

This oddity is important to our finned friends beneath the ice. Once shallow waters near shore freeze, many fish will stay together and high-tail it to deeper, warmer areas of the lake unless they are top-of-the-food chain predators. Some fish, like bullheads, even take it a little bit further and burrow in the mud or gravel for extra warmth.

In search of oxygen

As winter presses on, ice thickens, snow builds up, and diminishing supplies of oxygen are continually consumed below the ice. Low oxygen levels test fish and can leave them vulnerable. Shallow lakes with abundant vegetation are at especially high risk for dropping dissolved oxygen levels. "Some fish are more sensitive to low oxygen than others, though the reasons for that aren't well known," says DNR fish ecologist Paul Cunningham. "Low oxygen is most unforgiving for fish like bass, trout and bluegill. Northern pike, walleye, crappie and yellow perch have added tolerance, and fish like fathead minnows and bullheads come out on top in their ability to handle the lowest amounts of oxygen."

One of the most successful species in low-oxygen conditions is the mud minnow because it can take in air through its gills and also breathe air directly as needed to survive. John Magnuson, director emeritus of the Center for Limnology at the University of Wisconsin-Madison, observed that mud minnows breathe oxygen trapped in bubbles beneath the ice. Fish under low-oxygen conditions move upward in the water column searching for more oxygen-rich water, or they migrate to oxygenated inlets to get through the harshest months, he explained.

When fish become stressed from low oxygen, activity levels really drop off and feeding basically shuts down until conditions improve. If these low-oxygen conditions persist for a period of time, winterkill or "freeze-out" may occur, killing some or all of the fish, says Cunningham. "Partial winterkills are expected every year, but we haven't seen severe winterkills for more than 20 years," he notes. "In some waters, partial winterkill is just a natural and beneficial process that results in faster growth rates for the survivors."

Excerpts from article written by Alisa Santiesteban in the December 2009 edition of Wisconsin Natural Resources magazine.

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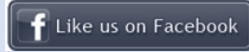


Vol. 21, No. 1

Spring 2013

LAKE DISTRICT
OFFICE

Oakland Town Hall
N4450 County Rd. A
Cambridge, WI 53523
(608) 423-4537
ripley@oaklandtown.com
WWW.LAKERIPLEY.ORG



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FROM THE HELM



Spring comes in different ways to Lake Ripley. This year it has come late and wet. There are signs of hope, even though the ice only went out a short time ago; I spotted a pair of loons swimming near shore close to Ripley Road. Unfortunately, their stay will be short. As activity picks up on the lake, they will move north to lakes that provide them with more solitude.

For the Lake District, spring brings a very active period that will last through the fall. Just like for many of you, it is time for spring-cleaning. We get our crew and machinery ready for weed harvesting, we review landowner cost-share projects, and we plan for volunteer efforts in the Lake District Preserve.

This winter we began a woodland restoration in the wood lot at the eastern end of the Preserve. Our goal is to restore a healthy woods to prevent soil erosion and promote habitat, as well as provide a beautiful outdoor experience for those who would like a little quiet time with nature. We are very pleased that the Friends of the Glacial Heritage Area will join us for a May 5th workday in the Preserve to help with this and other projects.

We hope you can get out and enjoy the Preserve, and that you take time to stop at the trail kiosks to learn how the Preserve benefits Lake Ripley. You are also encouraged to help on the shoreline where you live or access the lake. While we try to take on the big jobs, we need you to tackle those smaller projects. We are available to advise and recommend good management practices you can use on your farms, yards and shorelines. Please feel free to call and ask questions about your concerns, as it is always better to ask before you act, and we are here to help.

John Molinaro, Chair

All Eyes on Willerup



A winter view of the Willerup Bible Camp. Photo: Lake Ripley Institute.

Perched on the west shore of Lake Ripley next to Ripley Park, the 3.6-acre Willerup Bible Camp is an iconic landmark with a rich history. Its 360 feet of tree-lined lakefront has long appealed to visitors and passing boaters alike. Yet, it is a lakeshore that is in trouble, with undercut banks, exposed tree roots, eroding uplands, and a sloped sand beach with a stubborn propensity to wash into the lake. According to the nonprofit Camp's director, Perry Oates, raising the funds to repair and naturalize the degraded lakeshore "has become a high priority for us." He is appealing to the community for some much-needed help to make that a reality.

