



# Winter Sowing With Native Plants To Increase Biodiversity in Your Backyard



Presented by  
The Worcester Native  
Plant Initiative







# About WNPI

Worcester Native Plant Initiative is a grassroots volunteer organization that has been working in Worcester since November 2021 to:

- *Educate the community*
- *Increase local plant and insect biodiversity*
- *Increase climate resilience*
- *Collaborate with other local conservation groups*
- *Advocate for green policies at the local and state level*



# A Sampling of Worcester Native Plant Initiative Public Projects



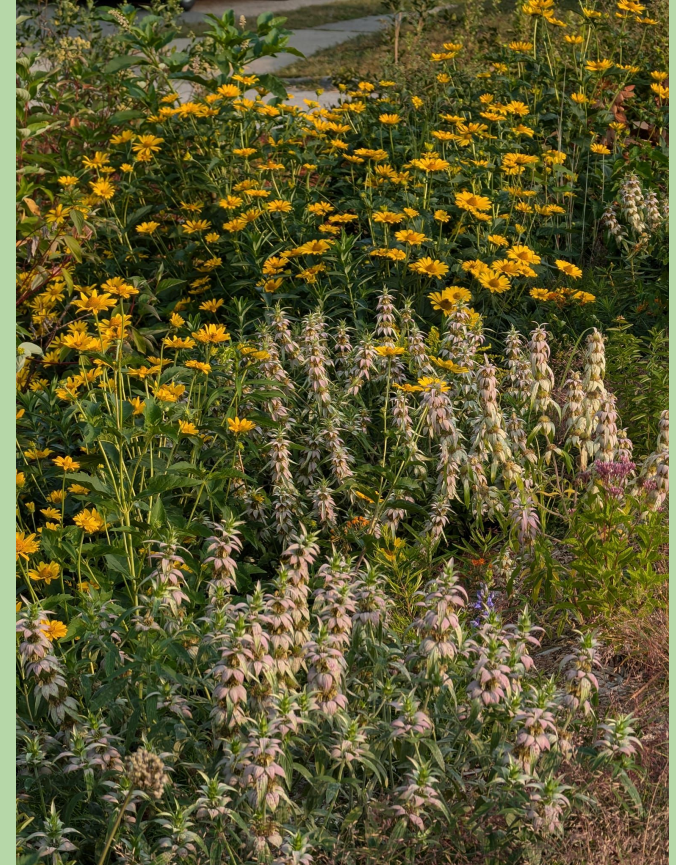


# Worcester Senior Center Installation June, 2024





....And,  
Worcester  
Senior Center,  
September,  
2024!





# Heat Island to Oasis: Webster Square Island Project





# Coal Mine Brook Park



**June 2023**



**October 2023**



**October 2025**



# Join The Initiative!

- Worcester Native Plant Initiative on Facebook
- Worcester\_native\_plant on Instagram
  - [wnpi07@gmail.com](mailto:wnpi07@gmail.com)



