Seeding Natives

This document can be helpful for those establishing a native plant community from seed for purposes of restoration, shoreline protects, stream/river/lake buffer, pollinator garden and other applications. This document describes the procedure for a broadcast seeding.

Site Prep

Site preparation is arguably the most important step in a native planting. Depending on current site status, site prep steps can vary. The goal is to eliminate the undesirable vegetation and create good growing condition with minimal competition for native seedlings.

Herbicide is a very effective means to kill undesirable vegetation. It is recommended that at least two herbicide applications are completed to eliminate the "first flush" of competitive weeds that are in the soil seed bank. Burning dry and dead vegetation is a good option for clearing an area to expose the soil seed bed. Variations of these steps below can be done depending on type and density of vegetation.

a) Spray – burn – spray b) spray – spray – burn c) burn – spray – spray

Once the vegetation has been cleared, the soil should be loosened by scratching with a dirt rake or harrow. Seed-tosoil contact is important for germination and ultimately establishment. Disturbance allows the weed seed bank to germinate so shallower disturbance is usually better.

Seeding

Broadcast native grass seed evenly over the prepared area. Gently rake the area once again to lightly incorporate the seed. Then hand distribute the forb seed (flowers) by pinching seed between fingers and "flinging" them openly. Forb seed can vary a lot in size but on average is very small and can be difficult to distribute evenly. Forb seed should not be incorporated to prevent burying.

A quick growing cover crop such as oats (spring/ summer) or winter wheat (fall) is recommended to hold the soil and prevent erosion while native seedlings establish. Cover crop shouldn't be planted thicker than 1 seed per 2 square inches. If the area is steep, erosion control blanket can be installed. If not, straw mulch can be hand applied to hold moisture and protect the soil until the cover crop establishes.

Maintenance

Once cover crop reaches 18 inches or starts to produce seed heads it should be mowed at a 6-8 inch height to allow sun light to native seedlings. Cover crop may need to be mowed again if sufficient growth occurs after the first mow.

For the next two seasons weed control is important to reduce competition with the native plants. Mowing at 6-8 inches when weeds reach "knee high" is a good guideline, to maintain sunlight penetration to the young native plants. Annual and biennial weeds are the main targets. Hand pulling is also a very effective means of control if a few taller individuals occur. After one year perennial broadleaf weeds (e.g., Canada thistle, birds-foot trefoil) can be spot treated with selective herbicides like 2-4D, triclopyr and clopyralid. However, care should be taken to avoid over spray on non-target native forbs.

As the planting matures, natives will out compete weeds for resources and with minimal maintenance, weeds will become scarce. Dominant species will change over time (depending on the seed mix). Black-eyed susan and yarrow that were abundant the first couple season will fade and bee balm, coneflower, blazing star and milkweeds will become the dominant flowers as warm season grasses like bluestem and indian grass mature into large clumps.