

Plant Guide

AMERICAN SLOUGHGRASS

Beckmannia syzigachne (Steud.) Fern.

Plant symbol = BESY

Contributed by: USDA NRCS Plant Materials Center, Corvallis, Oregon



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Alternate Names

Other common names include western sloughgrass, caterpillar grass.

Uses

American sloughgrass is native cool season grass important for wetland restoration as well as erosion control along ditches, streams, waterways, and the shorelines of lakes or ponds. It is valuable as a wetland forage species and is hayed or grazed in some regions. The seeds provide important food for waterfowl, seed-eating birds, and small mammals. The species has been commonly sown for wetland wildlife habitat. Palatability is rated high for all classes of livestock. It provides relatively quick and reliable cover under appropriate growing conditions.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

Description and Adaptation

American sloughgrass is an annual or short-lived perennial bunchgrass with stout, leafy stems (culms) that are 60 to 100 cm tall. The flower head (inflorescence) is a very narrow, upright spike, 20 to 30 cm long. It has a double row of densely compacted, 1-flowered spikelets on one side of the panicle branches. The seed with hull attached is nearly flat and disk-like in shape. This species occurs in the cooler parts of North America, particularly the north central and northwestern United States, as well as southern Canada, Alaska, and a portion of eastern Europe and Asia. However, it is not found at mid or high elevations and has not been collected in western Washington. Seedling vigor and establishment are moderately rapid. The plant flowers in June and goes to seed in July or August in western Oregon.

Adaptation: American sloughgrass is best adapted to poorly drained, irrigated, and somewhat acidic to alkaline soils with shallow water tables. It performs best on clay soils covered with a thin layer of organic matter, but grows on coarser substrates as well. Habitats include marshes, vernal pools and depressions within wetland prairies, pond shores, shallow water, and other flooded or seasonally wet sites. American sloughgrass thrives where the soils are saturated at or near the surface year round. It will also maintain itself under continuous, year round flooding up to 10 cm deep. Studies have shown that survival rapidly declines beginning at depths of 15 cm and beyond. It is intolerant of summer dry soils and shade.

Relative abundance in the wild: High in western Oregon. This species may be scarce or rare in other parts of its natural range. Individual plants usually contain many seed heads, which produce abundant seed. The seed does not shatter readily which creates a large window of time for easy collection.

Establishment

American sloughgrass lacks complex seed dormancy characteristics and rapidly colonizes mudflats or other recently exposed moist soil. Reports of percent seed germination vary, but it may be improved by

United States Department of Agriculture-Natural Resources Conservation Service

Plant Materials http://plant-materials.nrcs.usda.gov/

Plant Fact Sheet/Guide Coordination Page http://plant-materials.nrcs.usda.gov/intranet/pfs.html National Plant Data Center http://npdc.usda.gov

rubbing or hulling the seed (and in turn possible light abrasion of the seed coat), and by providing alternating temperature regimes. The best time to plant is in the fall, or as a dormant seeding, which will promote early spring establishment. Surface sown seed readily floats and migrates with flowing water, so insure adequate but shallow soil or mulch coverage. Generally, stands decline after three to five years on adapted sites. There are 240,000 seeds/lb (+/- 20%) with hulls intact. Recommended single species seeding rates can vary widely, depending on the site and purpose of the planting. Range is 5-18 lbs/ac. One lb of live seed per acre is equivalent to 5 to 6 live seeds per square foot.



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Management

In the Northern Plains, forage production is considered moderate to high. As a short-lived species, a pattern of deferred, rotational grazing may be needed every two or three years to allow for seed production and natural regeneration of the stand. It will require a high water table or regular irrigation during the dry season. Sloughgrass has the

ability to readily volunteer on exposed mudflats or other moist, disturbed ground and produce abundant seed crops. This makes it a good candidate for moist soil management (slow de-watering, disking, etc.) of certain wetlands and shallow water impoundments for waterfowl, shorebird, and other wildlife habitat.

Environmental Concerns

Relatively narrow ecological adaptation. While sloughgrass is usually replaced by more competitive grasses over time, it is sometimes considered weedy in low lying seed production field of introduced grasses in western Oregon. It can volunteer readily after tillage.

Cultivars, Improved, and Selected Materials (and area of origin)

'Egan' American sloughgrass was released as a cultivar by the Alaska Plant Materials Center in Palmer, Alaska in 1986 for wetland reclamation. Seed sources are relatively common for western Oregon, Alaska, and the north central US, but less so elsewhere.

Contact your local Natural Resources Conservation Service (formerly Soil Conservation Service) office for more information. Look in the phone book under "United States Government". The Natural Resources Conservation Service will be listed under the subheading "Department of Agriculture."

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For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS Web sitehttp://plants.usda.gov or the Plant Materials Program Web site http://plant-Materials.nrcs.usda.gov

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