"Growing Native Plant Communities" program **February 25, 2021**

Key overview points

- A new landscape paradigm is needed that better supports biodiversity and ecosystem function
- The two most major threats to biodiversity are habitat loss and invasive species
- Restoration ecology is the process of recovering a native ecosystem in terms of health, integrity and sustainability
- Backyards and urban green spaces can better support biodiversity if approached through plant community lens
- The four major plant communities of northern Illinois are:
  1. Woodland (oak canopy)
  2. Savanna (oak canopy)
  3. Prairie
  4. Wetland
- Plant communities provide "ready made" assemblages of plants that are adapted to specific light and soil conditions
- Conduct a site analysis and match the right community assemblage to your site conditions

Lessons from restoration ecology to scale to the backyard landscape

1. Set goals for your native garden – both functional and aesthetic
2. Not all natives are good – some are too aggressive
3. More conservative plants (higher C-value) can work in gardens even if more difficult to establish in restorations
4. Understand succession and plant behavior – the garden will evolve over time and look different as it matures
5. Know species interactions and allow those associations to work for you
6. Don't amend or fertilize – higher fertility supports weeds and is not critical for native plants
7. Seed is cheaper, plugs are faster – whichever you choose, buy in bulk from a reputable supplier
8. Local genotypes and species (vs. cultivars) help increase habitat function – buy as local as you can
9. Not all weeds are terrible – some are horrible; know what you have and the life cycle when it is best controlled
10. If you are going into battle, use "sedge warriors" to help claim ground
11. Fire and herbicides are necessary tools – know how and when to use them
12. Respect your neighbors, but know your rights
13. Native plants take time – readjust your timeframe for establishment and maturation

Woodland species for the garden (* indicates can also be used in savanna light levels if soils not too dry)

Actaea pachypoda	white baneberry
Aquilegia canadensis *	wild columbine
Asarum canadense	wild ginger
Carex pensylvanica	Pennsylvania sedge, common oak sedge
Cimicifuga racemosa	black cohosh, black bugbane, fairy candle
Claytonia virginica	spring beauty
Dicentra cucullaria	Dutchman's breeches
Geranium maculatum *	wild geranium
Mertensia virginica	Virginia bluebells
Phlox divaricata laphamii *	woodland phlox
Podophyllum peltatum *	May apple
Sanguinaria canadensis	bloodroot
Solidago flexicaulis *	zig-zag goldenrod
Symphyotricum shortii *	Short's aster
Thalictrum dioicum	early meadow rue

Savanna species for the garden

Dodecatheon meadia	shooting star
Polygonatum biflorum	Solomon's seal
Rudbeckia subtomentosa	sweet coneflower
Rudbeckia triloba	three-leaved coneflower, brown-eyed susan
Smilacina racemosa	false Solomon's seal
Hystrix patula	(G) bottlebrush grass

Prairie species for the garden

Asclepias tuberosa	butterfly weed
Baptisia leucantha	white wild indigo
Coreopteris tripteris	tall coreopsis, tall tickseed
Echinacea pallida	pale purple coneflower
Eryngium yuccifolium	rattlesnake master
Geum triflorum	prairie smoke
Liatris aspera	rough blazing star
Monarda fistulosa	wild bergamot, bee balm, Oswego tea
Physostegia virginiana	obedient plan, false dragonhead
Ratibida pinnata	pale yellow coneflower, grey headed coneflower
Silphium integrifolium	rosinweed
Silphium laciniatum	compass plant
Solidago rigida	stiff goldenrod
Tradescantia ohiensis	spiderwort
Zizia aptera	heart leaved meadow parsnip
Bouteloua curtipendula	(G) sideoats grama
Panicum virgatum	(G) switchgrass
Schizachyrium scoparium	(G) little bluestem
Sporobolus heterolepis	(G) prairie dropseed

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References