Summer-Time Options for Forages

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Nutrient Requirement of Cattle

Animal	TDN % - Energy	CP % - Protein
Steer Calf – 500lb, ADG = 1.5 lb	63	10.5
Finishing Steer 1000lb, ADG = 3	72	9.3
Dry, Mature, Mid-Pregnancy Cow 1100lb	48.8	7
Cows nursing 1100 lb	56	9.4
Two-Year Old Heifer (after calving) 950 lb	62.3	10

Nutrient Value of Common Hays (great condition)

Forage	Yield (ton/acre)	Protein %	TDN %
Orchardgrass	2-5	12-15	57-62
Tall Fescue	2-4	10-15	55-60
Johnsongrass	2-5	10-14	50-60
Bermudagrass	5-8	10-14	52-58
Ryegrass	1-4	10-16	56-62
Pearl Millet	2-6	8-12	50-58
Sudangrass	3-4	11-15	55 -60
Sorghum-sudangrass	4-5	11-16	55-60
Teffgrass	3.5 - 6	12-16	57-61
Quick-N-Big Crabgrass	2.5 – 3.5	8- 13	58 – 62
Red River Crabgrass	1.8 – 2.9	9- 17	59- 64

Summer-Time Options

Sudangrass can be harvested as pasture, hay or silage, but is best used for pasture. Yields of 3 to 4 tons/acre of dry matter. It can be pastured 5 to 6 weeks after planting and may be cut or grazed multiple times (when regrowth reaches 18 to 20 in.) For best results, it should be grazed rotationally with a sufficiently heavy stocking rate to remove forage down to a 6 to 8 in. height in a few days. The pasture will grow rapidly when the cattle are removed for more total tonnage. Additionally, if the grazing period is short, cattle will be less likely to be grazing regrowth that is high in prussic acid. It can be very difficult to dry for hay- a good strategy is to harvest early when plants reach around 30 in. tall. For silage, harvest in the medium dough stage at 65-70% moisture. Nutritional quality is good when plants are immature (about 70% TDN – total digestible nutrients, 17% CP – protein) and drops with maturity to around 55% TDN, 11% CP.

Sorghum-sudangrass hybrids are taller, have larger stems and can be higher yielding than sudangrass. Sorghum-sudangrass hybrids are normally harvested for green chop or silage (medium dough stage) but may be used for pasture or hay if planted at a high seeding rate and harvested at 18 to 24 in. tall (regrowth is good but not as good as Sudangrass). The sorghum-sudangrass hybrids usually yield less than forage sorghums. Forage quality will be around 65 TDN, 16% CP in the vegetative state; as the plant matures quality will drop to around 55 TDN, 11% CP.

Pearl Millet can produce 4-6 ton/acre. Millet can be grazed or harvested as hay or silage. Grazing should begin when plants reach 20 – 24 in. height. It requires at least 6–8 in. of stubble to regrow. Pearl millet can make good quality hay if cut when plants reach 2–3 ft tall. This will prevent the forage from maturing, and provide high quality hay. The drying rate of millet hay can be sped up by the use of a roller/crimper-style conditioner. The TDN ranges 50-58% and Crude protein (CP) will range from 8-12%.

Teffgrass has a tendency to lodge as seedhead formation begins. For this fact, it is suggested to be harvested for hay or silage in the late-vegetative or very early head stage. With adequate growing conditions, this will occur approximately 45-50 days after seeding (longer during droughty times) with 40-45 days between cuttings. Seedings made in mid-May can normally be cut 3 times. Yield per acre has ranged from 3.5 to 6 tons per acre. It is fine stem – leafy and usually dries much quicker and has better quality than sorghum-sudan hybrids; however, yields are often only half of sorghum-sudan hybrids.

Quick-N-Big Crabgrass is a very tall type of grass. It grows very erect and is similar to wheat or rye. Quick-N-Big produces much faster than red river and is easier for hay production. It can reach up to 56 inches at seed harvest. It tillers profusely and is very productive. It should be grazed at 12-24 inches and hayed at 24-36 inches for regrowth purposes. One should leave stubble at 3-6 inches for good survival and regrowth rates. Quick-N-Big crabgrass seed flows very well when spread.

Red River Crabgrass is capable of standing 2-3 feet tall. It is a lush grass with small stems. It will often weep or lodge over at 2.5 to 3 feet due to weak stems and weigh. It is recommended to harvest before this time. The seed does not flow well by itself due to a rough textured husk around the seed and some "peach fuzz" on the husks. Planting is often done by mixing the seed with a dry fertilizer.

Warm Season Forages Chart

Species	Seedling Rate (lb/acre)	Depth (inches)	Seeding Dates
Sudangrass and Hybrids	45 lb broadcast or 30 lb drilled	½ to 2 inches	April 20 – June 15
Teff grass	6-8	¼	May 1 - June15
Pearl Millet	20	½ to ¾	May 1 – June 15
Bermudagrass	4-6	¼	May 1 – July 1
Quick-N-Big Crabgrass	5-6	¼	Spring - Summer
Red River Crabgrass	5-6	¼	Spring - Summer