Seedbed Preparation from Introduced Grasses to a Native Prairie Mixture

Starting Site Preparation in spring

12/8/2014

The purpose of this sheet is to provide landowners with useful information on how to convert a cool season introduced grass or grass and legume field into a native prairie field (native grasses and wildflowers).

Guidance:

These are the necessary steps to ensure a successful native prairie establishment. There are some optional steps that can be removed such as a cover crop for one year, but using a cover crop will greatly improve your success rate as well as the establishment rate of your planting. One thing landowners need to understand however is that they need to give a native planting some time. Don't expect an impressive prairie in years one and two, and possibly even in year three or four. In fact it will be downright ugly the first two years, but don't let that alarm you. One should leave it alone as much as possible. Don't mow the site unless your local conservation office or weed inspector says so. And be all means do *NOT* spray the site once it starts growing. Native plants do a very good job at out competing those "weedy" species. And those "weedy" annual species actually provide very good habitat and forage for a myriad of species. The more species one plants, it will improve your; pollinator, pheasant, and other wildlife habitat, weed control, establishment time frame, and aesthetics.



Native MN Tall grass Prairie (Photo by: Adam Kleinschmidt)

Preparation Steps:

Consult your local USDA Service Center office for appropriate dates to start site prep if your land is currently in a program.

Do the prep - don't cut corners

- Spray site as early as possible but after green up (Generally May or April) with glyphosate.
 - Make sure if you mix other herbicides in that there is no long lasting residual.
- Wait at least a week after spraying, conduct a prescribed burn to remove vegetation and duff layer



- Moldboard plow in spring after green up
 - Follow with a disking, generally 2 to 3 passes

Or,

- Disk site up in the spring after green up to break up the sod
 - Generally 2 to 4 passes
- Brillion pulverizer (packer), or roll but 50% overlap and slower than 5 mph
 - Want seedbed: Black, level, smooth, and firm! Your footprint should sink <1".
- Spray site again with glyphosate if you're not planting right away
- Seed site as early as possible but for sure before the end of July
 - Spray site with glyphosate within 3 to 7 days after planting
- Most important step is to be patient after planting! Avoid excessive mowing and avoid spraying at all costs. Native take 3 to 4 years to establish well, and potentially 5 to 6 years if there is unfavorable weather conditions.

Additional Info:

Sites with fertile, wet, heavy soils and or with a composition of quack grass 20% or greater:

You may want to plant a cover crop to give you an additional year of tillage and spraying to help ensure a good kill of the brome, reed canary, and quack grass. If you plant a cover crop consult with your local conservation office to develop a cover crop seed mixture, be sure to not plant alfalfa and wheat. Be sure to spray the cover crop area with glyphosate before you plant the cover crop and in August again before you till (disk) the site up again. Next follow the steps of either a fall dormant seeding or a spring seeding. The more times a landowner sprays the site, the better the brome and weed control will be.



Prescribed Fire in NW MN (Photo by: Adam Kleinschmidt)

Please consult with your local USDA Service Center for a more in depth look at your site's specific restoration needs and eligibility.

