

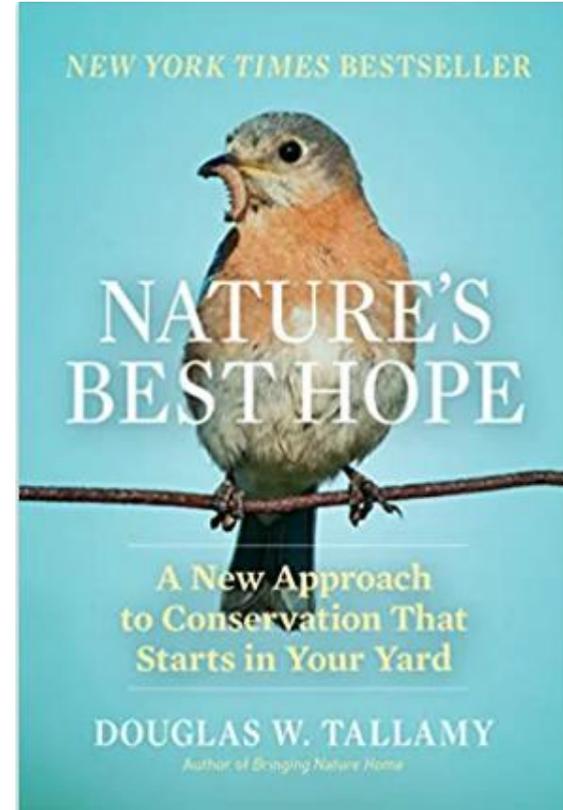


An Introduction to Winter Sowing

Presented by J.D. Hill
on behalf of the Bethel Land Trust

Importance of Native Plants

- Many plants provide nectar for butterflies and bees, including many non-native species
- The importance of native plants is not just as a nectar source, but as a food source for insect larvae
- These in turn support birds and other wildlife
- *Be careful when buying “pollinator seed mix”* - many include non-native seeds



What is Seed Stratification?

- Familiar garden plants are often from tropical regions
- Their seeds might not have much of a period of dormancy
- In Connecticut, sprouting right away when conditions seem good could leave seedlings easily killed by frost
- For this reason, plants have evolved seeds that are dormant, and require a period of cold temperatures, followed by warmth to sprout



Keeping Things Easy - Winter Sowing

- Winter sowing is a method of starting seedlings that puts the seeds outside in simple containers during the winter, originally proposed by Trudi Greissle Davidoff
- They naturally receive cold stratification and also do not require additional acclimatation to be set outside
- The materials used are also widely available (and mostly free!) and the process is reasonably “hands-off” after the initial setup



What You'll Need

- Suitable containers
- Tools for cutting and poking holes
- A way to reseal the containers
- A way to label the containers
- Suitable potting soil (e.g. Promix)
- Seeds
- Some means of watering
- An outdoor space with exposure to sun

The Containers

- The classic container for winter sowing is the milk jug. This is still a popular choice, but thorough cleaning is a must!
- Spring water jugs or juice jugs can work
- Light must get through the container, but they do not have to be totally clear
- Some winter sowers use larger containers (like plastic bins with lids)
- A rule of thumb - plan for 3"-4" inches of soil. Shallow containers (such as rotisserie containers) might look perfect, but will not allow for sufficient root growth and also can dry out too quickly



Preparation of the Container

- Containers must have several holes in the bottom for drainage (better too many than too few for this!)
- For most plastic containers, a drill works well. A soldering iron can be faster and doesn't require pressure, if you have a lot to do
- If the container doesn't have a natural separation (like a jug), a razor or knife can be used to cut around. Leave a hinge if possible
- If there are many labels from the original product, removing them can help let extra light in



Adding Soil and Seeds

- For soil, you will need an easy-draining potting mix. Don't just use garden soil! Seed-starting mix is also not ideal, as it usually has few nutrients
- Potting soils can have bigger clumps of debris. Consider sifting the soil first
- The soil should be dampened *before* putting it in the container
- Many prefer establish a “grid” for planting. They can be planted thicker than packet directions, since you will be thinning or transplanting them later.
- Seed planting depth is dependent on the seed itself; look for packet directions or aim for 2-3 times the diameter of the seed

Labelling Your Plants



- Many seedlings, particular ones that are new to you, look *very* similar
- If you are planting more than one type, good labels are a must
- Permanent marker may not hold up to the elements for several months if exposed
- Many sowers will label tape on the underside of the container, which is less exposed to sun and rain
- Consider labeling the *inside* of the container, or added a labeled piece of plastic inside
- For small numbers of types, color or container type can be a good way to distinguish things (just write it down)

Putting the Container Out (and waiting...)

