

Notes from the Field

Vol. 7, No. 1 / Winter 2021

Photo: Tyler Pellegrini



To show how large this white oak tree is Laura Helmich gave it a big hug. Can you guess how old it is? * See the red arrow on the aerial for location of this tree.

*See page 5



Photo: Laura Helmich

Cut-leaved toothwort (*Cardamine concatenta*), with a white bloom, carpets the forest floor at Keefer Nature Reserve in the spring.

William & Gayle Keefer Nature Reserve

by Laura Helmich, NLI's Stewardship Technician

This winter we started the work of restoring the **William & Gayle Keefer Nature Reserve**. Donated to NLI by Gayle Keefer in 2017 and located on the edge of the Village of Rockton, the Keefer Nature Reserve is 37 acres of diverse landscapes and habitats. From Old River Road you can see a steep bluff that is home to numerous oak trees and in the spring is covered by cut-leaved toothwort (*Cardamine concatenta*). Hidden farther back into

the property are three old limestone quarries. All of this is surrounded by dense woodland that is nearly impossible to walk through.

As with most woodlands in the Midwest, the woods on the Keefer Reserve are full of invasive shrubs. Buckthorn and honeysuckle are both native to Europe and Asia and are the two major invasive species issues on this property. Right now the work we are doing at Keefer Reserve centers on removing these

two species. We started by using a forestry mower to clear brush and small trees along the property boundary. This makes it much easier to access many parts of the property that were previously nearly impossible to get to. Now, with the

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Keefer Nature Reserve *continued*

help of volunteers, we are cutting the invasive shrubs with hand tools and carefully treating the stumps to prevent them from re-sprouting.

The work of clearing invasive species is just the beginning. Eventually we plan to restore parts of the site to prairie and oak savanna and some areas will be left as woodland.

We use several methods to determine what habitat types to restore and where those habitats should be. Resources we use include public land survey notes from the 1830s and historic aerial photography. As you can see in the 1939 aerial, the property was not always a solid woodland. Parts of the property were once open and covered in grass, parts had scattered large oak trees, while other areas were forested. We don't rely solely on this information because early settlers could have changed this ecosystem prior to 1939. We also look at soils maps and we take a close look at the vegetation on the site. These resources confirm what the 1939 photo tells us: that prairie existed in the southern portions of the property and woodlands were found primarily on the slopes.

Currently, we have one monthly volunteer stewardship day at Keefer Reserve on fourth Fridays, 9:00 a.m. – 1:00 p.m. We are planning to increase the number of volunteer service days later in the year during weekday evenings. Follow the Keefer Nature Reserve on Facebook for more information and updates on volunteer days.



Photo: Zach Grycan

Chinquapin oak (*Quercus muehlenbergii*) at Keefer Nature Reserve.

Discover the Chinquapin Oak

by Zach Grycan, NLI's Director of Stewardship

Individual trees have been given names, have become symbols. We call our organized understanding of all living organisms to have ever lived on Earth the “tree of life.” Particular trees have meaning to people in so many ways. When I gaze upon them I wonder *what have they witnessed?* In northern Illinois there are few trees as remarkable as our oaks. Walking through any park or nature preserve you might easily run across three or four different species of them.

At the Keefer Nature Reserve you will find five species including the lesser known and locally uncommon chinquapin oak (*Quercus muehlenbergii*). The chinquapin, also spelled chinkapin, is a species that often lives where limestone is close to the soil surface. The trees prefer moist yet well-drained soil which seems a bit of a conundrum, but one thing to keep in mind about nature is that

where opposing forces meet, where conundrums coalesce, interesting things happen — intrigue abounds!

Chinquapin oaks can grow as tall as 80 to 100 feet and spread to an almost equal width in the right growing conditions. One of largest chinquapins in the state has a trunk that measures just over 56 inches in diameter! As mature trees they prefer lots of sunlight, but as seedlings they will tolerate some shade. This is perhaps why these trees have survived and successfully reproduced where shade is overabundant, cast to the ground by an overgrowth of trees and brush that historically would have been suppressed through natural disturbances like fire and grazing. Our hope is in restoring the Keefer Nature Reserve we will nurture this population and allow them to thrive as so many other organisms rely upon them for their very survival, and yes, inspiration — and wonder.

2021 is Shaping Up to Be a Great Year for NLI's Keefer Nature Reserve

by Tyler Pellegrini, NLI Restoration Ecologist

Photo: Tyler Pellegrini

In 2020, NLI was awarded a grant from the Illinois Clean Energy Community Foundation (ICECF) for \$32,000 for habitat restoration at our William & Gayle Keefer Nature Reserve! When Gayle Keefer donated the land in 2017 she also gave NLI a substantial Endowment gift to manage this natural area. The *Community Stewardship Challenge Grant* will supplement the annual distribution from Gayle's gift by providing us with fuel to run our forestry mower and saws to clear the invasive brush, supplies to fully eliminate the brush and any other invasive species we encounter, native seed to plant once the invasives are under control, funds for an initial bird and insect survey to help us determine what wildlife call the Keefer Nature Reserve home, and even some funds to help us purchase a bat-wing mower which will drastically reduce the amount of time it takes us to mow down the aggressive non-native plants and encourage native plant growth.

We need *your help* to receive these



The right side of this photo illustrates how a forest should look, whereas the left side shows an area of invasive honeysuckle that hasn't been removed yet at Keefer Nature Reserve.



