



# Lawn to Meadow

The Ups and Downs of a First Time Meadow Creation

# Agenda

- 1 Planning and Site Prep
- 2 Planting
- 3 Project Costs
- 4 What I've Learned
- 5 Approached You Can Take



# Pandemic 2020 Project

- Great way to quarantine
  - Design planning in winter 2019-2020
  - Sidewalk install April – May
  - Manually removed all turf grass
    - Scalping with flat shovel
    - Rototilled site and removed remaining roots

Area	Front Lawn	comment	Name		Spacing	Height	Growth Season											
			Latin	Common			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
			Allium cernuum	Nodding Pink Onion	10"	1'-2'					X	X		X	X			
			Amsonia tabernaemontana	Common Bluestar	12"-18"	2'-3'						X	X	X	X			
			Asclepias tuberosa	Butterflyweed	12"	2'-3'							X	X				
			Asclepias syriaca	Common Milkweeds	12"	2'-4'						X	X	X				
			Aster novae-angliae	New England Aster	12"	3'-6'								X	X	X		
rarely native needs more moisture in full sun			Baptisia australis	Blue False Indigo	24"	3'-5'					X	X						
			Conoclinium coelestinum	Mistflower	12"	1'-3'						X	X	X	X	X		
			Coreopsis lanceolata	lanceleaf coreopsis	18"-24"	1'-2.5'					X	X	X					
			Echinacea purpurea	Purple Coneflower	12"	3'-4'							X	X	X			
requires moist rich soil			Eupatorium maculatum	Sweet Joe Pye	18"	4'-6'							X	X				
			Eupatorium perfoliatum	Boneset	18"	3'-4'								X	X			
			Heliospasis helianthoides	Ox Eye Sunflower	24"	3'-6'						X	X	X	X			
requires moisture more tolerant than red beebalm			Liatris aspera	Rough Blazingstar	6"-12"	3'-5'							X	X		X	X	
			Monarda fistulosa	Bergamot	12"	2'-5'						X	X	X				
			Phlox stolonifera	Moss Phlox	12"	.5'					X	X						
			Pycnanthemum muticum	Short-Toothed Mountain Mint	18"	2'-3'							X	X	X			
needs moisture			Rudbeckia triloba	Brown Eyed Susan	12"	2'-5'							X	X	X		X	
			Solidago flexicaulis	Zigzag Goldenrod	12"	2'-4'							X	X				
			Veronicastrum virginicum	Culvers Root	24"	3'-6'							X	X				
			Vernonia noveboracensis	New York Ironweed	12"	3'-6'							X	X	X	X		



# Planting Planner

Area	Name					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Front Lawn	comment	Common	Latin	Spacing	Height												
rarely native needs more moisture in full sun	Nodding Pink Onion	Allium cernuum	10"	1'-2'						X	X	X	X				
	Common Bluestar	Amsonia tabernaemontana	12"-18"	2'-3'								X	X	X			
	Butterflyweed	Asclepias tuberosa	12"	2'-3'							X	X	X				
	Common Milkweeds	Asclepias syriaca	12"	2'-4'							X	X	X				
	New England Aster	Aster novae-angliae	12"	3'-6'										X	X	X	
	Blue False Indigo	Baptisia australis	24"	3'-5'						X	X						
	Mistflower	Conoclinium coelestinum	12"	1'-3'							X	X	X	X	X		
	lanceleaf coreopsis	Coreopsis lanceolata	18"-24"	1'-2.5'					X	X	X						
	Purple Coneflower	Echinacea purpurea	12"	3'-4'								X	X	X			
	Sweet Joe Pye	Eupatorium maculatum	18"	4'-6'									X	X			
requires moist rich soil	Boneset	Eupatorium perfoliatum	18"	3'-4'											X	X	
requires moisture	Ox Eye Sunflower	Heliopsis helianthoides	24"	3'-6'							X	X	X	X			
	Rough Blazingstar	Liatris aspera	6"-12"	3'-5'									X	X	X	X	
	Bergamot	Monarda fistulosa	12"	2'-5'							X	X	X	X			
more tolerant than red beebalm	Moss Phlox	Phlox stolonifera	12"	.5'				X	X								
	Short-Toothed Mountain Mint	Pycnanthemum muticum	18"	2'-3'								X	X	X			
	Brown Eyed Susan	Rudbeckia triloba	12"	2'-5'							X	X	X	X		X	
	Zigzag Goldenrod	Solidago flexicaulis	12"	2'-4'								X	X				
	Culvers Root	Veronicastrum virginicum	24"	3'-6'								X	X				
needs moisture	New York Ironweed	Vernonia noveboracensis	12"	3'-6'								X	X	X	X	X	