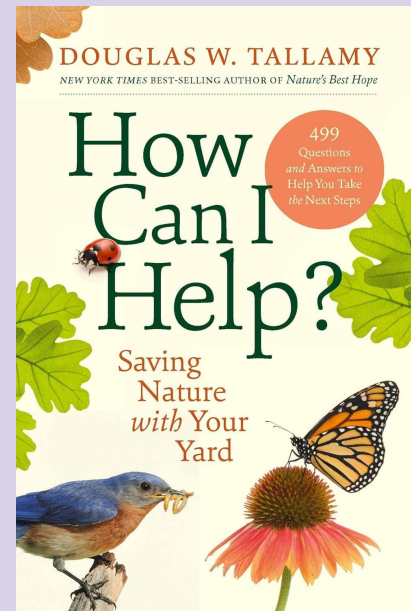
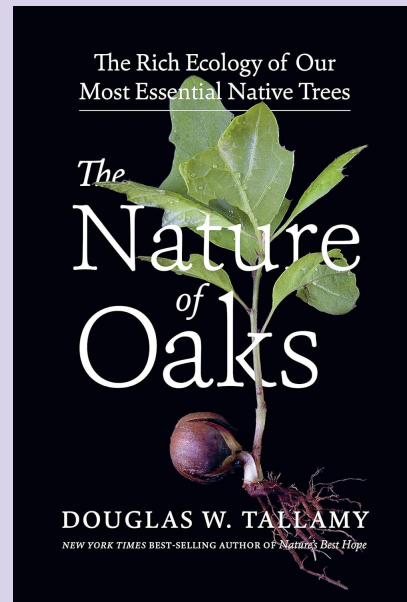
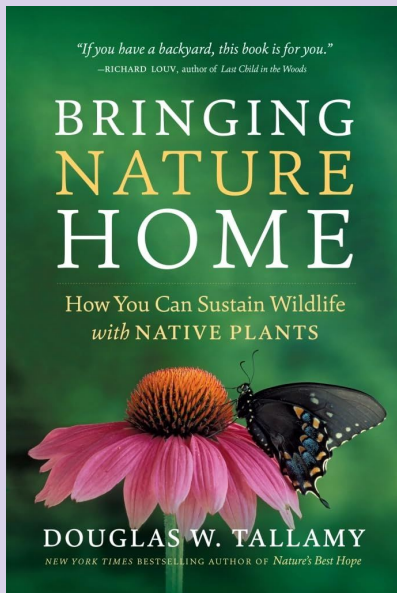
# Winter Sowing with Native Plants

- Importance of Native Plants (video)
- Winter Sow Method and Why
- Materials Needed and Demonstration
- Transplanting
- Seeds available
- Questions?
- Let's plant!









[homegrownnationalpark.org](http://homegrownnationalpark.org)



# Why Native Plants?

## Top Three Reasons to Plant Native?

**Ecosystem Health:** Native plants support vastly more insects, which are crucial food for birds and other animals, creating a stronger web of life.

**Adaptation:** Native plants are naturally suited to Massachusetts' diverse habitats, from coasts to forests, requiring less water, no fertilizer, and no pesticides.

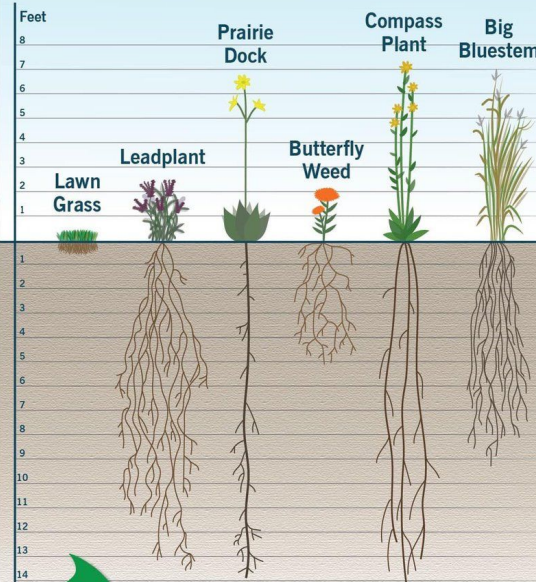
**Biodiversity:** Planting native plants helps conserve rare species and maintain local plant communities.

## What's So Great About Native Plants?

### ABOVE GROUND:

Native landscaping practices can help improve air quality.

Native species attract beneficial wildlife and support healthy and diverse ecosystems.



### BELOW GROUND:

Their deep root systems filter pollutants from stormwater runoff.

Natives require less fertilizer, pesticides, and watering than non-native species.



LEARN MORE AT [WWW.DUPAGECO.ORG/SWM](http://WWW.DUPAGECO.ORG/SWM)

*Focus on attracting native pollinating insects by providing native plants that bloom throughout the season, **from early Spring, through frost.***

*[www.grownativemass.org](http://www.grownativemass.org)*

*Plant in large swaths if possible or groups of 3, 5, or 7 plants for more impact. Talk to your neighbors to see if they can help add to your plantings to create a whole supportive pathway for pollinators.*





