

# The Windings of Ferson Creek Turns Green

www.thewindings.org

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## Special Report on Environmental Initiatives

### The Windings of Ferson Creek Mission Statement

*We will maintain and work to enhance our natural environment and amenities that serve as the foundation of our community.*

On December 5, 2000, the Windings Strategic Planning Committee (WSPC) under the sponsorship of the Windings Board of Directors and led by new Board member Charleen Miller reported its findings to the Board. The Strategic Planning Committee, consisting of 26 volunteer residents, recommended the above Mission statement, which was later adopted by the Board and published in the Windings Newsletter. The WSPC wished to accentuate the importance of the Windings preserving and enhancing our beautiful natural environment that distinguishes the Windings from other communities in the Fox Valley. In 2006, with the election of Doug Dirks to the Board and his acceptance of chairman of the Environmental Committee, the Board started sowing the seeds for many of the environmental initiatives that came to fruition in 2007 and should continue for many years to come. In early 2006, Doug began networking with the important area environmental groups, firms, consultants and government agencies, who provide grants, training and services for environmental projects. He gave walking tours of the Windings to many of these contacts who were very impressed with our community setting and suggested numerous opportunities that the Windings could undertake to become better stewards of our natural environment. Examples of these opportunities are controlled prairie burns, weed control, tree feeding and watering, ravine erosion control, Ferson Creek bed stabilization, pond management, tree inventory, resident education etc.

**The following is a description of the environmental initiatives that the Windings is actively working on, pursued or finished in 2007:**

#### **1. Arboretum Automatic Sprinkling System Installed to Save Trees and Plantings**

The Windings main entrance is distinctive due to its attractive sign wall, colorful memorial garden, flag pole and block-long boulevard of mature trees. In recent years, these trees have been a challenge to keep healthy as they age out and suffer from the vagaries of weather and insects. We now employ the services of the Save-A-Tree arborist who treats these trees as they show early signs of distress and disease. We have consulted with a number of arborists over the years, all of whom recommend more regular watering to improve tree health.

Whenever a tree died, was cut down and replaced, we would have to equip the new young tree with a water bag (called a gator) that someone would have to fill periodically. We also had to rely on nearby residents to hand water the memorial garden, and lawn in front of the Windings main entrance sign wall so that we didn't lose our investment in our flowering plants during the hot summers.



In May, 2007 the Board approved the Landscape and Maintenance Committee recommendation to install a automatic sprinkling system for these gardens and the entire length of Arboretum Dr. This system was installed by Irrigators of St. Charles for less than \$10,000 and has performed well in its first summer of use. The system has a rain detector that keeps the system from operating during and after a rainstorm for a period of time. The volume of watering is based on our tree arborist recommendation. This system is shut down and drained each fall to preclude winter damage.

It will take a couple more years for us to evaluate the effectiveness of the new automatic sprinkling system in prolonging the lives of our trees but we are optimistic that we will spend less of our budget for tree and plant replacement.

## **2. Pond Aeration System Installed to Promote Fish Health and Reduce Algae Growth**

Many Windings residents don't realize that over the years the Windings pond had shrunk in size and depth due to the build up of sediments and tree debris. Over a decade ago, according to past Board reports, the pond was enlarged and deepened by enterprising residents who drained the pond and used a back-hoe to dig out sediment. There was also an attempt to keep road salt out of the pond by using the pond sediment to create a better road grade.

Over the years, the growth of undesirable algae has increased due to deposition of fertilizer from ravine carried storm water, reduced pond water clarity and general water stillness. Years ago the Board hired Marine Biochemists of Elburn to add chemicals to the pond to control algae growth, so that the pond could be fished. They regularly measured water oxygen levels and limited chemical treatment to keep oxygen concentrations at a healthy level for fish. While this method worked pretty successfully, on occasion, the Windings would experience a pungent fish kill when oxygen levels were too low.

In May 2001, then Board member Jim Roth presented a major report to the Board recommending that a pond aeration system be installed to increase water oxygen levels to enable more aggressive algae treatment and improve fish health and longevity. Based on a misperception that the electric cable for such an aeration system would have to be routed underground over 700 ft from the Clubhouse transformer to the pond, the project was considered too expensive to install and the proposal died.