## Key Information Sources:

- Prairie Nursery, [prairienursery.com](http://prairienursery.com)
- North Creek Nurseries (Wholesale Only), [northcreeknurseries.com](http://northcreeknurseries.com)
- New Moon Nursery (Wholesale Only), [newmoonnursery.com](http://newmoonnursery.com)

# Plants Arrive!

- 1800 plugs for initial installation
  - Northcreek Nursery, Oxford, PA
  - New Moon Nursery, Woodstown, NJ
- Additional resources added later
  - Carolina Native Nursery, Burnsville, NC
  - Izel Native Plants, various



# Planting Methods



# August 2020

3 months after planting

Plugs are Amazing!

I now plant everything as small as possible as I have found small plants establish faster and outpace a larger specimen in the long run



## DIY Cost

- \$2000 (2020 actual)
  - \$1,800 in plants (average \$1 each plant)
  - \$250 in mulch (10 yards)
  - 30 hours labor (excludes sidewalk)

## 2025 Estimated DIY Cost

- \$3600
  - Plugs pricing +75% = \$3150
  - Mulch= \$450 (10 yards delivered)

## Estimated Pro Design/Install

- \$6000-\$8000 (estimated)
  - \$4000 for plants and mulch (2X wholesale)
  - \$2000 in pro install and design (40 hours X \$50/hour)
- *I asked a garden designer friend from Charlotte, NC and he estimated \$7000-\$8000 (2020)*

## Estimated Pro Design/Install

- \$12,000 = \$18,000
  - 3-4X DIY costs

# Was it Worth it? (August 2023)



# Routine Care

- Cut back to 6-18" height in late February
  - Cut by hand as it gives me more control and I get to see more
    - Looking for first signs of growth, and weed eat before they get tall enough to be cut
    - Cut the pieces in 6-12 in lengths to make better looking and laying mulch
    - Leave a lot of the debris as mulch but if there is excess it goes to compost
- 1-2 hours of weeding per week throughout growing season
- No Additional Mulching beyond what the plants provide
- I might sneak in new plants every now and then...



**"WHEN WEEDING, THE BEST WAY TO  
MAKE SURE YOU ARE REMOVING A WEED  
AND NOT A VALUABLE PLANT IS TO PULL  
ON IT. IF IT COMES OUT OF THE GROUND  
EASILY, IT IS A VALUABLE PLANT."**

~UNKNOWN



## Additions since May 2020

- Added Shade Garden to rear of house
- Added grasses as infills and replaced a few plants that failed in front
- Between shade garden and infill planting I've more than doubled the plant count (+4500-5000 plugs)

# What I've Learned

- **If You Plant it They Will Come...**
- I'm shocked by how much education it has caused and the interest it has generated!
- You need more plants than anything recommends to create a stable (non-floppy) native garden
  - I planted on 12-inch centers
    - Recommendations varied by plant from 12–24-inch centers
    - This is correct for the flowering plants
    - There should be a grass in every gap between for competition and support
      - Green mulch and competition keeps the plants shorter
- I've come to despise wood mulch (double ground)
  - It's a water barrier after 2-3 months
- There will be challenges
  - Some plants will be perfect for the sight on paper...and not thrive anyway!
  - Some plants are wrong but you must have them...and they love it in their new home!
  - Plants will not stay where you put them...relax and learn what they are trying to teach you!
  - You planted a buffet in a food desert...you will be too successful at some point before you're ready!