# Why Use the Winter Sow Method ?

- Helps Mother Nature do her work.
  - Provides protection to the seeds.
  - Most native seeds need a cold moist period to break dormancy.
  - Snow and rain will keep the seeds moist.
  - Open container will provide oxygen in a protected space.
  - It's inexpensive and fun!
  - Helps you to think Spring in the middle of winter.
  - Easy to transplant.
  - You will get a lot of plants in June to plant out in your yard or containers.  
(i.e. you will be very popular with your neighbors, friends, and local wildlife!)
- 





# Materials Needed for Winter Sow

## Supplies

- Organic potting soil (Coast of Maine “Bar Harbor Blend, organic potting soil for houseplants”, PRO-MIX MP)
- “Garden Marker”
- Duck Tape (thin/cheap from Dollar Store)
- Propagation Container (empty milk jug or two empty salad green containers.)
- Scissors
- Drill or glue gun (no glue)
- Marker for inside of container



# Making Propagation Containers

1 gallon milk jug or two large salad containers,  
Drill with  $\frac{1}{4}$ " bit or glue gun (no glue),  
utility knife or scissors.

- Remove the cap (or tops) and recycle
  - Drill 8 holes in bottom for drainage
- Use knife or scissors to cut just below the handle to maximize the amount of soil (Aim for 4 inches of soil)
- Create a hinge by leaving one side uncut





# Planting using the Winter Sow Method

- Fill container with 4" potting soil, gently compressed. Soil will compress further throughout the winter. (don't skimp on soil! The roots will need the room!)
- Water soil or pre-wet large amount of soil.
- "Surface sow" tiny seeds.
- Cover others with potting soil to the depth of the thickness of the seed. (In general, the larger the seed, the deeper it is sown.)
- Pack seeds down gently, then wet soil again to ensure good seed/soil contact.
- Label inside container with plant name.
- Label outside container using a "Garden Marker" (bottom section in case you cut the top off in spring.)
- Tape container using duck tape.
- Keep closed!



# Placing Winter Sow Plants Outdoors

- **Place containers outdoors** where they will get snowed/rained on:
  - Part shade is better to prevent overheating in early spring.
  - Avoid high traffic areas to prevent containers from being knocked over.
  - If using jugs or pots, brace them or put in trays to prevent tipping.
  - Seed envelopes indicate the required cold stratification period: C(0), C(60), etc. If possible, just sow everything the last week of December until early February.
- Keep tape on as long as possible; removing tape results in more maintenance.  
(Your jugs can stay taped up into June!)
- If jug is lightweight, soil is probably too dry.
- Watch out for those extremely cold days or heat waves in early Spring, before plants are ready for it.





# Caring for Winter Sow Seedlings

- Seedlings are most vulnerable just as they begin to germinate.
- You may NEVER have to water the containers.
- ProMix MP and Coast of Maine both have fertilizer, so no need to add.
- In late Spring, vent the lid with a stick if it gets too hot out.
- Transplant in early June. If no germination, keep container for a second year.
- If plant is growing through the top hole, use a rock or a stick to fully open the lid, or cut the lid off.
- Re-use container a second year.



# Transplanting

- Gently divide and re-pot plants if seedlings seem overcrowded.
- Transplant after two sets of leaves and before it gets root bound (early June for most).  
(Better to transplant too late than too early.)
- Transplant using the “Hunk of Seed” method. Water first to help keep the root system together, then split the container into ten or so hunks, 8-12” apart.

*(Release the young plants from their milk-jug greenhouse: if not planning on re-using container, cut a flap in the side of container. Then tilt the container. Out will come soil and plants, all in one clump. Next, separate the plants by pulling them apart, as if you were stretching taffee.)*

*Pull gently; the goal is to be gentle on the roots. Should you mangle several roots, don't despair! Winter-sown seedlings are itching to grow, and will recover from the trauma quickly. Now plant the individual seedlings, according to the spacing and light requirements indicated.)*





# Common Self-Heal

(*Prunella Vulgaris*)

**Light Requirements:** Partial Shade to Full Sun

**Soil Moisture:** Moist to Average

**Mature Height:** 4-20"

**Bloom Time:** early summer through September

**Cold Stratification period:** 30 days

*(can be used as lawn replacement)*





# Obedient Plant

(*Physostegia virginiana*)

