

Illinois Grazing Manual Fact Sheet

SPECIES • WARM-SEASON GRASS

Switch Grass



General Use

Like other warm-season grasses, Switch grass is noted for heavy growth during late Spring and early Summer, making excellent pasture, and can be baled for hay. The stiff-stemmed, upright growth is rated excellent for wildlife nesting, brood rearing, and winter cover. The extensive root systems provide excellent stabilizing cover for soil erosion control. The stiff straw makes Switch grass valuable for field borders and wind barriers.

Characteristics

Switch grass is a perennial bunchgrass that grows three to five feet tall and can be distinguished from other warm-season grasses, even when plants are young, by the white patch of hair at the point where the leaf attaches to the stem. The stem is round and usually has a reddish tint. The seed head is spreading and open.

Establishment

Switch grass should be seeded in a pure stand when used for pasture or hay due to manageability is better alone than in a mixture. The shiny, slick, clean, free-flowing seed can be planted with a drill or with a broadcast spreader.

Seedings should be made in fine, firm seedbeds free of competition. Seedbeds should be firmed with a roller prior to the drilling or broadcasting of seed. If the seed is planted using the broadcast method, roll afterward to ensure good seed to soil contact. When drilled, seeds should be planted one-fourth inch deep. No-tillage seedings in closely-grazed or burned sod have been successful where control of sod is accomplished with clipping, grazing or proper herbicides. Another option is to seed Switch grass into a low population corn crop. Allow the Switch grass to become established while the corn is growing. Then after corn harvest, manage the Switch grass for pasture the next year. The preferred method is to use a drill to plant the Switch grass and follow with a no-till planting of corn. Atrazine may be used for weed control in the corn crop. Late spring or early summer plantings of Switch grass should not be made with a companion crop because of potential moisture stress.

See your local NRCS or Extension office for proper seeding rates and dates. Weed control with all plantings of Switch grass is important the first year. Switch grass is atrazine resistant, and when planted with corn, can be used to help control weeds.

Phosphorus and potassium should be applied according to soil tests before or at seeding. Nitrogen, however, should not be used at seeding time due to stimulating weed growth. Fertilizer applied during the seeding year usually does not increase stand density but will increase plant vigor. If nitrogen is to be used the first year, do not apply until mid-July, and then only on stands with limited weed competition. No more than 30 pounds of nitrogen per acre should be applied at that time and adjusted to meet soil analysis.

Stand densities of 1.5 to 2 established plants per square foot in the spring of the second year is adequate for hay fields or pasture.

Management

If weeds are a problem during the seeding year, Switch grass may be mowed at a four-inch height in May or a six-inch height in June or July. Grazing is generally not recommended the first year, but a vigorous stand can be grazed late in the year if grazing periods are short with at least 30 days of rest provided between grazings. Switch grass begins growing late in the spring, making about 70 percent production after June 1. Switch grass is the earliest maturing of the common native warm-season grasses and ready to graze in early summer.

Established stands of Switch grass may be fertilized in accordance with soil tests. Generally, 60 pounds of nitrogen and 30 pounds each of phosphorus and potassium per acre are adequate for maximum yields. Phosphorus and Potassium will not be needed if the field is grazed since these elements will be recycled back to the soil by the grazing animal. Apply the nitrogen after the Switch grass has begun to produce using a single application in mid-to-late May or a split application in both May and early July. Avoid high rates of nitrogen because carry-over could spur cool-season grass growth or weed growth and harm young plants the following spring.

Switch grass may benefit from burning of plant residues at the initiation of spring growth. Burning fields once every three to five years decreases other plant competition, eliminates excessive residue and stimulates Switch grass growth. Switch grass used for wildlife food and cover should be burned once every three to four years to reduce mulch accumulations that inhibit movement of hatchlings and attract nest predators.

Under continuous grazing management, begin grazing Switch grass after reaching a height of 14 to 16 inches, usually in late May. Grazing should be stopped when plants are grazed to within four inches of the ground in May, eight inches in June, and 12 inches in late August. A rest before frost is needed to allow for carbohydrate storage in the stem, bases, and crown, to help produce vigorous plant growth the next year. Switch grass may be grazed to a height of six to eight inches after frost. The winter stubble is needed to provide insulation.

With management intensive systems, grazing can begin in the first paddocks when plants reach a 10-inch height and should not be grazed below a stubble height of 6 inches. Grazed paddocks need to be rested 30-60 days before being regrazed again, depending on regrowth.

Where to Get Help

For more information about big bluestem, contact the local Natural Resources Conservation Service listed in the telephone directory under "U.S. Government," or the University of Illinois Cooperative Extension Service.



USDA is an equal opportunity provider, employer, and lender.

ILLINOIS • 2000

il.nrcs.usda.gov/