# Why Plant a Meadow

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## Creating a functional landscape

- **Support diversity of life, not just pollinators**
  - Support the entire lifecycle
- **Provide energy for the local food web.**
- **Reconnect functional ecosystems**
- **Manage the watershed**
  - absorbing and retaining stormwater
  - Slow or stop runoff and erosion
- **Carbon sequestration**



**Your ancestors' lawn**



**Your lawn**

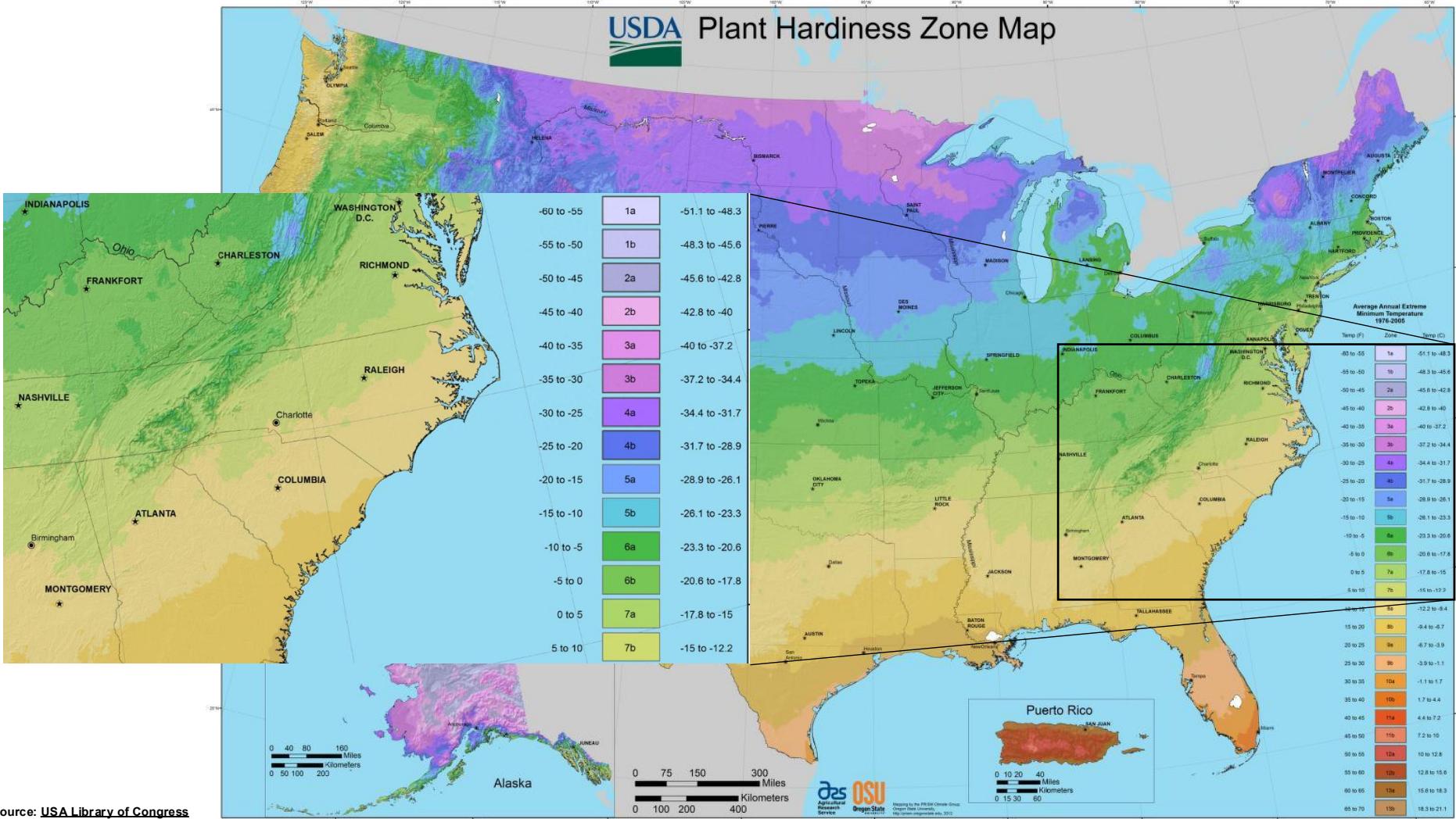


**Your descendants' lawn**

If you have to poison your lawn with pesticides and herbicides that kill wildlife, eliminate biodiversity and contaminate the ecosystem to "maintain" it...maybe it's not supposed to look like that.