- Now that the containers are ready, place them outside
- Make sure there is a hole in the top (or leave the cap off milk jugs) to allow some rain or snow to get in
- Do not put them in an area that is too protected (under an overhang, etc)
- But - many people will put them against a board or railing to corral them a bit in case of winds
- Your containers will not need anything from you until things warm up, except possibly a small amount of water if there has been very little precipitation

Getting Ready for Spring

- As temperatures warm, you might find that your containers could use some water. This shouldn't be frequent, since the lids will conserve moisture
- You can judge this a bit by the weight of the container; dry potting mix is very light
- Condensation can make it hard to see what is going on - knocking gently on the sides of the container can help
- You can open the containers to check on things, just seal them up after



Next Steps for Seedlings

- As your seedlings grow, at some point they will be cramped in the container
- If temperatures are warm enough, the lid can be opened entirely
- Keep in mind, without a lid, things dry out quickly
- If the plants are too crowded, consider gently separating them either into individual cells in a seed starting tray, or planting in their final location
- Keep in mind that even tiny sprouts of natives can have extensive roots if you are repotting!
- As they get bigger, they will start to have more requirements for nutrients, so make sure to take this into account when choosing soil.



Common Milkweed

Asclepias syriaca

- Perhaps THE poster plant for native plantings
- Hosts the monarch butterfly
- Very distinctive plant that makes nice purple flowers and also the familiar milkweed seed pods
- Definitely consider planting milkweed, but don't forget all the other great native plants that are important for biodiversity!



Butterfly Weed

Asclepias tuberosa

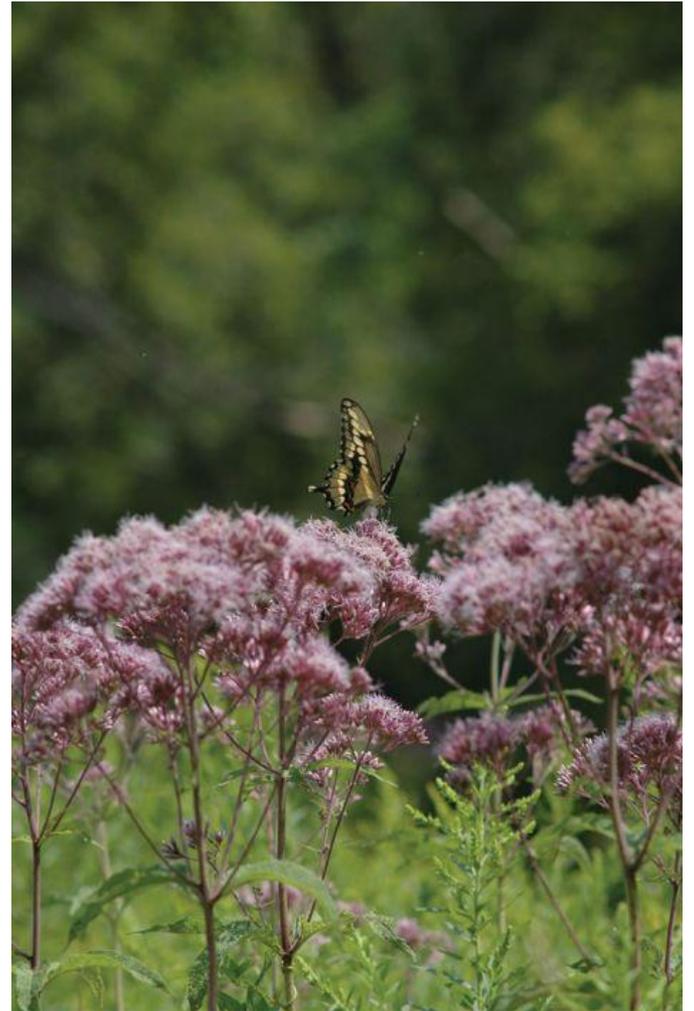
- Not to be confused with the non-native (and occasionally invasive) butterfly bush
- A relative of common milkweed that also hosts monarch butterflies
- Stays fairly low (2 feet tall) and enjoys sunny, dry areas



