GROWING NATIVE PLANTS
VOLUNTEER GUIDE

DANE COUNTY LAND&WATER RESOURCES DEPARTMENT

Updated 2025

WHY NATIVE PLANTS

Image: Rainscaping Iowa

Hundreds of years ago, before modern settlement altered the landscape, Wisconsin was a mosaic of native grasses, wildflowers, and trees that had evolved complex relationships with the region's soils, wildlife, and climate. Widespread loss of native species and habitat fragmentation have since destabilized these interconnected systems, reducing biodiversity and ecosystem resilience. Yet, by reintroducing native plants into our parks, yards, schools, and other public and private spaces, we can begin to restore these vital connections and support a healthier environment for generations to come.

Native plants offer many benefits for both people and the environment. They are uniquely adapted to our local climate and soils, naturally hardy, and often more resistant to pests and diseases. Their deep, wide-spreading root systems help soak up rainwater, reduce runoff, and prevent erosion. Once established, native plants are beautiful year-round and require little watering, fertilizing, or mowing. This reduced maintenance can lead to significant cost savings compared to traditional turf grass. In addition, native landscapes provide valuable ecosystem benefits—improving water quality and offering essential food and habitat for birds, pollinators, and other wildlife.

Impact on Water Quality

In natural, native plant-covered landscapes, rain soaks into the ground gradually. However, today much of the land is covered by impervious surfaces - such as streets, parking lots, roofs, compacted turf grass, and heavily tilled agricultural fields - where the water cannot soak into the ground. Instead, water runoff flows over the land, picking up pollutants, sediment, and nutrients along the way and transports them to streams, rivers, and lakes. One of the nutrients transported with runoff is phosphorous, which can cause excessive algae growth in water bodies. Algal blooms are unsightly, pungent, and potentially dangerous. People often do not want to swim, boat, or fish in this water, which is detrimental to local economies that rely on tourism. The algae can also produce toxins that may cause skin rashes, respiratory infections, stomach problems, paralysis, and (in worst cases) death of humans and animals.

The **deep root systems** of native plants help decrease soil compaction and infiltrate water back into the ground, reducing stormwater runoff and the transport of excess nutrients and pollutants to nearby water bodies.

Impact on Pollinators

In their 1996 book, The Forgotten Pollinators, Buchmann and Nabhan estimated that animal pollinators are needed for the reproduction of 90% of flowering plants and one third of human food crops. Each of us depends on these industrious pollinators in a practical way to provide us with the wide range of foods we eat. In addition, pollinators are part of the intricate web that supports the biological diversity in the natural ecosystems that help sustain our quality of life.

Unfortunately, the numbers of both native pollinators and domesticated bee populations are declining. They are threatened by habitat loss, disease, and the excessive and inappropriate use of pesticides. Planting native plants and reducing, or eliminating, pesticide applications that often accompany the traditional residential lawn maintenance regime can provide important food sources and habitat for the pollinators upon which we so heavily rely.



Image: Xerces

FREE NATIVE PLANTS PROGRAM

The plants you grow will go to schools and organizations within Dane County that apply for plants through this program. Applications that demonstrate high water quality and educational benefits will be given priority. Plants will be matched with groups according to their project needs (e.g., raingarden, pollinator garden, etc.). Plant recipients will receive planting and care instructions and must sign a document stating their commitment to planting, watering and caring for the plants for the first two years after planting.


GROWING SUPPLIES

Provided by Dane County:

- Seeds
- Pots and Trays
- Plant labels
- Garden marker

Provided by the Volunteer:

- Milk jugs
- Box cutter
- Screwdriver, awl, or something sharp
- Soilless potting mix
- Bucket
- Trowel
- Duct tape
- Pencil
- Spray bottle or mister

Examples of Potting MIX

Why Potting Mix?

It is possible to sprout seedlings using soil right from your garden but for this program we ask volunteers to use a soilless potting mix for several reasons:

- When using soil from your garden, you don't know what else might be in the soil, such as disease spores, bacteria, weed seeds, jumping worms, or other unwanted materials.
- Soilless mix has better drainage and provides a less compact material which helps with the seedling's root development.
- Soilless mix is not as heavy as soil making the trays easier to transport and move around.

Many of the local home and garden stores sell a soilless potting mix. Call ahead to make sure they have it in stock to save yourself a trip. Some of these mixes are compressed and give you a large amount of material.

Where Do the Seeds Come From?

For this volunteer program, Dane County will be providing you with all the seeds you need. Most of this seed is collected by our volunteer program and goes back to our parks to restore newly purchased land or add diversity to existing land. A small amount goes to this program. You will have the choice as to how many different varieties you want to grow. Please **only use seed provided by Dane County** for this program.