In 2006, the Board revisited the pond health issue and accepted the recommendations of Marine Biochemists and our Landscape and Maintenance Committee to remove three mature Weeping Willow trees that dropped their seasonal debris into the east end of the pond and drew down pond water levels during the summer. This action, not entirely popular with nearby residents, opened up the view of the west Hidden Springs Dr. and virtually uncovered a panorama of the beautiful pond, meandering Ferson Creek, grassy meadows and the nearby dense forest.



In mid August, 2007 the Board accepted the recommendation of its Landscape and Maintenance Committee to install a pond aeration system for a total cost of \$6000. The system was installed and up and running in October 2007. The gentle, attractive motion at the water surface created by the two underwater air dispersal points has already caused floating algae to move toward the shallow east end of the pond where it is more easily removed by rakes. Now we should be able to support a larger fish population in our pond and to better manage the algae problem.

## **3. Board/Resident/Government Funded Ravine Erosion Control Project**

In 2006, a Windings resident met with the Windings Board to discuss repeated damage to his driveway and bridge caused by heavy storm water flow and sediment from a nearby ravine during major storms. The Board recommended that the resident contact Kane County Water Resources Group as they were in discussions with the Villas about similar storm water flow problems.



In August, 2007 we were advised that Kane County had confirmed this ravine erosion problem and proposed to undertake a \$5000 project to place a large rock control structure in a ravine west of the Villas homes to reduce rainwater runoff velocities and erosion. An engineering firm hired by the County designed this rock structure and determined that "50" upstream Windings properties contributed rainwater runoff to this ravine. Kane County proposed to use their **Voluntary Cost Share Drainage Program** to pay for this project. Under this program half of the project cost is paid for by the County and half by a combination of Homeowners Associations and the residents who owned the properties shedding the storm water. Letters explaining this project and this program were sent to these homeowners in August by Kane County and a tour of the work site was hosted by their Water Resource Engineer. The Windings Board pledged to contribute \$1000 to this project as the Board felt that the joint funding by government, homeowner's association and residents was an excellent model for future similar projects. The Villas Board also contributed to the project.

In October, 2007 Kane County advised the Windings Board that sufficient Windings Associations and residents had stepped forward with contributions and that this Ravine Erosion Control project would move forward in December 2007.

The Windings have many beautiful and steep ravines that are capable of causing future problems. We will be improving our monitoring of our ravines and working with affected parties to manage erosion and minimize problems. Hopefully we can utilize a similar funding model to manage the impacts on our yearly Association budget.

#### **4. Ferson Creek Bed Stabilization Grant**

In May 2007, the Kane-DuPage Soil & Water Conservation District (SWCD) submitted a Streambank Stabilization and Restoration Project (SSRP) grant application on behalf of The Windings Homeowners Association. As described in the SSRP, the project will correct water flow that is causing streambank erosion in approximately 500 linear feet of Ferson Creek that runs in the common area near the pond and tennis courts. The solution involves construction of four to five rock riffles in the creek to slow the water flow. Ferson Creek's banks in the project area also will be sloped and stone will be added at critical points. The proposed project, which is expected to cost approximately \$40,000, would require the Homeowners Association to pay about \$10,000. The grant would supply the remainder of the funds.

In October the SWCD informed us that the Illinois Department of Agriculture had contacted them, indicating its interest in releasing about one-half of the grant funds for this project. Unfortunately, the State of Illinois' inability to adopt a budget has stalled progress on our project. We remain hopeful, along with our managers at SWCD, that money eventually will be supplied for our project.

#### **5. Reduced mowing along Creek and Pond to promote deeper grass roots to hold soil**

Starting in Spring 2007, based on recommendation of the Windings Environmental Committee and its consultants, the Windings lawn mowing contractor was instructed to let the grasses grow wild next to the approximately 500 feet of Ferson Creek bed. The grasses will sink deeper roots and hold onto soils better in high storm water periods.

#### **6. Tree Inventory Program Start**

The 2006 discovery of the Emerald Ash Borer in The Windings was an arresting incident for several reasons. First, we homeowners gradually came to the realization that we are going to lose our ash trees. Second, many of us began to understand that we had been taking our woodland resource for granted. We assumed—wrongly, it turned out—that the magnificent oak, walnut, and hickory trees around us pretty much could take care of themselves. In retrospect, we should have known that every living thing in our care always needs our full attention and sometimes needs our special care.

