

Adding Structure to your Native Prairie Seeding

Have you ever noticed how you can walk all day through a grass field and the only places that your dog points a rooster is in the road ditch or grasses waterway? Or... just as you enter a tall patch of switchgrass a huge buck gets up and bounds down the hill in front of you. Did you also notice that those are the areas in the field where the vegetation is more diverse or in some way “different” from the remainder of the field? This is no coincidence. It is a known fact that wildlife species diversity increases as the habitat becomes more diverse. That is why adding structure to your prairie can help you to achieve increase diversity and increase wildlife benefits on your property.

What is “structure”?

Structure can come in a number of different forms. Some of these are:

- Height of species (i.e. average height of the species in a mix)
- Size of patch (i.e. area that is planted to a specific mix)
- Time of green-up (i.e. mixes which develop earlier in the spring)
- Species diversity (i.e. increased forbs)

Planting various groups of species, with various characteristics, in different parts of your field can achieve great results. Historically under natural conditions species would separate themselves by adjusting to the conditions available to them (i.e. moisture, sunlight, soil type etc.) Structured plantings attempt to mimic this natural phenomenon. By matching your field conditions with the needs of the plants you can create a variety of blocks across your property which will vary in composition and appearance and thus result in greater diversity in your field. Ultimately resulting in increased use by wildlife.

The Goal:

To match site capabilities with plant species known to thrive under particular conditions thus establishing native plants which are well adapted to the differing soils and drainage gradients encountered across a field.

Why add “structure”?

Increasing the diversity of habitat types in your field can really add benefits for both game and non-games species. For example: planting species which are taller and denser can benefit species like deer who are looking for a good, hiding place to bed down for the day and are also good for winter cover for pheasants. But, planting patches rich in forbs can provide great habitat for baby pheasant chicks who thrive on the insects that live around forb species. Also, planting species that green up earlier in the spring can provide benefits to certain grassland song birds looking for a place to nest.

Another great benefit is weed control. By planting a diverse mix of early succession forbs along with more conservator forb species, these “good” plants can occupy many of the niches that weeds may invade. More diversity can save the landowner many headaches. On dry soils under prolonged adverse climatic conditions such as drought, weedy species may be able to invade knoll areas as the planted species struggle to survive. By planting species (typically short grass species) that are adapted to dry conditions you can reduce the invasion of weeds thus resulting in less need for maintenance.

So you can rest and find your dog once in awhile. We have all busted through large areas of tall grass prairie. Can't find the dog, can't see 20 feet let alone a flushing rooster. Plant short grass prairie mixes on the south and west facing slopes, on dry sites and you will not only increase diversity and structure, you will have a place you

can find that darn dog! Bottom land riparian areas full of switchgrass and Big bluestem can be improved by locating low moist soil areas and planting cool season natives and sedge mixes.

What in the heck is a forb?

A forb can be a legume or flower. A forb is any broadleaf plant that does not have a woody stem. (alfalfa, prairie clover, pale purple coneflower, strawberry)

How to add “structure”!

1. Determine the type of soils on your site. Stop by your USDA Service Center, they can help.
2. Categorize the soils into zones.

Divide your property into the following categories and outline the soil boundaries on a map.

High Prairie Zone (eroded knolls) *Diverse mixes adapted to dry soil conditions are planted here.*

Mid-Prairie Zone, medium to fine textured soils (side-hills, slightly elevated areas) *Diverse mixes with Big bluestem, Indian grass are excellent for these areas.*

Low Prairie to Wet Meadow Zones (swales, waterways, bottomlands) *Diverse mixes with cool season native grasses along with more traditional grasses and forbs are best for this area. You can also select low areas for specific wet meadow mixes for additional diversity.*

Firebreaks, *Use a mix with introduced cool season grasses with alfalfa and clovers will add great structure (and safety) to your native seeding. Firebreaks should be 30' wide if possible and often follow waterways when possible.*

3. Prepare for seeding.

It is advisable to mark out on the zones by driving around the areas with a tractor or drag-type devise (whatever you have available for equipment) to make it easy for the boundaries to be seen when planting.

4. Seeding.

Seed the high prairie mix on the knoll area first. Overlap the mix boundaries by about 10 yards to avoid any missed areas. If planting on steep slopes, be sure to check drill occasionally to ensure that the seed is being evenly distributed along slope.

No one can wait the 100 or 200 years it will take for your native prairie seeding to sort itself out. You can greatly increase diversity and structure by planting different mixes on the various soil types. Best of all the work will reward you with better habitat and more birds.