

# Sweetgrass

## Introduction

A member of *Poaceae*, the bluegrass family, the scientific name of sweetgrass is

- ▶ *Hierochloe odorata*
- ▶ *Hierochloe*, from the Greek, *hieros* = sacred; *chloe* = grass
- ▶ *odorata*, from the Latin “sweet smelling, fragrant; ill smelling”

Its common name is derived from its characteristics. Other common names include:

- ▶ Zebrovka (the place where bison graze)
- ▶ buffalo grass
- ▶ vanilla grass
- ▶ sweet holy grass
- ▶ foin d’odeur
- ▶ Wenserakon ohonte
- ▶ Wiingashk

## Identification

- ▶ Sweetgrass is a native rhizomatous perennial grass.
- ▶ The culms or stems are semierect, up to 30 inches tall and arise from slender, creeping rhizomes.
- ▶ Leaves are few, rough-edged and have very shiny, hairless undersides.
- ▶ These leaves, unlike many other grasses, will curl quickly when dried.
- ▶ Often it has a reddish-purple color near the base of the plant.
- ▶ The highly-prized longer leaves that grow on sterile roots reach 18+ inches in length.
- ▶ The inflorescence is an open, pyramid-shaped golden brown flower cluster with slender branches.
- ▶ Spikelets have three florets with bristleless lemmas; glumes are thin, translucent and nearly equal in length.
- ▶ The fruit is a caryopsis (fruit and seed in a single grain).



Sweetgrass  
*Hierochloe  
odorata*



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# Growing a Sweetgrass Garden

## How Sweetgrass Grows

Sweetgrass seedheads are largely infertile. Reproduction is best done by plant division.

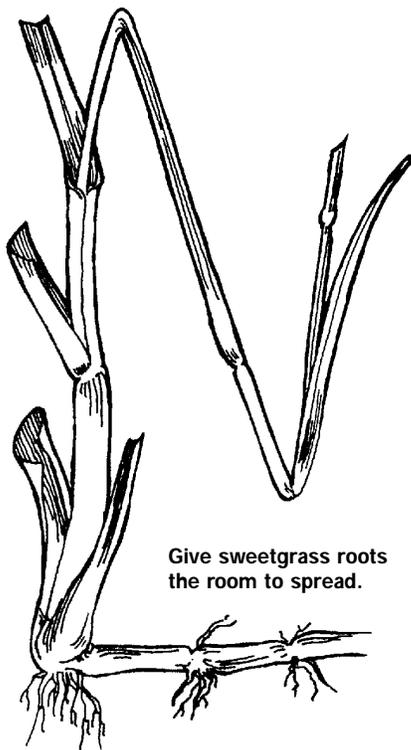


Whether for personal or commercial use, many people are interested in growing their own sweetgrass plot. Sweetgrass is long-lived. Once planted in the garden, due to their extensive root systems, sweetgrass plants will be difficult to remove and that area will be permanently dedicated to sweetgrass. The grass spreads vigorously by creeping rhizomes that are often fairly deep. In spring, creeping rhizomes produce inconspicuous fruiting stems with leaves that are few and short. Somewhat later, long leaves develop from separate sterile basal offshoots. Stems shrivel soon after flowering.

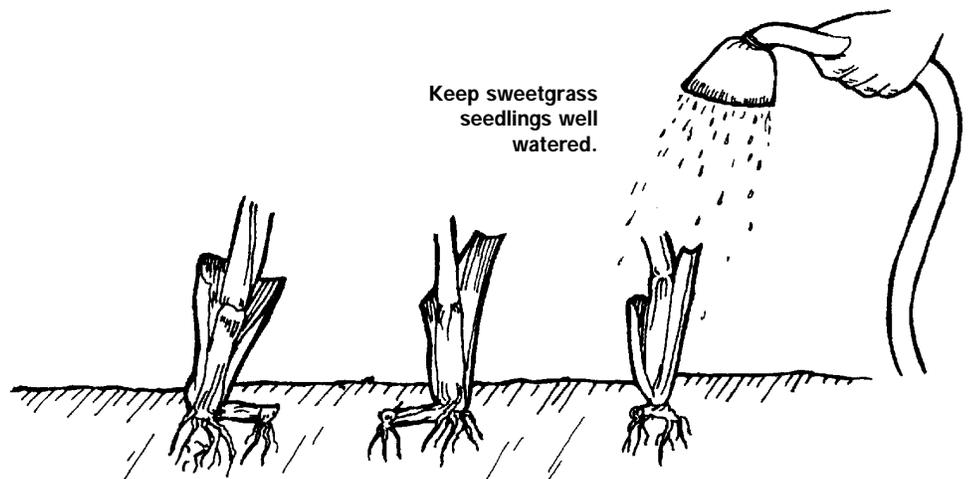
Sweetgrass also reproduces by seed. However, sweetgrass is largely infertile; it produces relatively few seedheads and these contain few seeds. Thus a plant started from seed takes several years to grow to the same size as a plant grown from a plug in only a few months. Therefore, division is the most successful method of increasing plant stock.