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Camp History

Willerup Bible Camp has stood on a semi-wooded bluff overlooking Lake Ripley for over a century. Since its earliest days, Willerup was envisioned as a special place where campers could get away from their regular surroundings to relax and open their hearts to God.



Epworth Hall sleeps 35-45 campers. Photo: Lake Ripley Institute.

It was founded in the late 19th century as members of Willerup Methodist Church sought land to use as a campground to host the popular tent meetings and revivals of that day. In 1887, John A. Johnson of Madison donated 2 acres of lakefront property with the stipulation that it be used at least once a year for religious purposes. The land was deeded to the Cambridge Norwegian and Danish Camp Meeting Association, later named Lake Ripley Epworth League Institute of Jefferson County. An additional acre of land was later purchased in 1934 from Belle Olsen. Thus, Willerup Park, named after the church's founder, John Willerup, was established.

Today, the property is home to several buildings, including a chapel recently renamed for Edith Kenseth (grandmother of local auto racing legend Matt Kenseth), who played piano there for many years. The property is managed by the Lake Ripley Institute Board, which is comprised of 16 members—eight from Cambridge Methodist Church and eight at-large members representing the nonprofit Institute. About 350-400 people affiliated with Christian churches, youth groups and other organizations from Chicago, Milwaukee and the surrounding area visit each year.



The Chapel. Photo: Lake Ripley Institute.

A Mission of Restoration

Visitors have long been attracted to the Camp, in part, because of its peaceful, natural, lake-side beauty. Perry Oates, who has been the Camp's administrator for the last four years, points to the impact these visi-



Sunrise over the Willerup pier. Photo: Lake Ripley Institute.

tors undoubtedly have on the local tourism economy—buying gas, food and other items in Cambridge during their recurring stays. He wants to attract even more visitors, and hopes that the proposed lakeshore improvements can help achieve that goal. He also sees it as an opportunity to benefit the lake. "I know that the shoreline is experiencing significant erosion," says Oates. "I was first made aware of the problem's severity by Mike Halsted from the Wisconsin Department of Natural Resources when Mike was helping to lead a camp activity last summer. Mike suggested I contact the Lake District for guidance and possible cost sharing."

Twenty years ago, Oates recounts that a church member recognized the shoreline-erosion problem and tried to fix it by adding the rocks now seen along part of the shoreline. He says they are continuing to lose the shoreline to runoff and erosion, and believes restoration is vital to improving lake quality. He referred to the current lake bottom conditions along the shoreline as a "sterile sand and dirt area."

Project Goals

If and when sufficient funds are raised, plans are to phase the project over a three-year period. Lakeshore work would include:



A troubled shoreline with great potential. Photo: Lake Ripley Institute.

- 1) adding more rock to the shore to protect against further erosion,
- 2) separating the sand beach from the lake by reshaping and terracing the bank,
- 3) planting aquatic bulrushes and native shoreline gardens,
- 4) seeding the hillside overlooking the lake to a woodland savannah, and
- 5) adding treefalls to act as natural fish reefs and turtle-loafing structures.

If the project moves forward, an arborist will examine the existing trees growing along the shoreline to determine if some should be removed. Those that are diseased, pose a safety risk, or that would negatively impact the restoration could be candidates for tree-falls to enhance fish and wildlife habitat near the shore. Deep-rooting plantings along the lakeshore and up the hill slope will create additional habitat, and will help filter runoff and stabilize eroding soils. Taken together, these project elements offer the potential of transforming the entire property into a showcase for lakeshore recovery.

Continued >>

The Lake District Board of Commissioners meets on a monthly basis at the Oakland Town Hall. Each member contributes a unique background, perspective and skill set as representatives of Lake Ripley-area property owners. Five board members are elected to three-year terms and must own land within the District, while two serve as appointees from the Town of Oakland and Jefferson County Boards.

In the last Ripples, we introduced you to two of our seven Board members. Two additional members are profiled below. We invite you to get to know them, and to join us in recognizing their valuable donations of time, experience and dedicated service. It is due to their passion and steady leadership that we are able to navigate Lake Ripley's ever-changing challenges and opportunities.

Dennis McCarthy has been a Lake Ripley resident since 2001. Wasting no time to get involved, he joined the Board one year later. He continues to serve as our lead water quality monitor and a member of the weed harvesting oversight committee. Dennis is a graduate of UW-Whitewater where he earned a degree in criminal justice. He is a member of both the Association of Former Agents of the U.S. Secret Service and the International Association of Credit Card Fraud Investigators. Dennis is also a 2004 graduate of the Wisconsin Lake Leaders Institute.