# Plant Hardiness Zone Map

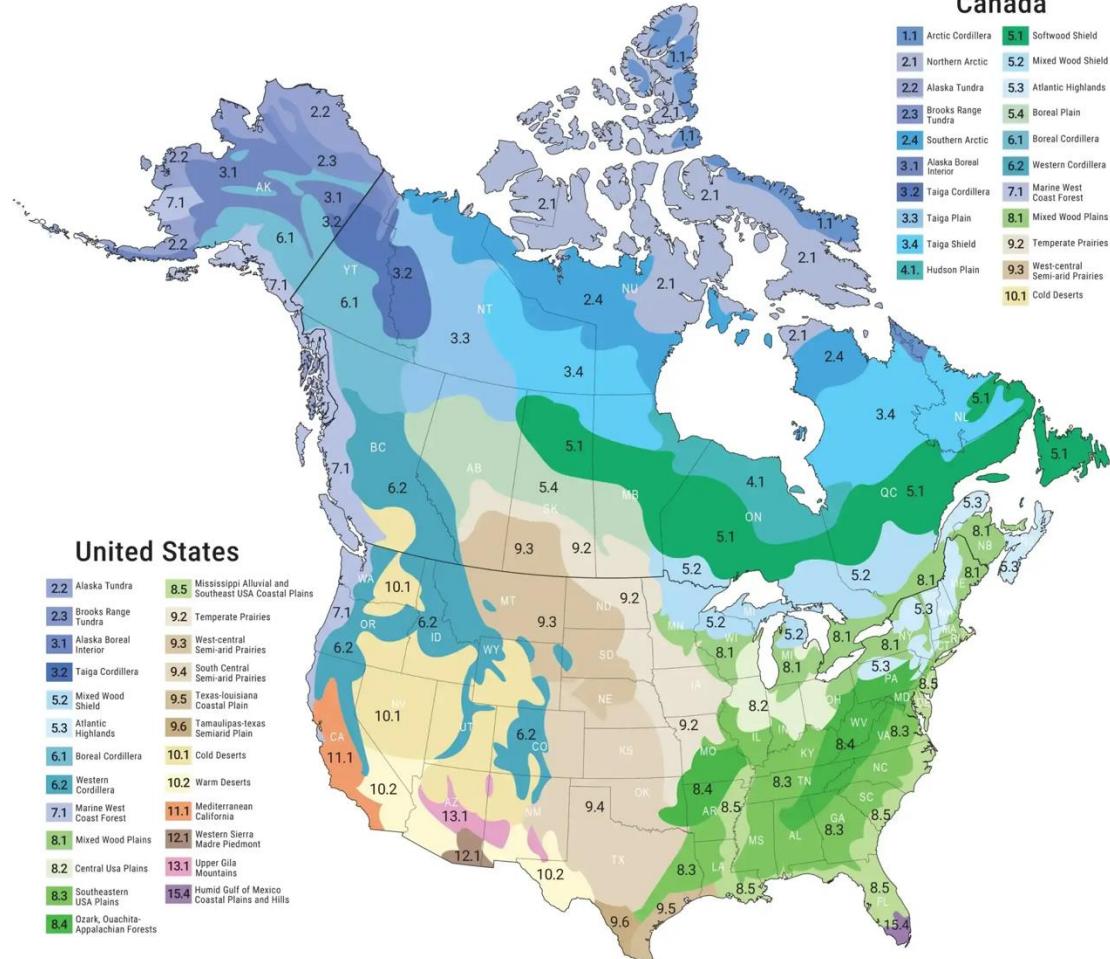


# Ecoregions

a geographic area with shared ecological traits. Climate, seasons, topography, soils, and typical plant and animal communities are similar within the region

## North American Ecoregions Level II

EPA ECOREGION DATA



Source: [Homegrown National Park](#)



# How to Plant a Meadow

# Kill Your Lawn

- Herbicide
- Cardboard
- Tarp/Plastic
- Sod Cutter





# Mature Plants

## Quarts and Gallons

- Broad availability
- Instant reward
- Ability to design plant location
- More work to plant
- Highest cost
- Slow to fully establish



# Plugs

- Limited availability (but growing)
  - Largely Wholesale, but retail growing
- Generally must buy by the flat
- Fast reward
- Ability to design plant location
- Fairly easy to plant
- mid-range cost
- Fastest to fully establish



# Seeding

## Premixed and Custom Blends

- Fairly availability
- Lowest cost
- Longest establishment time
- Harder to design plant layout
- Initial “messy” appearance
- Longer risk of invasive/trouble plants

# How to Get Started

## Homegrown National Park

- *Armchair Wildlife Habitat*
- *Landless Wildlife Habitat*
- *Step-by-step Wildlife Habitat*
- *Gung-ho! Wildlife Habitat*



# You Have the Power to Change the Script

