

## Using Native Turf on Your Next Project:

By Pamela Simmons, LEED AP BD + C, ARCSA AP, Co-Owner of Turpin Farms, Chairman of the USGBC SW OH Regional Chapter Sustainable Sites Committee, Supervisor of the Hamilton County Soil and Water Conservation District

Having grown up in the sod industry, I know sod gets a bad rap especially in the world of sustainable landscaping. Because we strive to be as sustainable as possible in our practices at Turpin Farms, we decided to try and produce a turf product that would benefit the built environment by introducing the advantages of native grasses.

Native grasses are particularly well suited for establishing wildlife habitats, soaking up rain water in a rain garden or for sediment and erosion control. Ohio native grasses add a different leaf texture, color and movement to the landscape.

Native grasses are slow to establish from seed and are expensive if landscaping large areas using container produced plants. By using a mature turf produced in sod form, native grasses become much more economical to use and can be used in a wide variety of applications. Native turf establishes in 7-14 days depending on the weather and the deepest rooting of the grasses can reach 7' deep in the soil.

Native Turf can help you achieve the following credits for LEED V3- New Construction and Major Renovations:

- SS 5.1 : Site Development- Protect or Restore Habitat
- SS 5.2 : Site Development- Maximize Open Space
- SS 6.1 : Stormwater Design- Quantity Control
- SS 6.2 : Stormwater Design- Quality Control
- WE 1 : Water Efficient Landscaping



LEED V4- For BD+C New Construction and Major Renovations:

- Sustainable Sites -Construction Activity Pollution Prevention
- Site Assessment
- Site Development
- Protect or Restore Habitat
- Open Space
- Rainwater Management Water Efficiency
- Outdoor Water Use Reduction

Native Turf also makes a great base planting for wildlife habitats which support:

The Presidential Memorandum for creating a federal strategy to promote healthy honey bees

<https://www.whitehouse.gov/the-press-office/2014/06/20/presidential-memorandum-creating-federal-strategy-promote-health-honey-b>

The Share Pollinator Partnership

<http://www.pollinator.org/SHARE.htm>



The Million Pollinator Garden Challenge

<http://millionpollinatorgardens.org/>



Certified Wildlife Habitat

<http://www.nwf.org/Garden-For-Wildlife/Create.aspx>



## Sustainable Sites Initiative (SITES) credits:

### Site Design-Water

Water C3.4 Reduce outdoor water use

Water C3.5 Design functional stormwater features as amenities

### Site Design-Soil + Vegetation

Soil + Veg C4.6 Conserve and use native plants

Soil + Veg C4.7 Conserve and restore native plant communities

Soil + Veg C4.8 Optimize biomass

Soil + Veg C4.9 Reduce urban heat island effects

Soil + Veg C4.10 Use vegetation to minimize building energy use

### Site Design-Human Health + Well-Being

HHWB C6.3 Promote equitable site use

HHWB C6.4 Support mental restoration

HHWB C6.5 Support physical activity

### Site Design-Operations + Maintenance

O+M C8.4 Minimize pesticide and fertilizer use

O+M C 8.7 Protect air quality during landscape maintenance



## The Grasses in Detail:

### Elymus canadensis - Canada Wild Rye :

This beautiful grass has a shiny blue metallic appearance in the sunlight and throughout the fall to spring remains semi-evergreen. During the mid to late summer this grass produces nodding seed heads (spikes) at the end of stems (culms) reaching 36". These seed heads add a great deal of interest to the landscape, adding movement to the grass when the wind blows. Wild rye prefers full sun to part shade and from moist to dry conditions. Adapting to practically any soil type including those containing loam, clay, gravel, or sand the wild rye is at home in an erosion control situation or in a rain garden/bio-swale. Host grass to the Zabulon Skipper butterfly.

### Bouteloua curtipendula - Sideoats Grama :

A distinctive oat-like spikelet beginning with a faded purple hue makes this grass stand out among other grasses even though it only reaches heights of 18"-24". Rhizomatous in nature this grass is often used to repair sites damaged by drought or over grazing. Salt tolerance makes it a perfect grass for projects near roadways. The seeds that are produced are a favorite of the songbirds that frequent grasslands and prairies. Fall foliage color is a golden brown fading to red-orange with purple hues. Host grass to the Green Skipper and Dotted Skipper.

Schizachyrium scoparium - Little Bluestem :

This attractive prairie grass really comes into it's own in the fall with it's beautiful reddish autumn foliage. During the summer season this grass reaches 24"-36" tall with densely tufted bases and foliage that is light green to light blue in color. Full sun and dry conditions make this grass a workhorse where infertile soils and clay-loam, gravel, or sand dominated soils. Often used in prairie restoration and projects requiring drought resistant grass. Little bluestem is an important wildlife habitat plant providing food for several species of caterpillars in the skipper family, such as the Dusted Skipper, Indian Skipper, Ottoe Skipper and the Crossline Skipper. Other insects such as the Prairie Walkingstick, grasshoppers, and leafhoppers feed on the foliage of the little bluestem and they in turn become food for many bird species.

Sporobolus heterolepis - Prairie Dropseed :

One of the true prairie grasses, this drought tolerant, long lived grass forms dense tufts of sprawling leaves 1-2' tall. The root system is fibrous, with a short rhizome, making it ideal for full sun and soil that is loamy, rocky, or gravelly. Songbirds from late summer into winter eat the seeds produced by the grass and the grass itself is a larval host to the Leonard's Skipper. The fall foliage color is a striking pumpkin orange making this grass an excellent choice for the landscape. Host grass to several Skipper species such as the Powesheik skipper.



Native turf being installed with small rolls



Native turf installed.



Cool season grasses: are added to the mix to help with erosion control since most warm season grasses such as our Ohio natives form individual plants. The fescue and bluegrasses fill in around their bases stopping erosion from starting and they also don't turn completely brown in the winter as do the warm season grasses which allows for extended seasonal color. The fescue and bluegrass along with the reinforcement netting aid in the harvest of the native turf allowing us to deliver it to your job site in small rolls (2' x 4.5') or in big rolls (50 sq yds/roll)- for large installations.

#### SPF-30 Kentucky Bluegrass :

A cross between Texas Bluegrass and Kentucky Bluegrass (TX x KBG) this bluegrass brings a whole new meaning to drought tolerant cool season grasses. SPF-30 is also a much more heat tolerant cool season grass and its aggressive rhizome system along with having one of the deepest root systems of all grasses, makes it the ideal choice for sediment and erosion control. Great habitat for the Eastern Cottontail and Box Turtle.

#### Turf Type Tall Fescue :

Added to the mix because of it's resistance to heavy wear and drought tolerance this cool season grass will provide year round color to the landscape and roots down within 7-14 days after being harvested. This quick turn around time will allow the native turf mix to establish it's self quickly thus making it ideal for sediment and erosion control. Tall fescue will blend nicely with the other grasses giving the overall mix a very finished look and will help to control weed establishment since it will act as the "ground cover" grass. Great habitat for the Eastern Cottontail and Box Turtle.

#### The Reinforcement Netting:

Our special turf reinforcement netting configuration is designed to help grass seedlings germinate and grow in a uniformly strong structure. The roots intertwine with the durable mesh and prevent separation from the soil when rolled during harvest. This reinforcement netting also helps stabilizes the native turf mix while establishment is taking place making it an ideal sediment and erosion control product.



For more information on our Native Turf products or any of our turf products please visit:

<http://turpinfarms.squarespace.com/>