Jane (Bilderback) Jacobsen-Brown began a long association with Lake Ripley when her teacher/school principal parents purchased a small cabin on Sleepy Hollow Road in the early 1950s. Jane's knowledge, memories and protectiveness of the lake grew as her life as a teacher, foreign language author and lake volunteer continued. Upon retirement, Jane and her husband's time were increasingly spent in woodland and marsh restoration and Lake District projects. She has served on the Board since 2004, and is a 2006 graduate of the Wisconsin Lake Leaders Institute. ♦



\$2,500 Cambridge Foundation Grant

Ongoing restoration work at the Lake District Preserve just received much-needed funding, thanks to a generous \$2,500 grant from the Cambridge Foundation. The funds will be used to eradicate woody invasive species, thereby improving the Preserve's overall health and habitat conditions. Our next volunteer cleanup day is set for Sunday, May 5th, starting at 9:00 a.m. at the Preserve parking lot.

\$3,000 DNR Lake-Planning Grant

Previously, you learned of our discovery that several, indigenous, nongame fishes—last collected in the mid-1970s—had disappeared from Lake Ripley. These tiny, lesser-known fish are important since they occupy unique habitat niches and biologically interact with other aquatic life in the food chain. Another \$3,000 grant was obtained to determine the feasibility of using conservation aquaculture to reintroduce these lost species. Our investigation shows that this idea holds great promise, especially given the documented history of water quality and aquatic habitat improvements since the early 1990s. If implemented, a successful reintroduction could play a vital role in preventing further declines throughout the region.

\$2,600 'Clean Boats, Clean Waters' Grant



Photo: UW-Extension Lakes

As part of its 'Clean Boats, Clean Waters' initiative, the Wisconsin DNR has awarded the Lake District a \$2,600 grant to conduct volunteer training and 200 hours of watercraft inspections and boater education at the public landing. Our program assistant, Jeanne Scherer, will be leading this effort and is asking for volunteers. If interested, let us know by calling (608) 423-4537. Training is set for 6:30-8:30 p.m. on Tuesday, May 14th, at the Oakland Town Hall. Students on summer break are welcome, and scheduling is flexible.

Bio-blitz at Zeloski Marsh

Professional and citizen scientists are invited to help document a "snapshot" of life in the marsh at this May 18-19th event hosted by the Rock River Coalition. Activities include an after-dark walk to identify frog-mating calls, and a celebration of marsh discoveries at Korth Park. To learn more about the weekend itinerary and how to get involved, please visit www.rockrivercoalition.org.

Once lakes freeze over, fish have to make due with colder temperatures. Though it sounds like a horrible fate, remember that the piscine world generally stays within a 40 degree temperature range year-round. Unless they freeze-out, lakes don't drop below freezing and they are rarely warmer than the mid-seventies. Wisconsin's waters are wonderful habitats, and fish have strategies to survive even some of the harshest conditions.

So where do the fish go when the temperature plummets and ice blankets the water? Most don't go anywhere...they just adapt. Nature has guided them through this annual cycle for thousands of years, and they are prepared to spend a long winter in lower light at lower temperatures. The frigid wonderland beneath the ice is not well explored, but biologists do understand the importance of metabolism, food and oxygen: the keys to underwater winter survival.

Activity and food go hand in hand

During early winter, the lakes have turned over, the water holds plenty of oxygen, food has been stirred up and fish are active. Even though the water doesn't drop below freezing, as winter progresses food becomes more scarce, the waters are still, light penetration drops off and oxygen levels begin to drop too. Fish have learned to adapt to survive.

Fish are *poikilotherms*, that is, "coldblooded," and can modify their metabolism to the environment. "To conserve their energy and lower their needs for food and oxygen, most fish decrease their activity during the winter months," says DNR Fisheries Supervisor Terry Margenau. During winter, anglers can see some of those changes. For instance, anglers are more likely to find food in the stomachs of the fish they catch compared to other times of the year, Margenau observes. "When water temperatures are around 75° F in the summer, it may only take a fish 24 hours to digest its prey," he says. "But in winter, [it] may take an entire week to digest."