Winter Sowing

Many native plant seeds have built-in dormancy to prevent germination before frosts or drought. To grow them successfully, we need to mimic natural conditions. Most prairie seeds require a cold, moist period—called stratification—before they will sprout.
We'll do this using winter sowing: plant seeds in mini greenhouses (like recycled milk jugs) in late fall or early winter, leave them outside over winter, and they'll germinate in spring. Follow the **"Winter Sowing Steps"** on the next page to get started.

WINTER SOWING STEPS

Check each species' **germination code,** and the minimum number of days of cold it needs, prior to planting. Make sure to winter sow your seeds so they have enough cold time outside. It is ok for them to get MORE cold than the minimum amount.

Add Drainage

Punch drain holes in the bottom of the jug using a Phillips screwdriver, drill (approx. 1/4 inch drill bit), awl or other pointy object. 10-15 holes should be sufficient for adequate drainage. It is easiest to do this before cutting open the jug

Cut the Container

Use a box cutter to cut your milk jug starting at the base of the handle (approximately 4 inches from the bottom of the jug). Cut around the jug leaving a couple inches of plastic near the handle area, so the jug can flip open.

Moisten the Potting Mix

Add some of your soilless potting mix to a bucket, add some water, and stir until the moisture is well distributed. Keep adding water until the potting mix starts to clump together but don't let it get overly wet. Prewetting the potting mix helps it absorb moisture much more easily.

Add Potting Mix to the Container

Fill the base of the jug up (approximately 1 inch from the top) with the pre-moistened potting mix. Pat this down gently so you have a flat surface to place your seeds on.

Add Seeds

Spread one species of seed over the potting mix and cover with a light layer of **dry potting mix**. Large seeds can be covered with up to ¼ inch. Small seeds should have a thinner layer. Very tiny seeds (germination code D) should not be covered at all.

The seed packets might have more seeds than you need - you don't need to use them all. Try putting less seed in each jug or even using a few jugs for each species so they have more room to spread out.

Moisten

Use a spray bottle to moisten the top of the seed bed. Using a spray bottle ensures the seeds are not disturbed.

Label

Add a plant label to the inside of the container with the name of the species. Label the outside of the milk jug with the garden marker as well. It is best to write this on the lower half of the jug as you will be cutting off the upper half in the spring.

Tape and Set Outside

Use a piece of duct tape a few inches long to tape the jug shut. Don't tape all the way around the jug or put the cap on - you want gaps where air and rain/snow can get in.

Place the jugs outside for the winter—on a hard surface, tarp, or raised off the ground. If under an overhang, add snow or lightly water during dry periods to keep moist. Seeds need a cold, moist period. If the jugs feel very light, they are likely too dry.

TRANSPLANTING STEPS

Moisten the potting mix the same way you did during winter sowing. Dry potting mix is hydrophobic so premoistening it will make it much easier to water the seedlings.

Fill Pots

Fill the pots with the potting mix and gently press down with your fingers or another pot to remove air pockets; then add more potting mix to level out the pot.

Use a pencil to make a hole in the middle of each pot so that there is space for the plant roots.

Extract Seedlings

Use a trowel or spoon to loosen the soilless potting mix around seedlings in the milk jug. Gently dig out a plant and separate its roots from the surrounding plants. If they are very tangled, soaking the roots briefly in water can help loosen them.

Note: Please be on the lookout for jumping worms in the containers. If jumping worms are present, you may see soil that resembles coffee grounds. If you think jumping worms may be present, contact us.

Pot up the Seedlings

Insert the plant into the hole in the pot and gently move and press the soil around the roots so they are covered. Try to plant at the same depth as it was growing in the jug . The part of the stem that was exposed in the milk jug should stay above the surface of the soil.

Make a plant label (or reuse the one from your milk jug). Only one label per species per tray is needed. You do not need to label each individual pot.

