

# In a Nutshell Quick and dirty guidelines for native plantings

### **Preparation**

In cropland or disturbed sites, preparation should consist of preparing a soybean or turf seed seedbed. In an agricultural context, plant Roundup Ready soybeans and dormant seed into the bean stubble. Otherwise, prepare a Goldilocks seedbed, not to firm, not to soft, just right. Soil must be uncompacted and able to absorb water. No-till drills will eliminate the need for a final cultivation before seeding, but generally do not eliminate the need for soil preparation.

Interseeding preparation will consist of mowing, burning, or herbiciding existing cover, or a combination of the above.

Fertilizer is needed only on severe road-cuts or landfills; areas with compaction, pH problems, and poor topsoil. Mycorrhiza may be necessary.

#### Installation

Native seedings can be installed with broadcasters (blended with oats, not necessarily easy), seed slingers, warm season grass drills, trillions, hydroseeders, air seeders, or by hand. Under no circumstances, plant deeper than 0.125 to 0.25 inches. Some seed will always be visible. Plant large seeds no seed deeper than 4 times its lesser diameter.

Drills are not useful on small projects, nor do they properly function when less than one half full, or when driven rapidly. Drills should not be used when a mix area is one acre or less. Drills can not properly plant some seeds.

Seed soil contact is the goal. Dormant seedings can be on top of open ground. Growing season seedings must be lightly raked in, drilled, or hydromulched. Cultipackers may be used, firm not hard seedbed. Optimum results are from dormant cultipacked seedings.

For the very best results, large-seeded native grasses, large-seeded forbs and nurse crops are drilled. Small-seeded forbs, sedges, grasses, rushes, and light-obligate germinators are broadcast or hydroseeded. Straw blanket everything. Our 30 year experience can properly separate the seeds for your project.

Hydroseedings should be installed with 1000 lb mulch per acre with seed followed by a second pass with 1000 lb mulch per acre. An experienced hydroseeder operator gives better seed distribution than drilling.

Native seedings grow slowly. The weeds grow rapidly. You will see weeds, "annuals", or nurse crop long before seeing native seedlings. Before seeding, cover a 4-foot by 8-foot area with plastic or plywood, so it cannot be seeded. After seeding, remove the cover. Any plants germinating in this area are weeds. (This method is not accurate in *insitu* hydric soils with native seed banks, where desirable natives may germinate.)

#### Seeding dates for optimum results

Plantings should have 12 weeks of growth before their first frost, not just planted 12 weeks before frost.

Frost dates	last frost	first frost
Rockford	May 13	Sept 25
Chicago	April 25	Oct 22

There is no such thing as a safe fall seeding in northern Illinois. A percentage of plantings will fail every year. Fall seedings may work in the frigid north, but not here.

For best results, forb mixes plant November 15 to March 31

For best results, grass mixes plant April 1 to June 15. Too dry later

Erosion control mixes as above, but as needed to stabilize the site.

Wetland / detention mixes as above, but as necessary to access the basin/wetland.

Plantings with true annual accent flowers must be dormant seeded or early spring seeded, two weeks before the last spring frost. Most "annuals" are actually biennials or short-lived perennials. Some plants are monocarpic; they grow one or more years, flower and fruit, then die.

If a site with serious restoration work becomes available in the off-season, stabilize it with 32 lb Seed Oats and 5 lb Annual Rye per acre. Dormant (frost) seed into existing cover at appropriate time.

# **Nurse crops (Nurse Crap?)**

Nurse crops are counter-productive and not necessary. Use standard erosion control measures, e.g. straw, hydromulch, erosion blankets. If nurse crops are used, do not exceed our recommended rates, 32 lbs oats, and 5 lbs annual rye. Timothy is stupid.

# Post planting management

IDOT specifications are based on quality assurance up front and often have no follow up or post planting maintenance, hence questionable successes. Good specs balance quality assurance with absolutely necessary, post-planting maintenance. No maintenance, no guarantee!!!

All upland plantings must be mowed during the first growing season 3 to 5 times between May and August, leaving 8-12 inches stubble going into winter. In the early spring of second growing season, mow very low, simulating a burn. As the 2nd growing season progresses, mow as weeds develop, approximately two or more times. Perennial weeds should be appropriately herbicided.

Alternately, appropriately designed upland plantings can be treated with Plateau<sup>TM</sup> at a low rate (approximately 4 to 6 ounces per acre, (always consult the label) and mowed 2 times first year, 2 times second year

Wetland plantings may be mowed when practical and accessible.

Plantings should not be burned prior to the end of their 2<sup>nd</sup> or 3<sup>rd</sup> full growing season. Plantings should be burned for several years there after, but not always in late spring.

Long-term maintenance consists of burning, mowing, and doing nothing (and spot controlling weeds). Management practices should be rotated and implemented at varying times of the year. Larger plantings should be divided into management units that receive different practices at different times during the same year. Performing the same maintenance operation at the same season every year will alter the floristic composition. Perennial weeds should be spot treated with selective herbicides as per the label.

Sample schedule		
Plot 1	Plot 2	Plot 3
Year 1 mow for weed control	mow for weed control	mow for weed control
Year 2 early spring mow	early spring mow	early spring mow
Year 3 early spring mow/burn	early spring mow/burn	early spring mow/burn
Year 4 fall burn	fall burn	fall burn
Year 5 fall burn	fall burn	fall burn
Year 6 nothing	early spring burn	fall burn
Year 7 early spring mow	fall burn	summer burn!

Any questions email genesis nursery@yahoo.com.