## Planting Sweetgrass Plugs

- Division is accomplished by separating the individual roots that have developed from the rhizomes of a spreading plant. Newly separated plants will do best if placed in the shade for two to three weeks while their roots establish. After this, transplant at one-foot spacings into areas of partial shade to full sun.
- The plants are extremely winter hardy and go dormant in cold weather. They resprout when temperatures reach 40° F. However, a winter mulch may help to promote spring growth over unmulched plants.
- Keep plants moist but not overwhelmingly wet. Do not let the soil dry out completely as dryness seems to be the only thing (other than herbicides) that can kill sweetgrass. The leaves will curl to warn you when the soil is getting excessively dry, and will revive quickly with a thorough watering.
- Once plants are established and spreading you can spread it faster by cutting out plugs from the patch.



Give sweetgrass roots the room to spread.

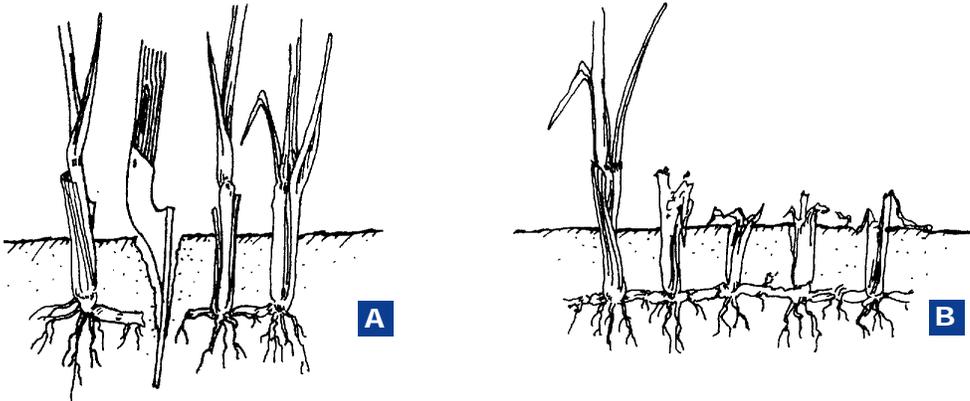


Keep sweetgrass seedlings well watered.

# Management Tips

## Weeding

Weed area at least once a year. This is best done in early spring when sweetgrass is easier to differentiate from other grasses. It can be done by hand but burning also works. Stems rise from dead foliage of the preceding year. This foliage may protect basal buds from fire damage in the spring when moisture content of dead foliage is high. Creeping rhizomes often grow fairly deep and will sprout after aerial portions are burned. But in fall, it is more likely that the buds would be damaged by heat produced when the dried foliage burns. During the growing season, it is likely that stems and leaves would be killed by fire.



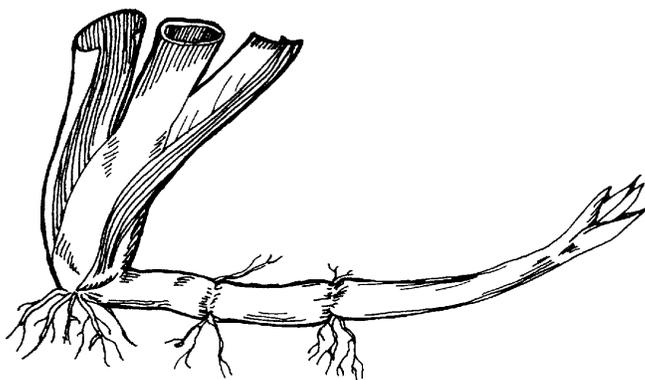
Sweetgrass is an invasive plant. Weeding can be done by hand with a shovel [A], or controlled using fire management techniques [B].

## Fertilizing

Fertilize at least twice a year and more often if you are harvesting the grass. If using a chemical fertilizer, a balanced, lawn-starter fertilizer is best.