Joe Pye Weed

Eutrochium maculatum

- Very tall - up to 6 feet in height!
- Hosts dozens of species of butterflies
- Prefers full sun and rich soil
- Spreads and might not be suitable for small gardens



New York Ironweed

Vernonia noveboracensis

- Tall, east-coast native plant
- Great for border areas of fields and backyards
- Perhaps consider mixing with Joe Pye Weed (a similarly tall plant)



New England Aster

Symphotrichum novae-angliae

- Familiar sight in fields and related to garden asters
- Enjoys full sun or light shade
- Can grow up to 5 feet tall and will self-seed regularly



Golden Alexanders

Zizia aurea

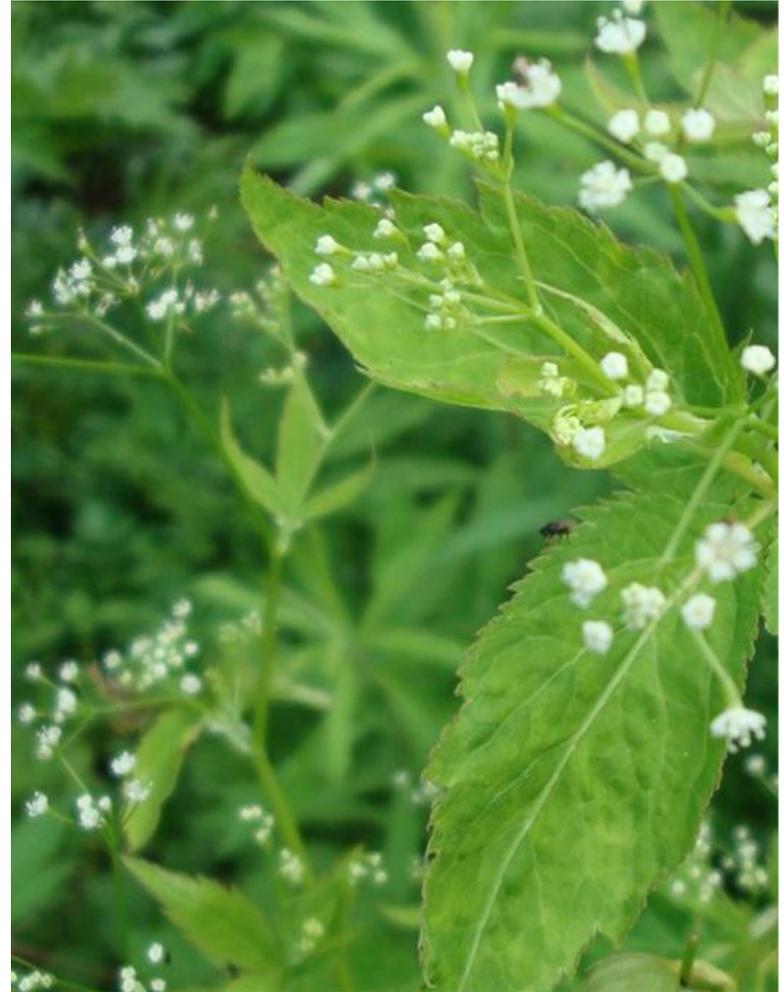
- Short-lived perennial that supports many swallowtail butterflies
- Prefers sun but can tolerate a decent amount of shade
- Pleasant umbel flowers, like other members of the carrot family



Honewort

Cryptotaenia canadensis

- Not the most showy flowers, but many other nice features
- Supports the Black Swallowtail butterfly
- Shade tolerant and potentially aggressive; a worthy plant to areas facing pressure from invasives



What to Do With These Plants?

- If everything works out, you will have a container of healthy seedlings, ready to lure wildlife to your garden
- The seedlings are yours to plant; however, if you have more than you have space for, the Land Trust is planning an event in late spring to replant natives in our preserves
- In particular, the Franc Preserve has some great fields that could benefit from additional diversity of native plants



What next?

- There are lots of good resources on winter sowing online, but you should have all you need to get started
- Several Facebook groups exist:
 - “Winter Sowers” - has excellent resources, but less discussion
 - “Winter Sowing” - is a little more discussion-focused
 - We’ll be putting some winter sowing materials on the BLT site; stay tuned!
- It’s not too late to try new or different seeds! There are many good sources for native seeds (Prairie Moon Nursery is one, Ecotype 59 has a limited selection but carries truly regional seed)

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