

**HEY! What Happened to the Woods?**

**RESTORATION WHYS and WHAT FORS...**

By Ed Collins, Natural Resource Manager

Over the winter of 2010-11, three sites underwent major habitat restoration projects that involved a large amount of brush removal which greatly altered their appearance: Pleasant Valley in Woodstock, Pioneer Landing in Ringwood, and Harrison Benwell in Wonder Lake.

Brush cutting projects, especially those on a large scale can be shocking when first viewed especially if a site user is used to a certain appearance and has grown familiar with it over time. At first glance, invasive brush and tree removal may appear very stark, primarily in the first few months. But allowing sunlight and water to flow freely in the ecosystem once more will create positive and noticeable changes. Regular visitors to the site will see positive changes unfold as spring and summer progress; the remaining pockets of native wildflowers will expand and be augmented by reseeded of many species once common here that disappeared due to lack of sunlight; songbirds, amphibians, and small mammals will respond favorably to the new growth of native grasses and shrubs; and the oak leaves will produce a "dappling" effect as they filter sunlight and rain to the woodland floor.

To learn more about the District's restoration process go to [www.mccdistrct.org/web/NRM.htm](http://www.mccdistrct.org/web/NRM.htm).



Top: Restoration before and after at Harrison Benwell. Above, L-R: Garlic mustard, Oriental bittersweet overtaking the woods, Honeysuckle, European buckthorn.

**Recent Restoration Projects**

**Harrison Benwell, Wonder Lake**

Harrison Benwell underwent noticeable changes as forty-five years of invasive species growth like Japanese Rose, European Buckthorn, Japanese Honeysuckle, Asian Bittersweet and Autumn Olive were removed from the site. This woodland restoration involved clearing exotic and invasive plant species to restore the high-quality oak woodlands systems, enhance the woodland bird breeding habitat, and help improve the overall stream quality in Wonder Lake by reducing erosion, and create a more scenic vista. Left unmanaged, these species choke out native trees such as oaks, hickories and hazelnuts, creating such dense shade that even the ground layer of wildflowers can no longer survive. Eventually only bare soil remains, resulting in soil erosion and severely curtailing germination and survival of oak acorns. In addition, the outbreak of Gypsy moths have already affected and weakened the oaks of

Harrison Benwell over the past four years. One result of management efforts is to improve the health of the oaks such that they will be better able to withstand the impacts of such outbreaks.

**Pioneer Landing Woodland Restoration, Ringwood**

The 125-acre woodland restoration, located along the west side of Pioneer Road, north of Harts Road near Glacial Park, similarly involves clearing exotic and invasive brush and plant species to restore the high-quality oak woodlands systems, enhance the woodland bird breeding habitat, and help improve the overall stream quality in Nippersink Creek by reducing erosion. Work began with brush removal in January and will continue through several stages through June, 2011. This spring the area was re-seeded with native woodland wildflowers and grasses, and throughout the coming fall restoration work will continue on the stream and surrounding wetlands.

Glacial Park is among the most ecologically diverse sites owned by the Conservation District. This portion of Glacial Park is characterized by its large mature oaks, three headwater streams feeding Nippersink Creek, diverse displays of spring wildflowers and close proximity to Pioneer Landing. This once beautiful woodland has become

overgrown with invasive woody plants and weeds from other continents such as European Buckthorn, Asian honeysuckle and garlic mustard. These species have no natural controls on their populations and can destroy native wildflowers while inhibiting the reproduction of sun-loving trees such as oaks. Left unchecked these invasive species can obliterate native woodland communities over time. Look for a much healthier Pioneer Landing in the months to come.

**Pleasant Valley, Woodstock**

Similar to the previous woodland restoration projects, the District also completed some work along the extreme NE portion of Pleasant Valley, along Laughing Creek. This project involved clearing exotic and invasive brush and plant species to restore the high-quality oak woodlands, which in turn will also enhance the woodland bird breeding habitat, and help improve the overall stream quality by reducing erosion. This spring the area will be re-seeded with native woodland wildflowers and grasses.



**Rare Fungi Discovered in Glacial Park**

During a preliminary visit to Glacial Park last October, Dr. Patrick Leacock from the Field Museum made a new discovery by finding *Peniophora rufa* on a dead stem of a quaking aspen. According to Dr. Leacock, the only other known record for the greater Chicago Region is a 1984 collection from



Waukesha County, Wisconsin. This year Dr. Leacock is studying fungi diversity on District sites.

**What's so special about fungi?**

When several different species of fungi are present, it represents a habitat that hasn't been altered much by humans. Often, native plants have a symbiotic relationship with soil fungi where both species benefit. The fungi create an underground network with the plant's roots to increase water and nutrient absorption from the soil, while the plant provides food to the fungi from photosynthesis.

