

Grasses for WET SITES



REED CANARY GRASS

IRVINE T. DIETRICH
SOIL CONSERVATIONIST

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N9
A8X
no. 478

COOPERATIVE EXTENSION SERVICE
NORTH DAKOTA STATE UNIVERSITY
FARGO, NORTH DAKOTA 58102

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REED CANARYGRASS (*Phalaris arundinacea*)

Reed canarygrass is adapted to wet areas. It will tolerate flooding for a considerable time during the winter and spring seasons. In summer it can stand some flooding, but less than during the colder part of the year.

Reed canarygrass forms a dense but sometimes bunchy sod. Some grass authorities describe reed canary as a giant bunch grass, forming bunches to 3 feet in diameter. However, most describe it as a sod forming grass. Reed canarygrass makes a very dense sod that will support the weight of livestock, heavy farm equipment, etc., even when the soil is saturated with water.

Seeding

Seeding usually is done in August or October because at these times of year wet areas are most likely to be dry enough to work up and seed.

Spring also is a good time to plant reed canarygrass in years when the area to be seeded is dry enough to permit working and seeding.

Seeding Rate

Plant 4 to 8 pounds of seed per acre of reed canarygrass. For ponds and potholes it may pay to seed pure reed canary in the pond area, and then plant a mixture containing slender, western and tall wheatgrasses above the water line where the soil is likely to be salty.

If the area is bare, work it up to a shallow depth (less than 2 inches) with a disk and plant with a grain drill, or broadcast the seed and harrow it in.

Many locations suitable for reed canary now are covered with inferior but highly competitive plants such as wild barley (foxtail barley). It is best to plow in late summer. Cultivate to kill existing vegetation and seed reed canarygrass in October.

If a pond is full of water, plant the reed canarygrass in a 20-foot or wider band around the water. If the water goes down slowly over a period of several years, the grass may work its way in as fast as the water recedes. This outer edge is likely to be high in salts, so plant this area to a mixture of slender, western and tall wheatgrasses, and reed canarygrass.

Management

Reed canarygrass is a high producer and soon uses up available nitrogen. Therefore, applications of 60 to 120 pounds of nitrogen per acre applied late in the fall are necessary to maintain high yields. Nitrogen-starved reed canary is reported to be not as well liked by livestock as when the grass has been fertilized.

This grass will withstand heavy grazing but, as with all grasses, it needs a rest for a part of each growing season. During this period of undisturbed growth it will store up root reserves.

In most years, wetness of the ground will determine when reed canarygrass can be cut for hay. However, when you have a choice, mow at about the time the grass heads out. It will make higher quality hay then than later.

Seed Production

Reed canarygrass produces considerable seed most years. However, harvesting the seed is difficult. This grass is a progressive ripener. When seeds in the center section of the head are ripe, the seeds at the top have shattered and those near the bottom are still green.

Harvest seed when you can get the largest amount of live seed. This is usually when about 40 to 50 per cent of the seeds are brown when examined in the field.

Straight combining seems to be the most practical method of harvesting reed canarygrass. Newly harvested seed will heat quickly if placed in sacks, bins or piles. Small amounts of seed can be placed to a 2 or 3-inch depth on the floor to dry. This seed should be mixed once or twice a day with a garden rake. Do this for several days.

Any amount larger than a few hundred pounds should be dried in a drying bin with forced air (unheated) or heated air in a temperature range below 120 degrees.

Since reed canary seed is quite small, it likely will plug screens that form the floor of drying bins. Place about 2 inches of oats on the floor of the drying bin before reed canarygrass is put in for drying. The oats can be separated easily from the reed canarygrass later.

CREeping MEADOW FOXTAIL (*Alopecurus arundinaceus*)

Creeping meadow foxtail was first reported from the Max area of North Dakota in the 1930's. Apparently, the seed was brought over by an immigrant from eastern Germany or western Russia in the early 1900's. Creeping meadow foxtail now occupies many pond edges and wet locations in the Max, Douglas and Garrison areas.

The plant materials section of the U. S. Soil Conservation Service made a selection of this grass

which was named Garrison creeping foxtail. The Garrison variety was released officially in cooperation with the Wyoming Agricultural Experiment Station. A number of farms in North Dakota, South Dakota and Minnesota grow it. Also, it is grown in mountain meadows in the Rockies. Growers of creeping meadow foxtail report favorably on its palatability, yield and tolerance to wetness. Creeping meadow foxtail is quite tolerant to salt or alkali as long as the site remains wet but is considerably less tolerant during periods of dryness.

Reports indicate the seed habits of creeping meadow foxtail are as poor as reed canarygrass. This grass is inclined to produce heads over an extended period, so there may be seed in all stages, from green to ripe to shattered. The seed shatters when ripe. Probably, the best method of harvest is to combine and then dry the seed artificially. The seed is small, so it will pay to put a few inches of oats on the bottom of the drying bin.

Seedings can be made the same as described for reed canarygrass. Six or 8 pounds per acre are considered to be the proper seeding rate. However, so long as seed continues in short supply, as little as 2 pounds per acre can be seeded. It isn't so necessary to get a thick stand from a seeding of creeping meadow foxtail because this grass spreads by rhizomes.

Fertility (nitrogen) requirements are likely to be similar to reed canarygrass.

Creeping meadow foxtail deserves a trial on wet areas on many farms.

Salty or Alkali Areas

Tall wheatgrass is the most tolerant to salt and alkali of the tame grasses. However, slender and western wheatgrass also are rather tolerant. Western wheatgrass is the only one of the three that spreads by rhizomes, and also is longer lived than slender or tall. Western wheatgrass definitely should be included in the mixture.

A mixture of tall (5 pounds), slender (4 pounds) and western (5 pounds) wheatgrasses, with sweet-clover (2 to 4 pounds per acre) is suggested for salty soil areas.

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