In light of that realization, this year we arranged to have a certified arborist make periodic visits to our community. Judy Markowski twice inspected our trees this summer; next year she will visit in early and late spring and in the summer. On her tours around The Windings, Judy will be on the lookout for diseases and conditions that affect the health of our trees. We will forward information in her reports to homeowners so that they can engage in good horticultural practices.

Early in Summer 2007, Judy spotted a condition in our some of our oak trees (chlorosis) that shows up as yellowish-green foliage. We immediately began treatment of affected oak trees on our common grounds. We included information about chlorosis in our newsletter mailed to all residents, and we mailed letters to 21 residents on whose properties we spotted chlorotic oak trees, advising them to consult with a certified arborist. In late summer, Judy apprised us that some of our maple trees suffered from anthracnose, and we began discussions on an appropriate course of action. Some residents began treating maples on their personal property.

Several forestry experts have strongly suggested that we initiate a tree inventory in The Windings. Essentially this project involves identifying the number, age and health of the tree species on a sample of Windings properties. By doing this, we will have a better idea of the various species of trees in The Windings and when they may need to be replaced.

#### **7. Resident Education initiative**

In 2006 Edith Makra led a tour of residents to help them identify trees. She discovered many hundred year old oak trees on top of sledding hill. Also, in April 2006 botanist Liz Aicher led a group of resident on a tour to identify native plants. She was excited to find many rare wild flowers, like *trillium* in our common trail areas.

#### **8. Prairie Burn Program**

On November 3, 2007 a dozen Windings volunteers joined Liz Aicher, formerly Land Conservation Specialist, Fox Valley Land Foundation, and Charlie Qualls, Property and I.S. Manager, Girl Scouts—Fox Valley Council, in a controlled burn of the wetland located at the southwest end of The Windings common area. Liz and Charlie used drip torches to start small carefully placed fires while the volunteers carried water packs and “flappers” to keep the flames from getting out of control. This is the first time in anyone’s memory that this practice has been implemented in The Windings.

During the orientation session prior to the burn, one of our residents asked, “Why are we doing this?” That was a good question, and here’s the answer. In the twelve thousand years since the last glacier in Illinois melted, fire has been an essential element of the ecology of the Midwest. Our native plants are adapted to occasional fires sweeping across the landscape. Their long roots, some going down as far as 20 feet, ensure that the plants remain viable after fire has burned out. Human populations naturally have an interest in suppressing fire, with the result that our native woodlands, prairies, and wetlands have become choked with garden escapes and other weeds that are destroying our native heritage. Burning reduces populations of non-native and invasive plants and returns nutrients to the soil, which in turn encourages the growth of our native plants and restores the beauty of our landscape.

Last spring a different group of volunteers cut down non-native bushes and trees in that same wetland. The group removed some—but certainly not all—of such plants as buckthorn, box elder, and garden escape roses. Much more of this work needs to be done, especially along the Ferson Creek waterway. Look closely along the banks of Ferson Creek and you will see non-native grasses and shrubs choking out the *coneflowers*, *black-eyed susans*, *goldenrods*, and *asters* that early residents of The Windings report that they saw in their spring and summer walks. The practices of cutting and removing, burning, and re-seeding can help to restore the beautiful vistas we once enjoyed.

#### **9. Proactive Interaction with IDA on Emerald Ash Borer Problem Saves Windings \$\$**

In the Summer of 2006 the Illinois Department of Agriculture (IDA) confirmed what Windings resident, Re Becca Mathewson already new as to be true: that her ash tree was dying because it was infested by the Emerald Ash Borer (EAB). This Windings tree was the first in the State of Illinois with a confirmed infestation. This insect had already destroyed millions of Ash trees in Michigan, Indiana and Ohio. The IL Dept. of Agriculture organized a joint task force in 2005 that had been preparing for this discovery in Illinois. Initially it was thought that the infestation could be stopped by destroying all Ash trees within a multiple mile radius of the Windings infested tree. IDA estimated that Ash trees constituted approximately 10% of the Windings trees. The Windings Board feared that the cost of complying with such an order for our Windings Common area trees would bankrupt the Homeowners Association. We shared this concern with politicians and area newspapers who mentioned such a possibility in EAB articles.

