A school-based landscaping project demonstrates how easy it can be for schools and homeowners to landscape with prairie plants.

Prairies at School

Story By Kristin Jacobson
Photos By Forest Park Nature Center

In the Peoria area, an appreciation for the Prairie State starts with hands-on programs involving elementary school students.

Illinois is the perfect place to create a prairie planting. In 1820, approximately two-thirds of the state was covered in prairies, which formed due to ideal climatic conditions such as abundant but uneven rainfall, dry winters, strong winds, regular droughts and natural fires. Today, less than 0.01 percent of Illinois' original tall-grass prairie remains.

The Forest Park Nature Center in Peoria has created a Prairie School curriculum to help teachers and students create small prairie gardens on school grounds, a process that can easily be replicated by a homeowner interested in converting a portion of their property to prairie.

Factors for choosing a site for a prairie planting include siting it away from trees, wooden structures and underground and overhead utility lines so it can be burned regularly to deter weeds and stimulate prairie plant growth.

For a schoolyard prairie, select an area out of the way of future building expansions yet close enough for students to use it as an outdoor classroom. Additionally, and to avoid the threat of the prairie going under the mower, include school administrators, custodians, groundskeepers and gym teachers in the planning process.

Seed collection usually takes place in mid to late October in central Illinois and can be done at any established prairie near your site—but only if permission from the landowner is obtained first. It also is beneficial to have a person accompany you who can identify prairie plants once they have gone to seed.

Venture into the prairie with paper bags, markers and plant identification tools showing pictures of the plants in bloom. Collect the seed heads from a given plant—only dry, ripe seeds lacking any green parts—and put them into a bag labeled with that plant's name.

For a typical 20-foot-square prairie, about four to five heads from 15 different species are plenty. Each plant is put in its own, labeled bag and stored in a rubber tote or metal garbage can in a cool, dry place.

In mid-December, seeds are put through a process called seed stratification—simulating a cold Illinois winter then warming spring. Most prairie seeds will never germinate if they are not exposed to extended cold followed by a warm, moist period. For seeds like rattlesnake master, remove the seed heads from the paper bag and gently press down on the seed heads using wooden blocks or spoons, using just enough pressure to separate the seeds without destroying them.

Once plants have set their seeds in the fall, students gather to learn plant identification and proper collection techniques.

Seeds from plants that go through an animal's digestive tract will not germinate without being scarified or roughed up. To do this, use blocks covered with sand paper and lightly rub them across the surface of the seeds, a process that allows water to penetrate the thick seed coat and make germination more likely.

Pour seeds into sandwich-sized plastic bags, add an equal amount of sand and just enough water to make it the consistency of a sand castle. Label each bag with the species of the plant, place it in a plastic shoebox and refrigerate for 60 days. The only maintenance necessary for this period is to open each bag weekly and gently move the contents to prevent mold build-up. Two months after the seeds have been stratified they can be prepared for planting.

Seeds need three things to germinate—light, water and warmth—and an inexpensive mini-greenhouse can replicate these conditions in a classroom or home. Punch several small holes in the bottom of a clamshell (deli-style clear sandwich container) then fill with about two-thirds seed-starting mix (without fer-

With careful tending, seeds gathered in the fall sprout, then mature on a grow table until the warming days and spring rains create ideal planting conditions.

The Prairie State?

What does 0.01 percent look like? If your body represents the state of Illinois, everything from your knees up would have been prairie 200 years ago. The area of your little fingernail represents the current amount of prairie in Illinois.

Adults provide gentle coaching as a team of students systematically plant their prairie seedlings, while other teams patiently wait their turn.

tilizer) and gently sprinkle the bag of seed and sand evenly along the top of the surface. Place an absorbent fabric on the grow table (a sweatshirt works well). Label the side of the clamshell and place it into a flat on a grow table. Gently set the clamshell lid on top to hold heat and moisture in. Water from the bottom so there is no standing and prevent the small seeds from being carried too deep into the soil. Check the water level on the absorbent fabric every two to three days, allowing it to dry out some but never completely.

At this point, young and old alike enjoy watching the grow table to see the first seedlings pop through the soil. By mid-March trays should be full of green sprouts and ready for transplanting into individual 5-ounce plastic cups. Prepare cups by labeling each one and filling it to the top with the seed-starting soil. Stick a finger into the middle and make a hole for the roots to be placed into. Gently remove seedlings from the clamshell by holding the plant near its base and using a fork to loosen the soil from the bottom. Place one seedling into the hole then gently press the soil around the plant to assure it is firmly in place. Water the cup and return it to the grow table. All that is left is to let the plants mature as much as possible before they are transferred to the prairie plot.

After much anticipation, a kaleidoscope of color erupts on the prairie—a show that is repeated year after year.

A 20-square-foot kidney-shaped site provides visual interest. Several options exist to prepare the site: A power sod cutter causes the least disturbance to the soil and requires the fewest steps; tilling the area two or three times to remove weed seeds and then tamping it down before planting; or, using a low concentration of Roundup when the grass is green then digging holes into the dead sod. (The chemical will have broken down in three days).

Seedlings will have developed adequate root systems by the end of May when spring rains should be frequent. Plant forb seedlings first then scatter grass seed.

Planting day at a participating school becomes a day of celebration with parents helping by digging rows of holes for students to place young seedlings in the ground. Finally it is time for pictures, refreshments and recognition for a job well done.

Kristin Jacobson is the former Prairie School Project coordinator at Forest Park Nature Center in Peoria. For more information, contact the Forest Park Nature Center at (309) 686-3360 or mmiller@peoriaparks.org.

Prairie School is a comprehensive K-5 curriculum focused on the tallgrass prairie habitat native to Illinois. It includes more than 60 activities including topics from prairie planting to animals, plants, food webs, history, physical factors and literature. This is delivered in a one or two day workshop in sites throughout the state. For more information contact Forest Park Nature Center at (309) 686-3360.