	1 - 3	Replant in Spring.	10 - 40 ^{8/}
Crop Residue (corn or sorghum)	Oct-Jan	Begin grazing immediately following harvest. If cover crop is not planted, leave residue as needed for soil protection.		Not applicable.	If cover crop is not planted, subdivide enough to utilize the residue while leaving cover for soil protection.
Eastern Gamagrass	Early Summer	14 - 20	8	21 - 30	7 - 10
	Mid Summer	15 - 24	8	21 - 40	7 - 13
	Early Fall	15	8	120 - 210	10 - 40

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Forage Species	Growth Periods	Height in Inches		Recovery Days ^{2/}	Number of Paddocks ^{3/}
		To Begin	To Stop		
Indiangrass	Early Summer	12	6	21 - 30	7 - 10
	Mid Summer	12	6	21 - 40	7 - 13
	Early Fall	12	9	120 - 210	10 - 40
Kale	60 days planted	12 -20	3	--	--
	Thereafter	12 -16	3	--	--
Lespedezas - Annual	Summer	8 - 15	3	--	--
	Last	8 - 15	3	--	--
Lespedezas - Perennial	Summer	10 - 15	3	--	--
	Fall	10 - 15	3	--	--
Little Bluestem	Spring	12	4 - 6	--	--
	Summer	12	4 - 6	--	--
	Fall	12	4 - 6	--	--
Orchardgrass	Early Spring	6 - 12	3 - 4	30 - 45	10 - 15
	Spring	6 - 10	3 - 4	14 - 30	5 - 10
	Summer	6 - 10	3 - 4	30 - 60	10 - 20
	Fall	6 - 10	3 - 4	21 - 35	7 - 12
Perennial Ryegrass	Early Spring	6 - 10	2 - 3	30 - 45	10 - 15
	Spring	6 - 8	2 - 3	14 - 30	5 - 10
	Summer	6 - 8	2 - 3	30 - 60	10 - 20
	Fall	6 - 8	2 - 3	21 - 35	7 - 12
Rape	60 days planted	12 - 20	3	--	--
	Thereafter	12 - 16	3	--	--
Reed Canarygrass	Early Spring	8 - 14	6	30 - 45	10 - 15
	Spring	8 - 12	6	14 - 30	5 - 10
	Summer	8 - 12	6	30 - 60	10 - 20
	Fall	8 - 12	6	21 - 35	7 - 12
Smooth Bromegrass	Early Spring	6 - 10	2 - 3	30 - 45	10 - 15
	Spring	6 - 10	2 - 3	14 - 30	5 - 10
	Summer	6 - 10	2 - 3	30 - 60	10 - 20
	Fall	6 - 10	2 - 3	21 - 35	7 - 12
Switchgrass	Early Summer	12	6	21 - 30	7 - 10
	Mid Summer	12	6	21 - 40	7 - 13
	Early Fall	12	9	120 - 210	10 - 40

TABLE 3: Recommendations for Grazing Heights, Recovery Days, and Number of Paddocks in Rotational Grazing Systems ^{1/}					
Forage Species	Growth Periods	Height in Inches		Recovery Days ^{2/}	Number of Paddocks ^{3/}
		To Begin	To Stop		
Tall Fescue	Early Spring	6 - 12	2 - 3	30 - 45	10 - 15
	Spring	6 - 10	2 - 3	14 - 30	5 - 10
	Summer	6 - 8	2 - 3	30 - 60	10 - 20
	Fall	6 - 10	2 - 3	21 - 35	7 - 12
	Winter (Stockpiling)	6 - 12+	2 - 3	45 - 90	15 - 30
Timothy ^{9/}	Spring	6 - 10	2 - 3	14 - 30	5 - 10
	Summer	6 - 10	2 - 3	30 - 60	10 - 20
	Fall	6 - 10	2 - 3	21 - 35	7 - 12
Turnips	60 days planted	12 - 20	3	--	--
	Thereafter	12 - 16	3	--	--
Winter Small Grain	Fall	6 - 12	3	45 - 90	15 - 30

TABLE 3 NOTES:

^{1/} This table provides guidelines concerning when to start and stop grazing established stands. Rotational systems include all systems that provide a recovery period. Based on available data, recommendations for the minimum number of recovery days and number of paddocks are provided in the table.

For all forage species, the lower beginning heights are for peak performance livestock such as lactating dairy cows. Cow/calf operations do well with somewhat lower quality forage found at the taller limits. Grazing at the lower beginning heights may not always allow for complete restoration of food reserves and may result in shorter stand life.

^{2/} Expected number of rest days before regrazing.

^{3/} The number of paddocks listed here is based on a grazing period of 3 days and assumes the growth will be ready for regrazing in the number of days shown in the previous column (recovery days). Short grazing periods generally result in best utilization of available forage with the least forage loss or quality changes.

^{4/} Frosted growth can be used flexibly, but may need supplemental protein, and it should be used before all leaves deteriorate.

^{5/} Number of paddocks are based on a 3-day grazing period and an attempt to use the frosted forage in 30-120 days during fall-winter period.

^{6/} Should usually have 45 days rest immediately before a killing frost. Thereafter, the growth may be grazed or harvested before leaves drop.

^{7/} Number of paddocks is based on a 3-day grazing period within each paddock and the goal of using all frosted growth in 30-60 days or before leaves drop.

^{8/} Late summer growth may be grazed in the fall, but quality may be limiting. Utilization can be improved with a very high stocking density to graze a paddock in a shorter time period (less than 3 days).

^{9/} Timothy is better suited for hay than for grazing. Poor regrowth; only suitable for less intense grazing systems. Susceptible to insect and disease problems.

TABLE 4: Recommended Residual Heights in Continuous Grazing Systems ^{1/}		
Forage Species ^{2/}	Height at First Grazing (in inches)	Average Height of Pasture (in inches)
Bermudagrass	4	2
Bluegrass	4 - 5	2 - 3
Clover - Alsike, Red, & Common White	4 - 7	3
Clover - Ladino	8 - 10	3 - 4
Fescue	6 - 8	3 - 4
Orchardgrass	6 - 8	4 - 5
Smooth Bromegrass	Before jointing	3 - 4
Timothy	Before jointing	4
Winter Small Grains	8 - 12	3 - 6

TABLE 4 NOTES:

^{1/} Table 4 provides guidelines for managing established stands in continuous grazing systems.

^{2/} The following species tend to become depleted in stands under continuous grazing systems where no recovery period is used. Therefore, these species are not recommended for use in continuous systems: Alfalfa (including grazing types), Big Bluestem, Birdsfoot Trefoil (upright & prostrate types), Caucasian Bluestem, Eastern Gamagrass, Indiangrass, Kale, Lespedeza (annual and perennial), Little Bluestem, Rape, Reed Canarygrass, Switchgrass, and Turnips.