Fish are often divided into three groups: coldwater, coolwater and warmwater species that thrive in different temperature ranges. "When it comes to the winter, different fish choose different activity levels, just like people," laughs Margenau. "Some stay somewhat active, some get more sluggish, and others just hunker down." Walleye, northern pike and panfish

adapt well to cooler water and keep feeding at the onset of winter. In fact, they feed heartily during first ice as protective weed cover for their prey dies back and small prey fish head for the shallower, relatively warmer waters. Other species, like bass and muskies, become more sluggish and only feed to meet base maintenance needs in winter. Some fish need even less food energy to get by and really restrict their movements in winter. Bullheads tend to pass the winter buried in the sand. Carp become dormant and some catfish take on a state of near hibernation—barely moving, slowing their respiration rate and rarely feeding.

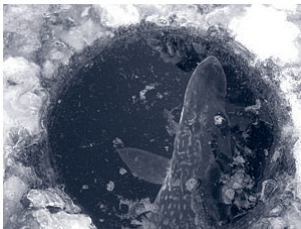
When it comes to food in winter, most fish are fairly opportunistic according to Margenau. "Take northern pike. Panfish are not a preferred prey food for pike during most of the year because they are tough to swallow, are a big size, and are very effective at using weed beds for cover. Yet, when you're cleaning pike that are caught in the winter, you will often find they have eaten bluegill as a mainstay of their diet," Margenau says. Consider that during summer months when aquatic plant growth is at its maximum, panfish have lots of places to hide. When the seasonal vegetation dies back in late fall, this hiding cover is greatly reduced. It's a perfect advantage for a coolwater predator like a pike. They're not picky during the cold months."

Most fish won't expend too much energy to find food in winter. They can't afford to spend much time or effort chasing down other fish to fill their bellies. The trade-off is that since food resources are limited, growth rates during the cold months slow way down. If food supplies are really low, this poor diet can result in stunting where the fishes' normal growth rate slows.

Layin' low

So what habitat do fish look for to protect them during more sedentary periods over winter? Places that can best meet their needs: as warm as practical, as much oxygen and food as possible, protected from predators, and as much light as is plausible. During winter there's a bizarre phenomenon that the frigid water actually gets relatively warmer the deeper you descend in a lake. The reason has to do with how water molecules arrange. As water cools, the molecules sink and pack tighter and tighter together (increasing density) until the temperature drops to 39° F. At that point, the water molecules are heavier than the water at the surface (around 32° F), causing a topsy-turvy effect where warmer water is at the bottom.

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To increase a fish's chance of survival when released, minimize handling and limit exposure to cold air. Photo: Terry Magenau

Fundraising Challenge

While some amount of cost sharing may be available through the Lake District, tight budgets and an estimated three-year price tag of \$46,000 means that additional sources of funding will need to be found. As a nonprofit entity, Oates explains that the Camp already struggles to pay for routine infrastructure and maintenance needs. "These needs are financed entirely by donations and the low fees charged to guests. When items like a new roof, window repairs, or the replacement of 75 mattresses becomes necessary, supplemental funds from donors are used to cover those costs," says Oates. He admits that a restoration of this scale is beyond what they can afford without help.



Part of the hillside that will be restored to a woodland savannah if enough funds can be raised. The eroding sand beach can be seen at the bottom.

Thankfully, the Cambridge Foundation has already moved the project a little closer to reality through a \$2,500 grant award. Oates is also appealing to the faith community, as well as area property owners who view the Camp as "a jewel on the lakeshore that deserves their support." He adds that a successful shoreline restoration will have such a positive and lasting impact on Lake Ripley's natural beauty, habitat and water quality. To learn more about the Willerup Bible Camp and how to donate, visit their website at <http://willerupbiblecamp.org>.

Did you know?

Runoff can increase water in a stream by 500%, leading to increased flooding and erosion. Wetland restorations, shoreline and stream buffers, rain gardens, vegetative swales and pervious pavement can hold back runoff and filter it, resulting in reduced flooding and cleaner water entering our rivers and lakes.

A 300-square-foot rain garden infiltrates 12,000 gallons of water per year—enough to fill 2.5 tanker trucks.

A mature deciduous tree has the potential to intercept 500 to 700 gallons of water per year, while an evergreen can intercept more than 4,000 gallons.



—Root-Pike Watershed Initiative Network

Sustainable Landscaping

Saturday, May 18th
10:30 a.m.— 12:30 p.m.
Oakland Town Hall

John J. Gishnock III, owner of Formecology LLC, invites you to learn how to create a personal outdoor living space that is environmentally beneficial and tailored to your aesthetic style. Come discover the many benefits of innovative and sustainable landscape options that can be applied to any site. Then, explore a variety of design, installation and care techniques that maximize beauty, erosion control, clean air and water, human well-being, and habitat for desirable wildlife.



