

# **Technical Guide**

## **ESTABLISHMENT AND CARE OF NATIVE AND NATURALIZED GRASSES**

### INTRODUCTION

Stover Seed has extensive experience working with landscape professionals, Erosion Control Specialists and Restoration Consultants in successfully establishing custom native and naturalized (non-native) grass and wildflower seed mixtures for various public and private projects. The use of such grasses has recently expanded to include golf courses, parks, public traffic medians and sidewalks and commercial and residential landscapes. Native grasses offer reduced water consumption, wildlife habitat, erosion control and pleasing aesthetics. This technical guide gives an overview of the steps needed to successfully establish and maintain a native grass stand.

Native and naturalized grasses include both cool-season and warm-season grasses. Cool-season grasses grow best in the spring and fall and even in winter in more temperate climates. In contrast, warm-season grasses grow best during the warmer months of the year which depending on the climate zone can range anywhere from April to October.

### SITE PREPARATION

A key element in establishing native grasses is the elimination of competition from weeds. Weeds typically grow faster than native grasses and compete with them for the basics needed for establishment and growth. Reducing the population of weed seeds prior to planning is essential for success and takes some planning and patience. The first step involves the removal of all existing weeds and unwanted vegetation. Most soils do not need to be tilled or amended but if needed it should be done by tilling to a depth of 3-4 inches. At this stage regular, frequent waterings should be made in order to germinate the existing weed seeds in the soil which may take several weeks. Once the weeds have germinated apply the herbicide glyphosate (Roundup) as directed on the label. Depending on the type of weeds, a second application may be needed a couple of weeks later. If you are looking for a non-chemical alternative you may try a technique called solarization.

More information can be found at: <a href="http://ipm.ucanr.edu/PMG/PESTNOTES/pn74145.html">http://ipm.ucanr.edu/PMG/PESTNOTES/pn74145.html</a> Never apply a preemergent herbicide to the site as it will prevent germination of native grasses. Once the weeds have germinated and been removed the site is now ready for planting.

### **TIMING**

In temperate climates cool-season grass species or mixtures can be seeded throughout the year providing irrigation is supplied in drier months. Seeding cool season grasses when temperatures exceed 90°F is not recommended. For non-irrigated sites seeding should be done prior to fall rains or during the rainy season. Recommended planting dates for warm-season grasses range from late winter to late spring and generally need a soil temperature of 50°F in order to germinate. Summer planting can be successful if rainfall is sufficient or supplemental irrigation is provided.

#### **SEEDING**

Apply seed at the recommended rate. It is important that the seed bed be clean in order to insure good seed-to-soil contact. Seeding can be by hand for small areas or with mechanical spreaders for larger areas although larger or light seeds may not flow easily through a spreader. If spreading by hand mix seed with moistened sand of 2 parts sand to 1 part seed in order to get uniform distribution. After seed distribution lightly incorporate the seed into the soil 1/8 to 1/4 inch deep by either rolling or raking. Another option would be to cover the seed with 1/4 inch of mulch (seed cover). Either way, seed should not be covered more than 1/4 inch.

With respect to fertilization, native grasses are generally tolerant of poor soils. A soil test may be conducted to determine if any phosphorus or potassium need to be added. Avoid nitrogen fertilizers as it will only encourage the growth of undesirable grasses and weeds.

#### **ESTABLISHMENT**

Consistent surface moisture is key for successful germination and establishment. In drier climates and high temperatures light waterings will need to be made 3-4 times daily for 10-14 days. Take care not to create puddles when watering. As seedlings emerge cut back on the watering frequency but extend the watering time to encourage root development. You can check soil moisture by inserting a shovel or trowel into the soil. If you encounter resistance or difficulty, then water penetration may not be sufficient and watering times should be increased.

## WEED CONTROL

Weed management is essential for the long-term establishment of native grasses. The goal of weed control is to reduce competition from undesirable grasses and broadleaved weeds. If these weeds are allowed to get too tall, they will shade out the desirable grasses. Care needs to be taken as to not damage young native grasses when practicing weed control. Weeding should start about 4-6 weeks after establishment and the soil should not be too wet to avoid compaction. Herbicides are not recommended at this stage.

Mowing is regarded as the best method of weed control. It decreases weed growth and improves the competitive advantage for desirable grasses. The objective is to remove as much weed growth while leaving as much growth of native grasses as possible. Set your mower to a height that will leave most of the native grass. Mowing should be done frequently in order to avoid too much heavy weed litter that may smother the young seedlings.

### MANAGING ESTABLISHED GRASSES

Native cool-season grasses can take one to two years to fully establish while warm-season grasses can take two to three years. With these long periods, additional weed control may be needed. Once grasses have established a good root system, they are resistant to dry conditions. During hot summers they will look best if given supplemental irrigation. Irrigate deeply in order to reach the root system. For non-irrigated sites grasses will brown out in summer but will recover with fall/winter rains. Occasional reseeding will strengthen the native stand and help to suppress weeds.

## **WILDFLOWERS**

The addition of wildflowers adds beauty and many wildlife benefits. Wildflowers can be added at the time of seeding or delayed until grasses become established.

## ADDITIONAL INFORMATION

These instructions serve as a general guideline for establishing and growing native and naturalized grasses. Many states have cooperative extension or conservation program resources for native grasses that can be found on the internet. These can be helpful in the selection and management practices in your area.

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