Growing your own Native Plants

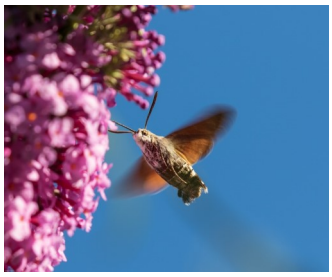
Image: Rainscaping Iowa

DANE COUNTY LAND&WATER RESOURCES DEPARTMENT

Why Native Plants?

Native plants are adapted to the local climate and soils, are drought tolerant, disease resistant, and have deep root systems that help infiltrate rain water. Once established, native plants are aesthetically pleasing and require little watering, fertilizing and mowing. The reduced maintenance can lead to significant cost savings when compared to labor-intensive turf grass. They also provide important ecosystem services such as improved water quality and habitat and food for local wildlife, including numerous pollinator species.

Image: Rainscaping Iowa



Obtaining Seeds

There are many native plant nurseries that sell seeds. Always buy from an official native plant nursery, not off of Amazon or untrustworthy sites. A few Midwestern nurseries that sell seeds are Agrecol LLC (http://www.agrecol.com) and Prairie Moon Nursery (https://www.prairiemoon.com). These sites also have great descriptions of the various plants so you can find species that fit your height, soil moisture, sunlight, or other needs.

You can also collect your own seeds—just make sure you get the proper permission before collecting seeds on public or private property.

Winter Sowing

Information compiled from Prairie Moon Nursery

The seeds of many native plants have built-in dormancy mechanisms which protect them from germinating before killing frosts or in times of drought. In the wild, seeds will lie dormant until the proper conditions for growth occur, and we will need to simulate these natural conditions in order to have successful germination. Most prairie species first require a period of cold, moist conditions (winter) in order to germinate; this is referred to as stratification.

To stratify the seeds, we will use a method called winter sowing, which utilizes two things: mini greenhouses (recycled milk jugs) and Mother Nature. Essentially you will plant the seeds in late fall or early winter, put them outside for the winter, and they will germinate and sprout in the spring. Easy! Follow the "Winter Sowing Steps" on the next page to walk yourself through the process.

Winter Sowing Steps

1

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.

2

Punch drain holes in the bottom of the jug using a Phillips screwdriver, drill (approx. 1/4 inch drill bit) or other pointy object (a corn cob holder works well); 10-15 holes should be sufficient for adequate drainage.

3

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.

4

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.

5

Spread one species of seed over the potting mix and cover with a light layer of the dry potting mix. Larger seeds can be covered with up to ¼ inch. Smaller seeds should have a thinner layer; and very tiny seeds such as culver's root, mountain mint, joe-pye weed, blue lobelia, and others should not be covered at all.

6

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

7

Add a plant label to the inside of the container with the name of the species.

8

Use a piece of duct tape a few inches long to tape the jug shut. There is no need to tape all the way around the jug; you want gaps where air and rain/snow can get it. Leave the cap off the jug. Write the species name on the jug. This can wear off over the winter which is why we also added a plant label to the inside of the container. Place the jug outside in a sunny location for the winter.

Spring Sprouting

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. As the seedlings are growing, keep the soilless potting mix moist and remove any weeds that emerge.

Transplanting

Once the plants have at least two sets of true leaves, you can begin to transplant them into trays or pots so they have a change to grow more roots before planting them in the ground. This gives the plants a better chance of survival.

Transplanting Steps

1

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.

2

Fill the pots with the potting mix and gently press down with your fingers.

3

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

4

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.

5

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.

6

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 plug cell so you don't accidentally wash the soilless potting mix off the roots.

Place the tray with the seedlings outside in a sunny location.

Make sure to water the plants diligently over the summer (trays will require daily watering in the heat of the summer) to make sure the potting mix doesn't dry out.

Seedling Care

Light and Water

Familiarize yourself with the light and water requirements of the species that you are growing. If one of your species needs shade or dry soil, take care not to place it in a spot that is always sunny or overwater it. Shade cloth can be used to artificially create shade if needed. Ideally, you should select species to grow that fit the conditions you have in your growing area (e.g., shady deck vs sunny patio).

Weeds

You may start to see weeds sprout in your plug trays or 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.

Planting

1. Water your plants in the tray thoroughly before planting. This will make them easier to remove from the planting trays.
2. Dig a hole about two to three times the size of your plug. A three inch drill-powered planting auger can make quick work of the job if you have a lot of plants to put in.
3. Remove the plant by gently squeezing the pot sides. Be careful not to pull or pinch the stem of the plant. Gently tease apart the roots if they are tightly bound together.
4. Hold the plug in the hole so the level of the surrounding soil is the same as the soil around the plant. Fill in soil around the plug and press firmly around the base of the plant; again, be careful not to pinch the stem.
5. Water the plant gently and thoroughly to settle the soil around the plant roots. Continue to water in between rain events for the first year of your planting. After your plants are established, supplemental watering may only be necessary during prolonged drought periods.

Additional Resources

Germinating Seeds
Prairie Moon Germination Codes and Tips: www.prairiemoon.com/blog/how-to-germinate-native-seeds