# Several Grasses Can Offset Summer Forage Slump

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Start working on your summer forage production in late April and May. If you wait until summer, you have waited too long. You can't depend on tall fescue/orchardgrass pastures to provide much forage during July and August. Think about planting a few acres of grass that will provide production during the summer. These grasses are called 'warm-season grasses.'

Most of these grasses were developed in tropical and subtropical regions of the world and have several characteristics that provide an advantage over cool-season grasses during the summer. Warm-season grasses can produce energy through photosynthesis faster, which allows them to use more of the sunlight. They also use water more efficiently and have deeper root systems than cool-season grasses. Another advantage for warm-season grasses is that their optimum temperature is about 90° F, while cool-season grasses perform best at about 70° F. All of these factors make warm season grasses more productive during the summer.

Following are brief descriptions of warm-season grasses that can provide grazing during the summer.

**Bermudagrass** – A perennial grass that grows and spreads by above ground stems known as stolons. It makes good hay or grazing material. Bermuda is very tolerant of close, continuous grazing. There are several varieties of bermudagrass. Some can be planted from seed, while others do not produce viable seed and must be planted using live, vegetative material from another stand. Cold tolerance needs to be a major consideration when selecting a variety. Winterkill can cause severe stand loss in bermudagrass. Hybrid bermudagrasses are highly responsive to fertilizer and can produce high-quality forage if harvested at an early stage of maturity. It should be harvested every four weeks.

**Warm-season perennial bunch grasses** – These grasses include big bluestem, little bluestem, indiangrass, eastern gamagrass and switchgrass. They produce high-quality forage early in the season, but forage quality drops rapidly as plants mature, just as with any of the warm-season grasses. Seedling vigor is very low in these species, so weed competition can be an issue with stand establishment. It is common for it to take two years to establish a stand. Rotational grazing is essential for maintaining stands. Plants should not be grazed below eight inches. If grazed too close, plants will be weakened and stands will thin. Because of their sensitivity to close grazing or clipping, these plants are easier to use for hay, but can be utilized with grazing cattle.

**Crabgrass** – This annual grass was selected for its higher yield from native populations in Oklahoma. Research in Oklahoma indicates both yield and animal performance are excellent on this forage. Experience in Tennessee indicates that it can make an excellent pasture for stocker animals during the summer. Because it is an annual, allowing plants to produce seed for next year's stand is necessary. No information is available to determine how successful natural reseeding of crabgrass will be due to the abundance of native crabgrass in Tennessee. There are two varieties currently available "Red River" and "Quick-N-Big".

**Sorghum x sudangrass hybrid and pearl millet** – Both are annual grasses that are frequently grown in Tennessee. These relatively tall growing grasses can be quite productive with timely summer rains. Sorghum x sudangrass hybrids can tolerate a cooler soil temperature so they can be planted earlier than pearl millet. These hybrids release prussic acid (cyanide) after a frost, so you cannot graze these hybrids as long as pearl millet. If a potential for even a light frost exists, do not graze a sorghum x sudangrass hybrid. Only cut it for hay, which will allow time for the prussic acid to break down.

**Teff grass** – This grass, originally from west Africa, has received a lot of publicity during the past year. It is a summer annual that is similar to sorghum x sudangrass hybrids. It has a little finer stem than the hybrids, so it should be a little higher in quality. Yields may not be quite as high as with sorghum x sudangrass hybrids. Also, early in the season the root system is shallow, so be careful with grazing management. It may be better to take first cutting off as hay.

Will warm-season grasses work for you? Warm-season grasses have the potential to provide forage when tall fescue pastures are not productive. However, the growing season is shorter with these plants compared to tall fescue and there is considerably more risk. If you decide to try one, be reasonable in the amount of land and resources you commit. Tall fescue should remain the primary forage on the farm. A good rule of thumb is to have 70 percent of your acreage in a cool-season grass, like tall fescue. Thirty percent can be sown to a warm-season grass. Your goal should be to provide grazing during late June through early September.

Most producers should think about planting a portion of their acreage to some type of warm-season forage. Although warm-season forages do not eliminate all of the problems associated with drought, these grasses will help minimize some of the forage production problems we may face in the future. Δ

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