Native prairie orchids are a specific example of why soil fungi is important. Without the particular soil fungus, orchid seeds will not germinate. Organisms not only benefit from the presence of each other, but also depend on each other for survival. Diversity of an ecosystem is advantageous to its overall health and survival. The greater the diversity, the healthier the ecosystem as it is more resilient to change, damage, etc. since it has more parts of the whole working together.

Native fungal pathogens like oak wilt cause the death of oak trees, but oak savannas of the Midwest have lived with oak wilt for thousands of years, and presumably could years into the future. On the other hand, introduced fungal pathogens like chestnut blight or Dutch elm disease are famously destructive of our native forests. Conservation of fungal diversity is much like the conservation of diversity of any other taxonomic group—it is probably best to focus on native species, and when possible, native species within restored ecosystems.



Blanding's turtles can live long lives, over 70 years, but don't reach reproductive age until their teens to twenties, if they survive that long.

**TROUBLE FOR TURTLES**

Partners in Amphibian and Reptile Conservation (PARC), an inclusive partnership dedicated to the conservation of the herpetofauna (reptiles and amphibians) and their habitats, is calling for more education about turtle conservation and have declared 2011 as...the **Year of the Turtle.\***

Turtles and tortoises are unique animals, iconic throughout world cultures as symbols of wisdom and steadfast qualities. They have persisted on Earth for over 200 million years and survived many world disturbance events. However they are now the fastest disappearing species group on the planet.

The Turtle Conservation Coalition recently issued a report that states 47-54% of all turtles and tortoises are considered threatened. The U.S., home to more species than any other nation, has 57 different species of the 328 different turtles that exist worldwide. The purpose of the *Year of the Turtle* campaign is to drive attention to the plight of turtles and advocate for protecting rare species and their habitats, managing common turtle species and their habitats so that they remain common, and managing crisis situations, such as rare species in peril or acute hazards such as oil spills.

Locally, the biggest causes to turtle decline are the loss and degradation of habitat, cars, and invasive species.

Many turtles are only found in a few locations, which heightens their risk when habitat changes occur. When the habitat is lost or degraded, larger turtle populations become isolated and places to feed, mate, or nest become harder to find. Over a relatively short time, this can lead to population decline. Turtle habitats are subject to many types of human alteration, such as wetland drainage, land development or water diversions. In the Midwest and McHenry County, the Spotted turtle population has greatly declined or is no longer present as shallow-water wetlands have been drained.

Fast-moving cars pose another serious threat to slow-moving turtles. The Blanding's turtle will move among wetlands throughout the

year, making them more susceptible to death on Midwestern roads. Equally threatening is the presence of non-native animal species that enter the habitat and compete for food, prey on turtles or eggs, or carry disease. Raccoons are very adept at finding nests of turtle eggs, and the increases in their numbers have impacted many turtle species. Even non-native, invasive plants alter turtle habitats by changing the availability of their food, water, nesting sites, and shelter.

Retaining sustainable turtle populations is synonymous with ecosystem stewardship and the maintenance of healthy waterways. Aside from protecting and improving McHenry County's wetlands and stream corridors, the Conservation District has been actively hatching and "head-starting" Blanding's turtles, a state endangered species, for the past 17 years. The District's Wildlife Resource Center cares for hatchlings through their first winter and releases them the following spring.

\*For more information on 2011 *The Year of the Turtle* visit [www.parcplace.org](http://www.parcplace.org).

**Give Turtles a Fighting Chance— What you can do:**

- 1) Drive with care. Turtles do travel. In the spring male turtles move from wetland to wetland looking for females—after which the females frequently cross roads searching for suitable nesting habitat. Drivers who watch both the road and their speed can spare turtles. If you can safely do so, move turtles found on or near the road, off the road in the direction they're headed.
- 2) Mow with care. When mowing your lawn, look out for turtles, especially at dawn or dusk.
- 3) Protect and promote turtle habitat on your own land. Provide shelter areas such as brush and leaf piles. Protect wetlands and nearby natural uplands. Eliminate or limit the use of pesticides and herbicides.
- 4) Don't allow dogs to roam free in areas where turtles and their nests may be found.
- 5) Leave turtles in their natural habitat. Enjoy seeing them in the wild and count it a privilege. Turtles have a strong homing instinct and shouldn't be moved to other areas. Report any collection or illegal sale of turtles to the Illinois Department of Natural Resources at (847) 608-3100.
- 6) If you find an injured turtle, call the Wildlife Resource Center staff (815) 728-8307 for guidance in how to help the turtle.