

## IT IS THE GROWING SEASON! GO OUTSIDE!

The growing season is a vital time for green professionals to learn from nature. Improving our ability to establish native plant communities requires observation of both intact natural areas and restoration plantings. Observation of intact natural areas is vital to establish a baseline for the structure and composition of a restoration. Species composition, transitions between communities, and variations resulting from differing soil type and aspect are all important variables that may be observed.

For professionals working primarily in the built environment, observation of restored urban communities is very useful. This is particularly true for storm water BMPs. By observing which plants are thriving in relationship to the hydrology and quality of runoff, one may establish variables such as wet tolerance, drought tolerance (especially this year), and salt tolerance of the species planted in the basin.

## DROUGHT TOLERANT NATIVE PLANTS

While late summer droughts have afflicted most of Indiana during the past two summers, this year the dry weather started early. While we all hope that weather patterns will change and bring more rain in July and August, drought will be a more common occurrence in a warmer world. Not only will rainfall patterns become more erratic, increased temperatures will bring more moisture loss through greater evapotranspiration. These shifts will stress established plant communities and make establishment of plants in landscapes increasingly problematic. By selecting drought tolerant plant materials, planners can greatly reduce the maintenance and replacements required in their designs.

While many native plants are drought tolerant, this characteristic varies markedly from species to species. Plants native to more drought prone habitats will obviously fare better than those that prefer mesic conditions. Drought resistant plants may employ several different strategies to deal with low soil moisture. Some have very deep roots that can reach subsoil moisture, while others are able to restrict moisture loss from their foliage during dry weather or employ a combination of these strategies. Examples of species with exceptionally deep roots include Compassplant (*Silphium laciniatum*), Wild Indigo's (*Baptisia* spp), and warm season prairie grasses. Many sedges (*Carex* spp) are able to tolerate drought by restricting moisture loss from their foliage.



Row of Compassplant (*Silphium laciniatum*) thriving in a non-irrigated portion of our seed nursery on June 29, 2012.

### HERE ARE SOME OF THE MOST DROUGHT TOLERANT NATIVES

#### Forbs

Leadplant (*Amorpha canescens*)  
 Heath Aster (*Aster ericoides*)  
 Baptisia leucantha (White False Indigo)  
 Baptisia leucophaea (Cream Wild Indigo)  
 Coreopsis palmata (Plains Coreopsis)  
 Echinacea pallida (Pale Purple Coneflower)  
 Helianthus occidentalis (Western Sunflower)  
 Liatris aspera (Rough Blazing Star)  
 Penstemon hirsutus (Hairy Penstemon)  
 Petalostemum purpureum (Purple Prairie Clover)  
 Sedum ternatum (Wild Stonecrop)  
 Silphium integrifolium (Rosinweed)  
 Silphium laciniatum (Compassplant)  
 Silphium terebinthinaceum (Prairie Dock)  
 Solidago nemoralis (Grey Goldenrod)  
 Solidago rigida (Stiff Goldenrod)  
 Tradescantia ohiensis (Ohio Spiderwort)

#### Graminoids

Andropogon gerardii (Big Bluestem)  
 Bouteloua curtipendula (Side-Oats Grama)  
 Carex bicknellii (Prairie Oval Sedge)  
 Carex brevior (Plains Oval Sedge)  
 Carex cephalophora (Short-Headed Bracted Sedge)  
 Carex muhlenbergii (Sand-Bracted Sedge)  
 Elymus canadensis (Canada Wild Rye)  
 Schizachyrium scoparium (Little Bluestem)  
 Sporobolus heterolepis (Prairie Dropseed)

**Please note that with a few exceptions, the above plants require well drained soil and are therefore not recommended for pooling areas in storm water BMPs. Please consult our February 2012 Newsletter for rain garden plants that tolerate drying.**