



## **What are the keys to a successful seeding?**

Key #1 - Prepare a good seedbed: Removing all pre-existing vegetation, loosening the soil and removing the thatch will allow sunlight to penetrate into the soil.

Key #2 - Firm the soil: After tilling or loosening the soil to allow for good air and moisture penetration, you must firm it to achieve good seed-to-soil contact.

Key #3 - Plant shallow: The rule of thumb is that seed should not be planted any deeper than 1/4". One exception is eastern gamagrass, which can be planted 1" deep.

## **When is an herbicide necessary for weed control?**

The most important time to control weeds is before planting when complete vegetation control can be achieved. After seeding, a selective herbicide can be used to control certain groups of undesirable plants. Check with a vegetation management specialist.

## **Should I fertilize my native establishment site?**

We do not recommend using fertilizer when establishing native plant species. Natural fertility on sites being planted in native or wetland species is generally adequate. The use of fertilizers can promote the growth of weed species which can out-compete your native plant species. Fertilizers can also lead to contamination of nearby wetland areas. We do recommend adding well-decomposed, organic material to all sites when the topsoil has been removed or depleted, as this is the better way to improve soil fertility.

## **Can seeds from one region be grown in another?**

State-specific ecotypes will grow in other states as long as the species naturally occurs in your region.

## **Why is diversity important?**

A mix of species will increase the site's functionality and add to successful establishment. A diverse mix will attract a greater diversity of pollinators and birds to the landscape.

## **What kinds of mixes do you carry?**

We offer mixes for many different sites. Our website, [www.ernstseed.com](http://www.ernstseed.com), lists all of our stock mixes with application rates and species composition.

## **Do you have pictures of your mixes?**

We always strive to obtain pictures of our mixes from our customers as well as from site visits. We have both individual species as well as group species pictures available that represent what a site will resemble when established. The appearance of a mix will vary from site to site and from season to season.

## **Why do stock seed mix formulations change?**

Stock seed mix formulas may vary within a year or between years. Each mix is created with a particular guiding philosophy. As new species become available, they will be added to enhance the performance of the mixes. Occasionally, a crop may not be available due to crop failure or high sales. This will lead to a reformulation using the remaining species in the mix. To adapt to these variations in our formulations, we recommend you use the phrase "Ernst Mix (X) as currently formulated" when writing your specifications.

## **Can I order a custom mix?**

The sales team is able to create a mix to your specifications, contingent upon inventory availability. Custom mixes must be ordered in whole pound increments and a 5% custom mix charge is added to the total.

## **Why are cover crop rates so low?**

Seeding rates are based on our experience with native meadows and our desire to establish strong, individual plants. Planting cover crops that are too aggressive or thick diminishes the long-term viability of the perennial meadow plants. We have concluded that the annual, small grains, such as oats and rye, are the best cover crops or companion crops to plant with native seedlings when there is a need. Due to its physiological adaptations in warmer regions, brown top millet is recommended for portions of the planting season. Grain cover crops can reduce competition from aggressive weeds because they grow quickly and also reduce the potential for erosion by providing quick cover. We do not recommend annual ryegrass as it is too aggressive and long-lived.

## **What is the difference between a cover crop and a companion crop?**

A cover crop is a fast-growing species that is used to protect soil and water resources. A companion crop grows rapidly and provides long-term protection for the desired plants.

## **Why inoculate legumes?**

Inoculation involves adding a specific bacterium, "rhizobia," to legume seeds. Rhizobia have a beneficial relationship with legumes in that, when root nodules develop, the bacteria inside convert nitrogen gas from the air to a form which is used for plant growth.

## **How do I calibrate a drill for seeding?**

Calibrating a drill or broadcast seeder is dependent upon seed bulk density and required application rates. Many native and naturalized seed mixes contain a mix of large, fluffy seeds and small, dense seeds. Some drills have special seed boxes that can meter large, fluffy seed. Many native seed mixes are planted at 10-20 lb. per acre (1/4-1/2 lb. per 1,000 sq. ft.).

A simple method for calibrating a seeder is to add a bulking agent (kitty litter) to create an even flow of seed. Add 40 lb. of a bulking agent to 10 lb. of seed and calibrate for 50 lb. per acre (1



## Frequently Asked Questions

lb. bulking agent to 1/4 lb. of seed per 1,000 sq. ft.). Divide the seed into proportional areas of the project. Start seeding at a lower rate than the calculated rate. If possible, plan on seeding half of the seed in one direction and make a second pass with the remaining half of the seed in a direction perpendicular to the first direction.

### **My seed isn't coming up - what should I expect?**

Many native seeds have long germination periods and require particular conditions (proper temperature, light or light period, moisture and physiological conditions). We often see germination within four weeks of field corn emerging from the soil. The seedlings of long-lived, deep-rooted perennials typically produce more root structure than top growth, making the plants hard to identify. Some species in a native meadow take two to three years to become fully recognizable (see "Life Cycle of a Meadow"). Perennial plants do not produce flowers and seed heads until they have well-established roots. During this period, vigilant weed control (high mowing and/or an herbicide application) is necessary to assist in establishment.

### **Should I burn or mow?**

The natural process of burning, which is beneficial to native species, generally occurs during the dormant season or early spring. The benefits of burning can be replaced by mowing during the dormant season. While winter burns or mowing generally favor forb production and wildlife, late spring or summer burns or mowing increase grass production and control more woody vegetation.

### **When can I expect shipment?**

Shipping depends on how many orders we have to process at the time of your order. We ship on a first come, first served basis. Please order as far ahead as possible.

### **How soon can I get my bioengineering order?**

We require at least one week's notice when bioengineering orders are placed, as we custom cut your order for you.

### **Can you ship my order overnight?**

Yes. Generally, we require air orders to be placed by noon; however, during our busy season, air orders may be cut off earlier in the day.

### **I don't see it in your catalog - do you have it?**

We are always adding new species to our inventory. Please call for the latest additions.

### **Why is my specified species not available?**

Some species sell out quickly due to demand and/or harvest volume. We can make substitution suggestions that maintain the functionality of the original species.