NATURAL RESOURCES 101

NATIVE GRASS PLANTINGS: TIPS FOR EVALUATING A FIRST YEAR NATIVE GRASS AND FORB PLANTING

In a previous job, I helped landowners enroll in and implement private land conservation programs like the Conservation Reserve Program. Much of my job centered around talking with landowners about how to establish and manage native grass and forb (wildflower) plantings for wildlife. Even in my job today, I provide educational opportunities including seminars, field days, and workshops centered on this topic.

One of the most common emails, phone calls, and questions I get when talking about establishing these plantings revolves around evaluating the planting during the first year.

Typically, the inquiries go like this: "I planted native grasses and wildflowers for wildlife this spring, and now I just have a field of weeds! Did the planting fail?" or, "Nothing I planted this spring is growing!"

Following these flustered phone calls and frantic emails, I usually do a site visit with the landowner to help them evaluate their planting. Below are the four things I look for when evaluating a new native grass and wildflower planting.

Before we get into the things I look for during an evaluation, it's important to note that native grass and wildflower plantings for wildlife typically take 2-3 years to establish. So, what you see in Year One may not be what you get in Years Two, Three, or Four. But there are a few signs you can use to monitor your planting's progress.

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1. Monitor weed pressure.

Inevitably when you plant these diverse mixes of native grasses and wildflowers you will get weeds. Even if you control weeds before planting (which you should), some weeds will still show up, especially annual weeds like foxtail, ragweed, and horseweed. In the past, we used herbicides like imazapic (Plateau) to help control weeds during the first growing season after planting - which is still an option in native grass-only stands or with certain wildflowers. But with more diverse plantings we do not have any herbicide options to control weeds without harming what we planted. Therefore, weeds may be more of an issue in diverse plantings like pollinator plantings.

Controlling these weeds may require mowing during the growing season before they produce seed, which can help planting success. But this mowing can come at a cost. Many of these weeds, like common ragweed, provide cover and food for wildlife. Mowing the field may temporarily reduce its value to many wildlife species. When evaluating weed pressure, we need to decide if weeds are dense or thick enough to reduce the germination and growth of what we planted. Generally, if the weed pressure in the field is high and it is shading out the ground, you should think about mowing to control weeds. If weed pressure is not high and sunlight is still reaching the ground, you may want to consider skipping or delaying the mowing until later in the summer.



This field that was planted to native grasses and wildflowers is now dominated by foxtail. This would be a situation where mowing may improve the establishment of what you planted.

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2. Look for rows or drill marks.

If you plant the field with a no-till drill, you may see rows of plants appear during the first growing season. This is a sure indication that what you planted has germinated and is growing. However, if you frost seeded the field by broadcasting the seed on top of the ground, you will not see rows. Sometimes the rows of plants will not be obvious at first, but will be very obvious later on.



See the bronzish/orange grass in rows? That's little bluestem. This landowner thought they had a failed planting, but it wasn't until the following winter when the drilled rows of little bluestem were obvious.

3. Identify indicator plants.

One of the best ways I could calm the nerves of a landowner who thought they had a failed planting was by identifying species of wildflowers or grasses that they did indeed plant. Some of the annual or biennial wildflowers such as black-eyed Susan or partridge pea will germinate quickly and may even flower during the first growing season.



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Authors: Jarred Brooke, Extension Wildlife Specialist; Jessica Outcalt, Natural Resources Training Specialist www.Purdue.edu/FNR/Extension 765.494.3583

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Partridge pea is a commonly planted species that grows and flowers during the first summer after planting. Their yellow flowers and compound leaves make them easy to identify.

Learning how to identify some of the species you planted will help you determine if what you planted is indeed germinating and growing.

4. Scout for invasives.

Another topic of discussion on a site visit is invasive plants. It is important to catch invasives early in a planting so they don't cause problems later on. Some of the common invasive plants that show up early in the life of native grass and wildflower plantings are Canada thistle, *Sericea lespedeza*, and Johnsongrass. Control of these species often requires herbicide. Catching them early when they can be spot-sprayed will save you time, money, and headaches.

Looking for these four signs when evaluating your newly established planting can help you determine if it's on the right track and help you keep it there. But many of the species you planted are perennials, and will not be very obvious the first growing season. They are putting most of their energy towards below-ground (roots), not above-ground (stems), growth. So, if you don't see them during the first growing season, it doesn't mean they are not there. Establishing a native grass and wildflower planting for wildlife takes a bit of patience and persistence.



Scan or click this QR code to see a video that expands even further regarding these tips on evaluating your first-year planting.

Resources for further information:

Purdue Extension Pond and Wildlife Management, website

Renovating Native Warm-Season Grass Stands for Wildlife: A Land Manager's Guide, free guide at Purdue Extension's Education Store

Calibrating a No-Till Drill for Conservation Plantings and Wildlife Food Plots, video

Habitat Help Q&A - Native Grasses and Forbs for Wildlife, video