

South Dakota Rancher[®]

Management tips for South Dakota livestock and grassland managers

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Summer Annual Forages

Temperatures are warming, the days are getting longer, it's nearing the end of spring so it must be time to start thinking about planting summer annual forages.

Summer annual forage crops like sudangrass, millets, cane, and sorghum-sudan hybrids are grasses that grow well when the weather gets hot, sunlight intensity is high, and moisture is less abundant.



Sudangrass.

These types of forages can be an excellent solution to the "summer slump" in forage yields and quality we so often see in the northern Great Plains region for haying and grazing as a result of our predominately cool-season vegetation.

There are however, a few key management tips to remember as you consider establishing and utilizing summer annual forages: 1) Don't plant summer annual forages too early. Wait until soil

temperature will remain above 65 to 70 degrees.

This will be in early- to mid-June in most cases. Exposing young seedlings to cool air (<50 degrees) or soil temperatures can permanently stunt growth, greatly reducing potential forage yield;

2) Sudangrass, one of the more popular annual forage species, produces a compound called prussic acid. Prussic acid is a hydrogen cyanide compound and is toxic to livestock when ingested.

To manage prussic acid poisoning problems, allow sudangrass to grow taller than 18 inches before grazing or haying it. Typically the prussic acid is diluted to non-toxic levels once the plant has grown taller than this height;

3) Summer annual forage species tend to be aggressive nitrate accumulators, especially in dry soil conditions. Livestock that consume these forages, either through grazing or hay, can be subjected to nitrate poisoning if not managed properly. A manager should always have summer annual forages tested for nitrate levels before grazing or haying. If nitrate levels are a problem, haying is likely the better alternative. Although the hay is still toxic in terms of nitrate levels, it can be ground and diluted into other forage stocks to minimize nitrate concentrations in livestock diets.

Grazing annual forages with high nitrate levels is not generally a good idea, however, if a manager is going to graze these forages, strip graze these fields and move animals frequently enough that they don't consume the lower one-third of the stalk where the highest nitrate concentrations typically occur.

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