This seminar is free to those who register. **Register by May 15th and you will be entered into a prize drawing for a 32-count tray of native plants.** Call (608) 423-4537 or email ripley@oaklandtown.com. ♦



Project photos: Formecology LLC.

John J. Gishnock III is the owner of Formecology LLC, a Wisconsin-based landscape design, build and care firm. He is a landscape architect who works as an ecological designer, project manager, and tireless advocate for more sustainable approaches to landscaping.



John has worked on projects throughout the Midwest, including green roofs, commercial and residential landscapes, and the South Milwaukee High School native landscape (awarded the 2006 Conservation and Native Landscaping Award by the U.S. EPA and Chicago Wilderness consortium). His passion for ecologically-sensitive and regionally-appropriate landscaping is evidenced by his commitment to increasing public awareness, utilizing alternative stormwater management techniques, and the use of native plants in all types of settings.

Visitors to the Lake District Preserve are noticing a lot of changes, and more are coming! It is all made possible due to the professionals, school children and volunteers who are collaborating to make the community's vision for the Preserve come to life.

Guided by a 20-year plan, recent improvements include new educational signs that were added to the trail kiosks and at the entrance. The signs were designed and installed by our program assistant, Jeanne Scherer. In addition, wet sections of the trail were rerouted to higher ground, providing for easier hiking and a better overview of the new prairie plantings. Ty Rohloff of Awesome Landscaping maintains the trails and has been busy removing old tires and other debris found during past cleanup events.

Over this past winter, the wood duck nesting boxes were cleaned out and repaired, and plenty of evidence was found of successful hatches. This winter also saw the start of a major woodland restoration, with forestry mowing being used to clear undesirable trees and shrubs. This is just the beginning of a three-year project designed and supervised by Jay Settersten, president of SetterTech LLC, and carried out by Applied Ecological Services (AES). Trees larger than six inches in diameter were cut down or girdled, while smaller trees and shrubs were ground up by a forestry mower, or cut and treated with an herbicide.



From left: 1) A forestry mowing machine is used to grind up small trees and shrubs; 2) shattered stumps left behind by the forestry mower cannot resprout; and 3) evidence of new growth on a stump that was cut with a chainsaw and not treated with herbicide. Photos: SetterTech LLC.

Girdling is the process of cutting a gash completely around the trunk, severing the tree's vascular system. The girdled trees will soon die, but are left standing to become important bird and animal homes. Eventually, the tree will fall and break down with the help of insects and fungi until it is part of the forest soil. Among the trees targeted for girdling were elm, red maple, box elder, honeysuckle and buckthorn.



A girdled tree at the Preserve. Photo: Jeanne Scherer

The goal is to bring back the original, high-quality oak savannah that is protective of water quality. By opening some of the dense tree canopy, sunlight can reach the forest floor. This allows native groundcover plants to sprout from seeds that have remained dormant for decades, creating a living carpet that keeps soil from eroding and washing away. The amount of edible vegetation for birds and animals is expected to increase fivefold in the woodlot because of invasive plant removal!



A child walks down the woodland path on a carpet of ground up wood debris. Photo: Jeanne Scherer



Evidence of cavity nesting in a standing dead tree.

All the work done in the Preserve is intended to directly impact the quality of the stream that feeds Lake Ripley. "It is important to develop a stronger herbaceous vegetation layer to aid in the stabilization of soils," explains Settersten. "This does a tremendous job of preventing soil runoff, and therefore improves the water quality of Lake Ripley." He notes that woodlands heavily infested with invasive species can experience substantial soil loss on an annual basis, mostly due to the shading out of the herbaceous vegetation layer.

Dan Walker and Austin Brody of AES concur, adding that one of the goals of forestry mowing was to open the door to a better habitat, "and that door is definitely open now." They feel the 23-acre woodlot has a lot of potential to become a good savannah habitat as long as the work continues to keep the canopy open and woody invasive species at bay.

This summer, herbicide will be applied to re-sprouting honeysuckles and buckthorn. A controlled burn will then occur in 2014 or 2015. Like the open prairie, oak savannahs required burning to be maintained, so proscribed burns are an important piece of the management plan. Each step in the process is reliant on the success of previous steps. The initial work, according to Settersten, "is not going to be pretty as there is a lot of debris to deal with, and it will take time for the restoration to play out. This is followed by a maintenance phase, which will continue as long as invasive species continue to pressure our natural landscapes."

