Annual Forages

“When the gaps in forage production are temporary, annual forages can fill them.”

In Missouri, gaps in forage production often occur in late fall, winter and summer. When these gaps are consistent, it is generally best to plant permanent forages to fill them, rather than incur the yearly costs of reseeding annuals. Annual crops also cause more erosion than perennials.

What are the alternatives? Low endophyte fescue can make a good late fall or early winter forage if stockpiled. Warm-season grasses such as indiangrass, big bluestem, eastern gamagrass and switchgrass grow well during the summer and provide excellent forage if kept in a vegetative state. Legumes, such as birdsfoot trefoil and Korean lespedeza, complement the warm-season grasses well.

However, when the gaps in forage production are temporary, annual forages can fill them. Cool-season annuals such as wheat and rye can provide excellent late fall, early winter and early spring pasture. The fields should be dry when grazed, because livestock will tear them up quickly. This is the main limitation to grazing wheat in Missouri, as compared to the states of Kansas and Oklahoma. (There, drier fields make grazing easier.) If grain production is desired, you should remove animals in the spring before the plants start to tiller. Fertilization is vital to secure the best yields for both grazing and grain production. Bloat and grass tetany are two hazards of wheat pasture. Bloat guard should be provided to all animals. Lactating animals should have magnesium-oxide in their mineral mix.

Summer annual forages include sudangrass, sorghum-sudan hybrids and pearl millet. Of these, sudangrass or hybrid sudangrass are considered best for grazing in northern Missouri. They have finer stems, higher digestibility and less prussic acid problems than sorghum-sudan hybrids. Sudangrass should reach 15-20 inches before grazing. It should be grazed down to four inches, then animals should be moved to another field.

Prussic acid is a potential in sudangrass that is grazed when young or has been wilted by drought or frost. Pearl millet is free of prussic acid producing compounds. Nitrate poisoning in sudangrass can occur when a high rate of nitrogen fertilizer is applied, then a drought occurs. While prussic acid is found in the leaves, nitrate concentrates in the lower parts of the stem.

Brassica crops, such as rape, kale, mangels, rutabagas and turnips, can provide good feed. These can be directly planted into existing pastures. They can extend grazing into December, if planted in August. Except for copper, mineral content of these plants is higher than in many grasses. Studies by the Agriculture Research Service indicates that they are 15 to 25 percent more digestible than good alfalfa and have protein levels of 15 to 25 percent in the leaves.