Water Gently

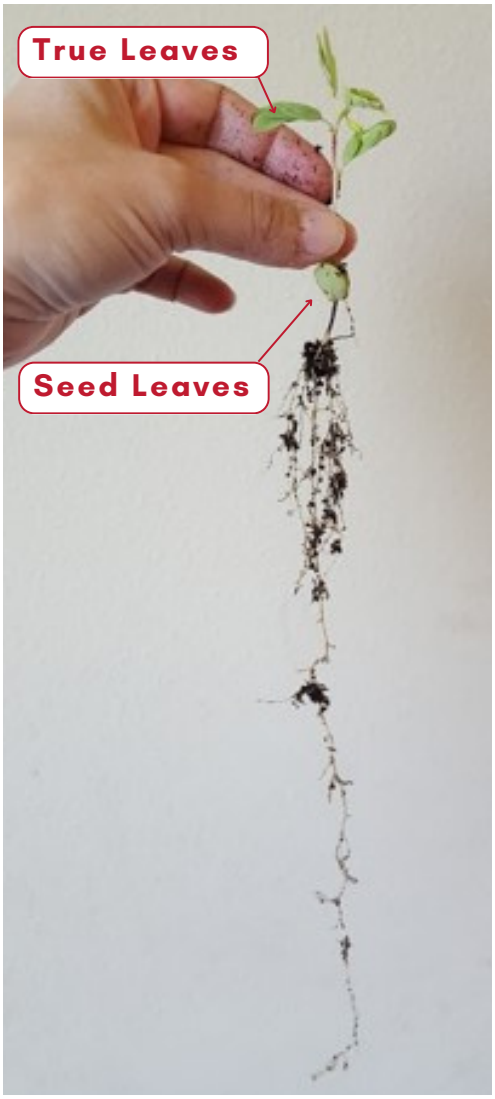
A good way to do this is to poke a hole in the top of a water bottle so you have a very light stream of water. Water around the edges of the seedling so you don't accidentally wash the soilless potting mix off the roots.

Place the tray with the seedlings outside in a sunny or part shade location, depending on species needs. Water the plants diligently over the summer (trays may require daily watering) to make sure the plants don't dry out.

SPRING SPROUTING

In early to mid-March, move the jugs to a sunnier location (if they are in the shade) and give them some water if they are not moist. If the spring is dry and they aren't getting rainwater, you should keep doing this as the weather warms so the soil is consistently moist. Once plants start to emerge (usually early April) you can pull the tape off the jug and flip open the top on warm days (above 50 degrees). Keep the top on the jug until the threat of freezing temperatures and frost are gone (mid-May); that way you can flip the jug closed again if there is a frost/freeze danger. After that you can cut off the top off the milk carton.

TRANSPLANTING



Once the plants have at least two sets of true leaves, you can begin to transplant them into the pots. Don't wait too long to transplant. If the jugs have a lot of seedlings, the seedlings might not grow very large before they are ready for transplant. Keep them out of really intense, direct sunlight for a week or so after transplanting to reduce the shock. Follow the **"Transplanting Steps"** on page 7 to get started.

PLANT CARE

Light and Water

Know your plants' light and water needs and match them to your growing area (e.g., shady deck vs. sunny patio). Large plants often need daily watering; moving them to partial sun can reduce drying. If roots fill the pot, set the container in a water tray so it can absorb moisture from below. If you'll be away, arrange for someone to water—staff can't cover this.

Nutrients

You do not need to add fertilizer or additional nutrients when you transplant the seedlings; however, over the summer you may start to see signs of nutrient deficiency as the plants grow. If this happens you can add a small amount of diluted fertilizer (a weak solution of water-soluble fertilizer like Miracle-Grow) to provide additional nutrients for the seedlings.

PLANT CARE CONTINUED

Weeds

You may start to see weeds sprout in your pots. These should look different from the rest of your plants and be easily identifiable. Remove weeds from trays so they don't take nutrients away from your native plants.

Flowers

Some species grow more quickly than others. If your seedlings start to get large or develop flowers, you can pinch or clip them back. This will cause them to put more energy into root development instead of producing flowers. Be sure not to pinch or clip below the first set of true leaves of the seedling.

REPORTING PLANT NUMBERS AND RETURNING PLANTS

We will email in June/July for an estimate of how many plants of each species you have. This helps us match plants to project applications, so it is very important to respond to the email to let us know, even if you have low or no plants to return. You will need to care for the plants until their return date in August.

TRACKING HOURS IN MYIMPACT

When you spend time on this program, you can log the time in your MyImpact account. This helps us track the impact of our volunteers and helps you track your impact.

We suggest tracking your hours and reporting for main chunks of time:

- Winter sowing (Dec/Jan)
- Transplanting (April/May)
- Watering (Summer) - estimate
- Plant return/drive time (Summer)

How to Log Hours

- Log in at **https://app.betterimpact.com/**
- Click on the **Hours** tab at the top of the page
- Select **Independent Volunteering: Native Plant Grower** from the dropdown list.
- Record the **date** and **number** of hours (estimates are fine)
- In the summary section, you can note what activity you did (e.g. transplanting) to help yourself remember what you've already logged.

QUESTIONS?

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