Continued >>

Other recent and upcoming activities include adding new bluebird houses to the trail, and extending the path so it loops through the east woodlot. The birdhouses are being donated by Board member Georgia Gomez-Ibanez and her Environmental Club students at Cambridge Elementary. They were built with help from Ron Martin of Midwest Prairies who provided the designs and donated the materials and shop services. Martin also maintains the wood duck boxes and leads our prescribed prairie burns.



Top: Ron Martin checks a wood duck nesting box (Photo: Jeanne Scherer). Bottom: Cambridge Elementary School students assemble bluebird houses (Photo: Carol Gunnelson).

The Friends of the Glacial Heritage Area (GHA), with the assistance of Dr. George Clokey and his UW-Whitewater biology students, are also volunteering their time to improve the Preserve. With coordination from Scherer and Gomez-Ibanez, this dedicated crew will be pulling garlic mustard and clearing a woodland trail on **Sunday, May 5th**. (Interested volunteers are invited to meet at the Preserve entrance at 9:00 a.m. Call Jeanne at 920-382-6123 for details.)

"The Friends of GHA is pleased to be a partner in the District's efforts to restore native habitat and help develop a woodland trail," said Friends' President and co-founder, Clare Carlson. She explains that the Glacial Heritage Area, centered in Jefferson County, is the network of our area's conservation parks, preserves, wildlife areas, river and lake corridors, and linking trails. "Our mission is to improve these properties through habitat restoration to bring back native species and healthy waterways," says Carlson. "Through this work, we not only greatly improve the land for wildlife, but we also greatly improve the recreational experience to those who visit our area. Visitors who wish to hike, nature-watch, paddle the lake, or fish will find a pristine home for birds and critters, native plants, and improved water quality. A win for all!"

Did you know?

Bluebirds and tree swallows compete for the same nesting sites, but not the same food. Bluebirds eat insects near the ground, while swallows snap them out of the air. Swallows will not nest within 25 feet of each other, but they don't mind bluebirds being that close. By pairing and then widely spacing birdhouses, both bird species can be given nesting sites without the risk of direct competition.

Did you know?

In 1993, Lake Ripley's inlet stream was found to be heavily impacted by fertilizer runoff and ditch erosion. Water quality monitoring described the stream as depleted of oxygen, "septic" in appearance, and covered in algal slime from high phosphorus and sediment loading. This prompted the Lake District to launch a 13-year, grant-funded "Priority Watershed Project" to assist willing landowners in correcting erosion and pollution problems. It also led to the acquisition and restoration of the Lake District Preserve. Starting this year, and with funding support from UW-Extension, the inlet will be re-tested to evaluate progress made over the last 20 years.

Did you know?

Historically, one of the most essential functions of prairies and native plantings has been erosion control. While erosion is a natural process, human activity—primarily unsustainable agricultural practices—has dangerously accelerated the process.



The Dust Bowl is a dramatic example of the drastic consequences of erosion. The Dust Bowl, a series of dust storms occurring from 1930-1940 in the Great Plains, was one of the worst ecological disasters in modern history. Beginning in the 1920s, farmers began to employ mechanized deep plowing which displaced the natural deep-rooted grasses that normally kept the soil in place and stored moisture even during times of drought. In addition, the farmers removed trees which allowed the wind to race across the land, gathering speed.

Removing the soil's natural anchor combined with the drought caused nearly one-third of the Great Plains' top soil to blow away, or erode, during that period. Erosion can also occur due to water. This is why anchoring river and stream banks is so important. River and stream bank erosion can lead to loss of productive land, stream bank instability, damage to downstream property, high sediment loads, reduction in water quality, loss of native aquatic habitats, and damage to roads, bridges and dams.

The most effective method to prevent erosion is to increase vegetative cover on land, which helps prevent both wind and water erosion. Due to their deep root systems, native grasses are the best choice for erosion control. Their roots firmly anchor the soil and have the advantage of being fully adapted to the local climate, thus requiring little maintenance to thrive. In addition, using natives helps control the invasion of non-native, highly opportunistic grasses that spread quickly and reduce biodiversity.

-Tallgrass Restoration LLC (Winter 2013 Newsletter)