Cooler heads prevailed and the IDA decided to embark on a comprehensive search for evidence of wider infestation. They subsequently found the EAB in various northern Illinois counties as well as in many dozens of infested trees in the Windings. In the late Spring of 2007, IDA supervised their contractor to remove 160 trees from the Windings and nearby properties at a cost of over \$60,000. This was paid for with Federal and State funds. We expect that more of our Windings ash trees will become infested by EAB in the future. The cost of managing their removal from common areas will be borne by The Windings Homeowners Association. Homeowners will bear the cost of tree removal from their own property. Some Tree Maintenance companies are treating ash trees with pricey root injection insecticides yearly in an effort keep the EAB from infesting trees.

The Windings Board played an important role in interfacing regularly with the IDA and posting information notices in its Newsletter and on its website. This kept the community well informed and helped residents and the Association avoid paying the high initial cost of fighting this infestation. We recommend that the residents who remove ash trees in the future, replace these trees with hardy non-ash varieties.

## **10. Clubhouse Window Sun Screens**

For the past three years the Windings Board has been working to reduce electricity consumed by air conditioning its Clubhouse for meetings and events. In 2005 inside sun shades were added to the southern exposure window wall. An attempt was made to add a sun reflecting film to the large, high, western exposure windows in 2006, but the contractor declined to install the film due to fear that the windows would crack from uneven heating caused by shade patterns from outside vertical vent stacks.



In 2007 a Board member researched sun blocking screen materials and devised a way to fabricate sun screens & holding frames that would fasten onto the outside window frames. While the installation was labor intense, the design worked well and the screens now block 80% of the incident solar radiation from entering the Clubhouse main floor room for a total cost less than \$500. We expect that summer afternoon and evening Clubhouse events will be more comfortable and consume less electricity.

## **Possible Future Directions**

Windings residents have many opportunities to be good stewards of the beautiful property on which we live and many ways to enjoy the abundance of nature. Here are some possibilities. Accomplishing these activities will depend on whether there are residents willing to volunteer their leadership.

- a) Remove invasive plants, such as *buckthorn*, that have invaded the area around the clubhouse, giving native plants an opportunity to thrive.
- b) Identify and call attention to high-quality native varieties (such as the quaking aspen grove and the pre-settlement oaks west of the clubhouse) by placing informative plaques nearby.
- c) Construct a prairie plant demonstration garden in the common area near Ferson Creek.
- d) Use native plantings, including grasses and forbs, around the pond.
- f) Prepare and distribute literature showing homeowners where to purchase and how to use native plants in their home landscaping.
- g) Improve the trail lying between the Villas and Lost View, highlighting special varieties of plants, such as white *trillium*, that grow there, and control or eliminate the garlic mustard growing in the trail area.

- h) Expand the controlled burn area to include more of the common property along Ferson Creek.
- i) Join a proposed project managed by Morton Arboretum that involves collecting heritage acorns from our pre-settlement oaks, learning how to treat and germinate them, and growing seedlings for distribution to homeowners.
- j) Expand the tree inventory program, now in its infancy, to include all tree species growing on our common properties.
- k) Develop resources for existing and would-be birders, perhaps keeping an inventory of permanent and migratory songbirds that live in The Windings.
- l) Identify wildlife viewing areas where residents can make likely sightings of foxes, beavers, coyotes, owls, snapping turtles, and other wildlife.

**Doug Dirks is always looking to expand his Environmental Committee. Anyone interested in this worthwhile cause please call 630-513-5391 to volunteer.**

## Overall Summary

**In 2000**, the Windings Strategic Planning Committee laid the groundwork for the next decade by defining a environment oriented Mission for its Board and residents.

**In 2005**, Windings residents approved a 25% increase in the yearly \$300 Assessment to fund needed infrastructure replacement and environment stewardship projects.

**In 2006 & 2007**, the Windings Board established a *Green Standard* by undertaking a number of very important environmental projects that will serve the community well for decades to come. In the course of planning its projects for the next few years, the Windings Board will fully embrace its role as steward of the beautiful environment that makes the Windings a wonderful place to visit and live in.

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