**Light Requirements:** Partial Shade to Full Sun

**Soil Moisture:** Wet, Medium Wet, Medium

**Mature Height:** 3-4'

**Bloom Time:** August, September

**Cold Stratification period:** 60 days

*(Dr. Gegear's list for endangered bees:  
nectar source).*







# Common Yarrow

(Achillea Millefolium)

**Light Requirements:** Best in full sun, but will tolerate some shade.

**Soil Moisture:** wide range of soils as long as there is good drainage. Drought tolerant.

**Mature Height:** Up to 3 feet

**Bloom Time:** late spring through early fall, especially if dead headed.

**Cold Stratification period:** 30 days  
*(can be used as a lawn replacement)*



# White Upland Goldenrod

(Solidago Ptarmicoides) aka (Oligoneuron Album)

**Light Requirements:** Full sun.

**Soil Moisture:** Medium dry-dry soil.

Drought tolerant.

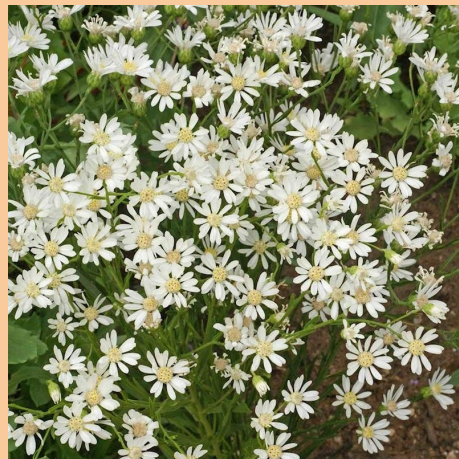
**Mature Height:**

12-18 inches

**Bloom Time:** June-September.

**Cold Stratification period:** 30 days; surface sow

***Keystone plant!***





# Sneezeweed

(Helenium autumnale)



**Light Requirements:** Full sun to partial shade.

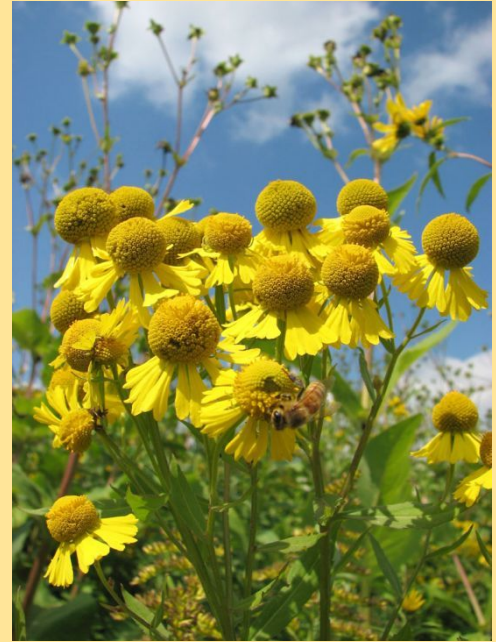
**Soil Moisture:** Wet, medium-wet.

**Mature Height:**

4 feet

**Bloom Time:** August, September, October.

**Cold Stratification period:** 0 days, surface sow.





# New England Aster

(Symphyotrichum novae-angliae)

**Light Requirements:** Full sun to partial shade.

**Soil Moisture:** Wet, Medium-Wet, Medium, Medium-Dry

**Mature Height:** 5 feet

**Bloom Time:** August, September, October.

**Cold Stratification period:** 60 days.

**Bloom Color:** purple, violet, and lavender to all shades of pink.

*(Keystone Plant!)*







# Zizia Aurea

(Golden Alexander)



**Light Requirements:** Full to partial sun.

**Soil Moisture:** Medium-wet, medium, medium-dry.

**Mature Height:** 3 feet.

**Bloom Time:** April, May, June.

**Cold Stratification period:** 60 days.

***Host plant for  
Black Swallowtail butterfly.***





***Plant it and they will come!***







***QUESTIONS?***



"IN A WAY WINTER IS THE REAL  
SPRING — THE TIME WHEN THE INNER  
THINGS HAPPEN, THE RESURGENCE  
OF NATURE."

---

HENRY DAVID THOREAU