

# Going Native on the Course

*A planning and planting experience.*

by LUKE CELLA

**N**ATIVE PLANTS and plantings have a real place in the world of golf. Finding the place, planting and caring for the areas are up to us. One may ask, "Why even try to restore a site to its native vegetation?" The answer is simple: There is an aesthetic appeal that becomes quickly evident, and in the long term we are preserving many rare plants, animals, and natural communities.

The key to planting a successful native or natural area is to plan it properly. Look carefully at the area you wish to restore to its native vegetation. When I first started working with Audubon International for the certification of the Pottawatomie Golf Course in St. Charles, Illinois, I drew a plan noting all of the available space for native restoration plantings on the golf course property. The next logical step was to choose a site for my first restoration. The questions that needed to be answered were: Is the area out of play but not out of sight? What type of soil does the site possess? How much sun reaches the location? How will the plantings work into the existing landscape? What kind of preparation does the site need?

I asked the advice of a friend and teacher to help me make the site selection. He told me to keep it small for my first attempt at this type of project. The area I chose to restore measured close to 6,000 square feet along the Fox River. It had its own natural boundaries — the river, a cart path, and the rough from the third hole. The location would serve as a backdrop for an approach shot to our third green and was highly noticeable as golfers made their way to the third green.

The next step was to take a close look at the area's soil and sun conditions. It turned out that part of the area flooded occasionally with the changing seasons. After a heavy rain I marked off the line that water had reached and staked this area off. I could also see



*A local boy scout troop was interested in helping with the restoration of the native area. Prior to planting, the area was prepared by killing all the existing vegetation and burning off the excess organic matter. The area to be planted was marked with different paint colors that corresponded to the appropriate plant flats.*

that other parts of the site would rarely flood and marked these areas. The areas in the middle would serve as a transition between the two. The reason for this delineation becomes important in plant selection. The area also received full sun after I removed a small cottonwood tree that had sprouted up and transplanted a willow that had been planted in the area a few years earlier.

When planting a prairie or native vegetation, plants are grouped not only by zones but also by the amount of moisture in the soil.

- *Wet* is soggy or marshy most of the year.

- *Wet-Mesic* is excessively wet in winter, spring, and after heavy rains, but dries in summer.

- *Mesic* is of average moistness, water readily soaks in with little runoff, and is considered average garden soil.

- *Dry-Mesic* is well-drained soil, and water is drained from the soil readily, but not rapidly.

- *Dry* is excessively drained.

Sun requirements are defined as follows:

- *Prairie*: Plants grow normally in full sun. Should do well with a half day or more of sun.

- *Savanna*: Partially shaded. Sun will reach ground level through the openings between trees.

- *Woodland*: Heavily shaded by a closed canopy of trees.

After we defined the site possessed, we then began to choose plant species. The plan was to use plugs of native plant material on the outside edges of the whole area, about 12 feet deep towards the middle. The middle portion of the selected site would be seeded. I wanted to plug for a couple of reasons. First of all, this area could be irrigated, and I wanted to establish the plants quickly and provide some diversity right away, not only with color, but texture and height as well. Selecting the plant material was new to me. I started by contacting



Audubon International for suppliers of native plant material in my area. They sent me a list of all the available seed and plant producers close to my location. Next I contacted these suppliers and requested catalogues. Soon the catalogues showed up in the mail and I looked through them for plant material and seed possibilities. Feeling baffled by the amount and types of material to choose from, I contacted individual suppliers and found that

planting day. The plug trays are a little different from most because of the depth of the actual plug. The diameter is close to two inches, but the depth of the plugs is five inches to accommodate some of the plants' taproots. I carefully laid out all of the areas in the site with string and had a staff member operate a drill with an auger bit attached to make the holes for the scout troop. This method proved least disruptive to the soil around the plugs. I marked the

the area was that it had forced some weed seeds to germinate as well. Because the area was relatively small, I was able to have some of my staff hand weed among the native plants when the course was crowded during league play. Most seeded sites can be mowed a couple of times a year when the plants reach a height of 12 inches. It is recommended to cut the plants to a height of six inches. Mowing is detrimental to the annual weeds and prevents them from



*(Left) The area was irrigated for about a month to help the plugs take root and to help the seeds germinate. Temporary fencing was used on the outside edge of the area to help train golfers to walk around the area rather than through it. (Right) Now the native plants have taken hold in their new home. The project has been well worth the investment of time and energy.*

most of them are more than willing to answer questions about planning native areas.

The next step was to prepare the site for planting. I used a non-selective herbicide to kill all of the existing vegetation. In this case, the area was primarily annual ryegrass and bluegrass. I waited to see the effects of the application and then went back and retreated areas that needed it. After all of the existing vegetation was dead, I contacted the fire department and received a land management burn permit. One evening before the dew set in, I burned the decaying vegetation and the weed seeds that had found their way into the site. The site was now ready to plant. All of the existing vegetation was gone and the soil was undisturbed. The less the soil is disturbed, the less likely weed seeds will germinate in the area.

Planting time approached, and I asked the local boy scout troop to help out with the planting. I had the plugs delivered the day prior to the scheduled

flats with colors that coincided with the areas that went with that type of plant. I let the troop choose where to plant individual plants as long as they were within the right soil type boundary. We did make sure the tall plants were planted close to the middle of the site, with the shorter and more colorful plants closer to the edge where traffic passed steadily. When the troop finished, the plugs were thoroughly watered. I then applied a preemergent herbicide between the plugs and watered it into the soil. The middle of the site was seeded by lightly scraping the soil, sowing the seeds, and hand raking. Because the area previously had received foot traffic, I put up a temporary fence to train the golfers to walk around the area instead of through it as they normally had.

The plugs were watered by sprinklers for about a month to establish their root systems. The watering also helped the native seed in the middle to germinate a little more quickly than normal. One problem with irrigating

producing seed. The native plants are usually too small to be injured by a six-inch mowing during their first year.

I plan to burn the area early next spring. All of the plants that established themselves this past season have now stored a large portion of their nutrients in their underground system of roots and will survive their first burn. The burning will help warm the soil by exposing the blackened ground to the spring sun. Over time I would like to find new places on the golf course and repeat the process of restoring sites with native vegetation. Despite the investment of time and materials, we need to remember that these native areas are sustainable. They can survive on their own and maintain the natural diversity found in our environment.

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