## Harvesting

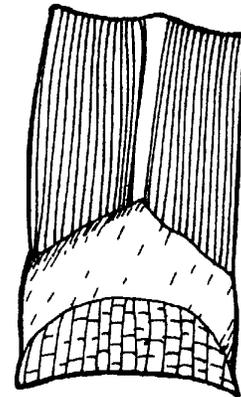
One to three braids worth of sweetgrass per square foot may be harvested by the end of the second season of growth. The longer leaves may be harvested several times during the year, although the mid-season growth is considered to be superior. Leaves are harvested either by grasping the shoots firmly near the ground until they break from the rootstock below the surface of the soil or by cutting the grass near the bottom at soil level. If you pull up the root stock with the plant, simply cut the root from the stem. If kept moist, the root can be planted to create a sweetgrass plug.



Sweetgrass should be harvested carefully. Cut back the plant, but allow the rhizome and root structure to spread, thereby promoting new growth.

## Fertilizing Wild Stands

Wild stands of sweetgrass are disappearing because nutrients are removed from the ground when grass is harvested and the soil's fertility is not being replaced. If you are harvesting this plant from the wild, leave an "offering" of five pounds of organic fertilizer per every 100 square feet harvested.



If harvested by cutting, you'll notice the thickness of sweetgrass leaves.

## Sweetgrass

### Range

Sweetgrass is circumpolar, being native to both the western and eastern hemispheres. In North America, its extensive range spans the northern regions from Alaska to Newfoundland, moving down to New England, across the Great Lakes region and the upper Midwest to Oregon and south to Arizona. In the Great Lakes, it is usually found in wet meadows, low prairies, the edges of sloughs and marshes, bogs, shaded streambanks, and lakeshores. It is usually found in mid-successional communities among other grasses or shrubs and seldom in pure stands.

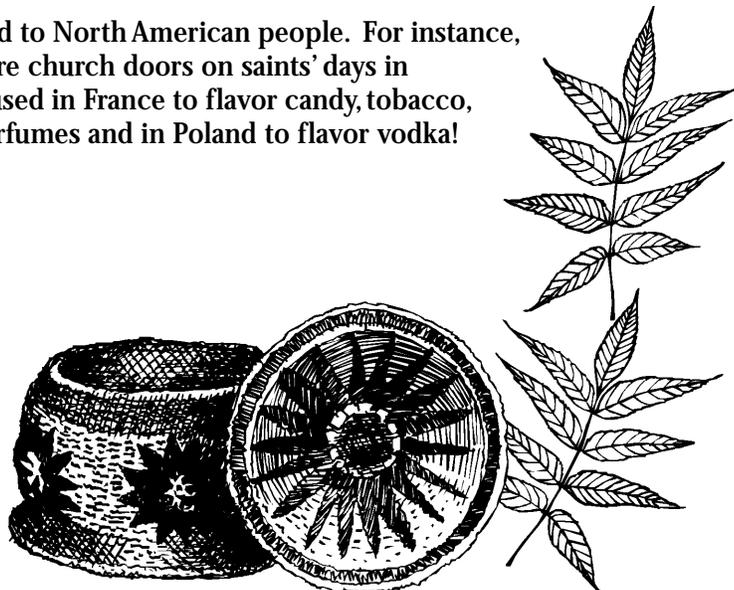
Sweetgrass can be a member of some meadow communities succeeded by forest in the absence of disturbance. Some companion trees are: Balsam Fir (*Abies balsamea*), Red Maple (*Acer rubrum*), Paper Birch (*Betula papyrifera*), Tamarack (*Larix laricina*), White Spruce (*Picea glauca*), Black Spruce (*Picea mariana*), Jack Pine (*Pinus banksiana*), Red Pine (*Pinus resinosa*), White Pine (*Pinus strobus*), Balsam Poplar (*Populus balsamifera*), Quaking Aspen (*Populus tremuloides*), Northern Pin Oak (*Quercus ellipsoides*).

### Uses

Dried sweet grass foliage is fragrant because of its coumarin content and is used as incense and in making perfume. Because of the sweet, vanilla-like fragrance that develops once the plant has been harvested and dried, the use of sweetgrass as an incense and fragrance is widespread among the Native American peoples. Native Americans use the long leaves of sterile shoots to craft or decorate baskets, bowls, trays, and mats. It also has religious significance to some Native Americans who use it to burn as incense to smudge and to “purify” places, objects and in calling the “Spirits of the Four Directions.”

In addition, sweetgrass is used for many medicinal purposes. Sweetgrass tea is used for coughs and sore throats, to treat chapping and windburn, and as eyewash.

Uses are not limited to North American people. For instance, it was strewn before church doors on saints’ days in northern Europe, used in France to flavor candy, tobacco, soft drinks, and perfumes and in Poland to flavor vodka!



Native Americans use the long reed-like leaves of sweetgrass to create baskets, wrapping them around vines. It is often used with black ash (leaves pictured). New York Sea Grant is presently involved with black ash restoration efforts.



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