

# Forages



## UTILIZATION OF BERMUDAGRASS

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### Spring Management

Early spring growth should be promoted by removal of any dead material from the previous year. Cut and remove or burn the dead material in late February or early March. The removal of dead material should be as early as possible but late enough to avoid damage from severe frost. Follow immediately with a topdressed application of nitrogen, potassium, and phosphorus as per soil test recommendations. Early fertilizer application will stimulate early spring growth by helping develop a good root system.

### Grazing

Begin grazing bermudagrass early in the spring when the grass has reached a height of two inches in the pastures. The prostrate growth habit of bermudagrass allows it to be grazed more closely than many grasses without damaging the stand. Forage quality of bermudagrass falls rapidly as it matures; thus, as the grass is maintained at more immature stages, higher forage quality will result. Highest quality is achieved by maintaining the grass at a height of one to five inches. Grazing to 1 or 1.5 inches is preferred — grazing to the ground surface should be avoided. Stoliferous types, such as Coastcross 1, Callie, and Tifton 78, need to be grazed less severely. The forage can be used most effectively if fields are divided into three or more pastures and grazed rotationally. This will allow all

of the forage to be grazed more uniformly by reducing spot grazing. Rotational grazing will also allow hay to be made on a portion of the pasture when forage production is more than the cattle can consume.

Average daily gain of yearling cattle and milk production of dairy cows grazing bermudagrass will not be as high as for cattle grazing clover-fescue pastures but carrying capacity of the pastures will be higher. Additional supplementation of the cattle with corn and possibly a protein source will be required if high levels of productivity are desired.

When grazing, pastures should be fertilized monthly with additional nitrogen and once during mid-summer with potassium.

### Hay

Bermudagrass should be cut for hay whenever the forage reaches a height of 12 to 15 inches. This means that a cutting will be taken about every three to four weeks if the grass is growing normally. Delayed cutting may result in similar or, even, increased tonnage but the forage quality will be greatly reduced. The grass should be cut at a 1- to 2-inch height, crimped to accelerate drying, and removed from the field as rapidly as possible.

Bermudagrass should be fertilized with nitrogen after each harvest to provide nutrients for the next

growing period. A mid-summer application of half of the annually required potassium is recommended, particularly on sandier soils.

## Fall Growth

Little concern for fall management of bermudagrass is necessary except where a variety is near the northern limit of its area of adaptation and winter survival is a concern. In these situations, allowing 3 to 4 inches of growth to accumulate and remain over winter will increase winter survival.

## Overseeding

Overseeding with an annual grass or a legume may extend the grazing season on a bermudagrass pasture. The seeding should be done into dormant or nearly dormant stands, usually during October. Prior to seeding, the hay field should be clipped to a height of 3 inches or pastures should be grazed to a 1- to 2-inch height because pastures generally have denser stands. Overseeding is best accomplished with a sod-seeder. If the soil is moist and the stubble short, a grain drill may be used. The major problem with using a grain drill is lack of penetration into the soil for good seed placement. A light disking may be required prior to seeding if soil conditions do not allow proper penetration of the seeding equipment.

Overseeded annual grasses, primarily rye and ryegrass, provide high quality forage earlier in the spring than legumes. Forage sufficient for grazing is generally available from late February through April. The recommended seeding rate is 2 bu/A for rye and 20-30 lb/A for ryegrass. It is important that soil pH be above 5.8-6.0 and that the levels of phosphorus and potassium are adequate. An application of 40-50 lb N/A at seeding is recommended as well as a spring application of approximately 50 lb N/A.

Legumes may also be overseeded, either alone or mixed with annual grasses. Legume seed is more expensive than that of the annual grasses but nitrogen fertilizer is not required. As with the grasses, seed when the bermudagrass is dormant after making sure that the soil pH and fertility is adequate. Be sure to inoculate the seed before seeding. The legumes may be seeded either singly or in combination with each other. Crimson clover may be seeded at 15 to 20 lb/A. This legume will provide the earliest spring growth of the recommended legumes. If allowed to flower, some reseed-ing may take place the second year. Arrowleaf clover is another excellent legume for overseeding that provides growth later in the spring (generally April and May). It should be seeded at 5-8 lb/A. Hairy vetch is also a legume used for overseeding, particularly on the deep sand soils. The vetch should be seeded at 25 to 30 lb/A. It provides good late-season grazing.

It is important to remember that competition from the overseeded crop will delay the greening of bermudagrass in the spring.

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