RESTORING THE NORTH BRANCH: A MAGICAL TRANSFORMATION

Radhika Miraglia, Bill Tucker, and I are hiking through Forest Glen Woods, which straddles the North Branch of the Chicago River near Cicero Avenue. We stop a couple feet away from an impenetrable wall of buckthorn—the invasive hedge that has taken over woodlands throughout the Chicago area. "Here’s the front wall of the jungle," Bill says, neatly capturing what it’s like to stand in front of the dense, intimidating barrier.

Bill is a Volunteer Work Day Leader for the Cook County Forest Preserves, and Radhika is a Field Volunteer for the Forest Preserves’ Centennial Volunteers Program and the Friends of the Forest Preserves. "The oaks were having a hard time reproducing," Radhika explains, "because of the limited sunlight because of the buckthorn." It’s not only oak trees that are crowded out by buckthorn. This voracious hedge, introduced into the United States in the late 19th century for landscape decoration, chokes off anything that might grow on a forest floor, from wildflowers to ferns.

BY CHRISTOPHER JOHNSON

Yet through heroic efforts, restoration ecologists and hundreds of volunteers throughout the Chicago area are cutting away the thick walls of buckthorn and other invasive species; planting seeds of native species; and restoring woodlands, prairies, and savannas to ecological health. Radhika explains, "We're trying to restore the ecological balance with native plants and animals that have evolved together in the ecosystems of this area."

In his excellent book The Sunflower Forest, William Jordan III, who is the Co-Director of DePaul University's Institute for Nature and Culture, defines ecological restoration as "the attempt, sometimes breathtakingly successful, sometimes less so, to make nature whole. To do this the restorationist does everything possible to heal the scars and erase the signs of disturbance or disruption."

At Forest Glen Woods, the restoration efforts are wonderfully visible on this gorgeous day in mid-June. Where buckthorn once dominated, oaks and hickories stand untrammeled, and an incredible diversity of plants carpets the forest floor. We see wild ginger, foxglove, milkweed. Tucker says, "That’s how it was when the European settlers came here." On both sides of the path, small oaks have taken root, and volunteers have wrapped wire fences around their trunks to prevent deer from browsing on the saplings.

Forest Glen Woods is just the latest restoration site in the North Branch Restoration Project. For 40 years, citizen-volunteers and ecologists have been restoring degraded habitats along the North Branch, from Sauganash Prairie Grove on Foster Avenue to Somme Prairie in Northbrook.

The project is a collaborative one, bringing together the Cook County Forest Preserve District, the Friends of the Forest Preserves, the Friends of the Chicago River, the Nature Conservancy, and other environmental organizations. Miraglia explains that it’s a "community of volunteers who support one another. There are volunteer experts in plants and birds and insects, and they help new people boost their knowledge."

All photos are courtesy of the Friends of the Forest Preserves.
Woods, and ten acres at Wayside Woods.

Restorationists in the Chicago region benefited enormously from having local biologists and botanists who were in the forefront of ecological restoration. Ray Schulenberg, a botanist who worked for the Morton Arboretum in Lisle, began restoring a 55-acre prairie on the west side of the arboretum in 1962. Dr. Robert Betz, a biologist at Northeastern Illinois University, spearheaded the prairie restoration project at Fermilab in Batavia in the mid-1970s.

Since then, volunteers and Forest Preserve staff have significantly improved the ecological quality on about 12,000 acres of natural areas in the Forest Preserves. Last year, nearly 20,000 volunteers contributed more than 60,000 hours of their time in cutting buckthorn, planting seeds, and doing the prescribed burns necessary to bring the lands back to ecological health. During any given week, nearly 400 volunteers have given their time.

As Radhika and Bill guide me through Forest Glen Woods, they give me an expansive overview of the process restorationists go through. According to Miraglia, “We cut buckthorn in the winter, because we don’t want to trample plants, and the buckthorn is easier to get to.” Volunteers then burn the buckthorn, and I spot several burn patches on the forest floor.

Then, when summer arrives, volunteers do a whole lot of weeding of invasives like garlic mustard, thistle, and sweet white clover. Tucker explains, “One of the things we do to support restoration is gather seeds. Today, as part of our work day, several of the volunteers were collecting seeds from this patch of wild ginger. We also get seeds from several sedges.”

The North Branch Restoration Project coordinates all the seed collection and dissemination. In the fall, everybody gets together and processes the seeds by removing them from their husks. Then project workers distribute seeds, with each site receiving seeds appropriate for its ecosystem. Miraglia explains, “We disperse [the seeds] by hand. We scatter them over the winter.” As the snow melts, the seeds embed themselves in the soil and sprout in the spring.

As restored plants take hold, licensed experts conduct prescribed burns. A prescribed burn is the use of fire to clear away underbrush and stimulate plant growth. Tucker explains, “Many of the ecosystems here require fire. Everything up to the river was prairie or savanna and required fire to keep it from becoming shrubby and woody. All those plants adapted to a lifecycle of fire. That’s what we’re trying to reintroduce.”

As a site regains ecological health, the results make themselves evident. “In the
summer," Tucker says, "the flowers in here are just gorgeous."
A restored site also becomes more efficient at providing ecological services—the benefits of nature that help an entire region protect its resources. For example, replanting along the Chicago River helps the surrounding woodlands absorb water and mitigate flooding of the river during storms. According to Miraglia, "There have been analyses done on the billions of dollars that we save because natural systems are doing services."

Ecological restoration also promotes biodiversity. Miraglia explains, "The right plants bring the right insects, which bring the right birds, especially during migration." Woods along the North Branch serve as an important stop-over point for birds migrating from South America. At nearby LaBagh Woods, which lies east of Cicero Avenue, the Chicago Ornithological Society is planting native shrubs to attract more birds.

Fortunately, not all Forest Preserves are as degraded as the southern section of Forest Glen was before the restoration initiative. Radhika and Bill take me to the northern section, and walking into these woods is like hiking into wilderness. Tucker says, "This is undisturbed. It's never been farmed. This is virgin as far as we can tell. There are old trees—a nice mix of species." We bushwhack to a doough, where enormous swamp white oaks tower above us, their canopies reflected in the still water. Yet even here, a patch of buckthorn is visible. "We're figuring out the plans [for this area] right now," Bill says. "We put together three-year plans. There are a couple of things that we'll probably want to get after here."

Radhika explains that the Forest Preserves' Centennial Volunteers Program "is all about building a new generation of leaders in celebration of 100 years of the Forest Preserves. I'm particularly interested in finding leaders like Bill who want to grow in their leadership and eventually become stewards."

Aspiring stewards go through a training program, working closely with Forest Preserve ecologists. Radhika adds, "They work closely with organizations like the North Branch Restoration Project, which is a community of volunteers." Anyone interested in volunteering can reach out to the ForestPreserves at http://fpdcc.com/volunteer. Folks can also contact the North Branch Restoration Project at https://northbranchrestoration.org/calendar.html.

Bill Tucker concludes, "I just really love the work, the people, and the immediate feeling of accomplishment. Volunteers come, and they really enjoy it. In general, I think people come away here feeling good about what they've done."

As I looked one last time at the beautifully restored woods of Forest Glen and at the forest floor bursting with wildflowers and other plants, I realized that a magical transformation is taking place along the banks of the North Branch of the Chicago River.