Lee Bach, Bob Ramirez and Loren Schafer helped clear brush and make a trail last summer at the Keefer Reserve.

grant funds. The two biggest ways you can help NLI restore the Keefer Nature Reserve are to volunteer and to donate. For one portion of the grant, we need 400 total volunteer stewardship hours to unlock those funds. The biggest financial impact though, will come from your donations. As a part of the award ICECF matches donations to the Keefer Reserve at a three to one rate, up to \$21,000 total. That means if you collectively donate \$7,000, the grant will provide our Keefer Reserve project with the \$21,000 match! This is a huge opportunity for NLI and our community to improve and restore a beautiful piece of land for us all to enjoy!

Regardless of whether you are able

to donate or volunteer, NLI's Keefer Nature Reserve will be open to the public for *everyone* to enjoy later this year. As our restoration activities progress this year and beyond, new interior hiking trails to view the rare chinquapin oak habitat, oak savanna restoration, and prairie restoration will be available to explore. Part of our plan for this natural area is also to connect our trails with the Village of Rockton's paved Woodlands Park Disc-Golf course trails to the south of the Keefer Reserve. NLI is excited for this collaboration because it will enable even greater public access and enjoyment of our wonderful protected spaces. We look forward to seeing you at the William & Gayle Keefer Nature Reserve in Rockton in 2021!

Land Stewardship Community Service Days Schedule

Call or email staff or the site steward for more information and to confirm participation. Work for as long as your schedule allows or for the whole time listed. Wear sturdy boots and dress for the weather in layers.

Location	Schedule	Staff/Site Steward
Burr Oak Valley Preserve	First Saturdays, 9:00 a.m. — 1:00 p.m. Every Thursday, 9:00 a.m. — Noon	Staff: Tyler Pellegrini 815/970-5012 tpellegrini@naturalland.org Site Steward: Position Open
Howard D. Colman Dells Nature Preserve	Every other Friday starting Feb. 12 9:00 a.m — 3:00 p.m. Ask to be added to email/text updates.	Site Steward: Chris Reisetter reisetterc@gmail.com 815/985-7208
Silver Creek Woods Preserve	Third Saturdays, 9:00 a.m. — 1:00 p.m. 815/520-6916	Site Steward: Dion Faith, DocFaith68@yahoo.com
Nygren Wetland Preserve	Every Wednesday, 9:00 a.m. — 3:00 p.m. <i>Suspended through Spring</i>	Staff: Tyler Pellegrini Site Steward: Position Open
William & Gayle Keefer Nature Reserve	Fourth Fridays, 9:00 a.m. — 1:00 p.m.	Staff: Laura Helmich 712/301-1208 lhelmich@naturalland.org Site Steward: Position Open

Our spring fundraising appeal will be to help us match the ICECF Community Stewardship Challenge Grant for the William & Gayle Keefer Nature Reserve.

If you would like to donate now please visit www.NaturalLand.org/donate and tell us it is for the Keefer Nature Reserve. You may also make a donation by calling 815/964-6666 or mail your donation check payable to Natural Land Institute, 320 S. Third St., Rockford, IL 61104.

Stewardship Wish List

- √ Snow Plow for ATV/UTV
- √ Tractor (100hp)
- √ Banquet Tables
- √ Large Event Tent
- √ Shop Tools: wrenches, vice, socket sets, etc.
- √ Plastic Arm Chairs

Study Finds Honeysuckle Leaves Impact Water Quality

Natural Land Institute has been fighting the growth of bush honeysuckle (*Lonicera maackii*) in the wooded areas of our preserves for many years. Bush honeysuckle (from Asia) doesn't have natural competitors here, and therefore, grows aggressively making it impossible for other plants and trees to reproduce wherever it grows. A healthy wildlife habitat needs a variety of native plants and animals. We know what it does to the land, but until a recently, we didn't know

Photo: NatureMuseum.org



The Illinois Wildlife Action Plan lists the tiny wood frog (*Lithobates sylvaticus*) as a Species in Greatest Need of Conservation.

about honeysuckle's impact on water.

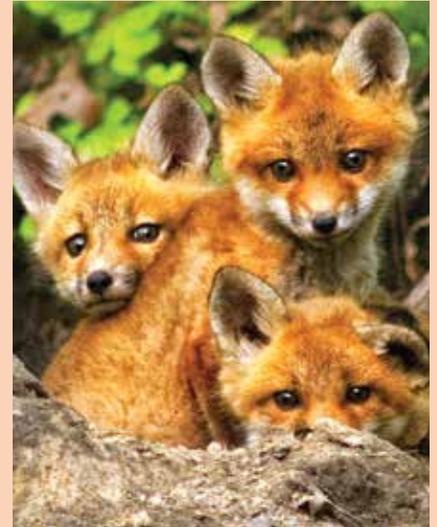
A study conducted by a team from Northern Kentucky University found that leaves from bush honeysuckle that fall into water produces an undesirable effect on the quality of the water, as well as harm to aquatic species, such as the wood frog. Read more about it here: <https://landairwater.me/2020/12/10/honeysuckle-water-quality/>

Photo: Landairwater.me



Honeysuckle growing along a creek bank.

Photo: David C. Olson



Red fox kits.

You Can Make a Big Impact on Habitat Protection

Use your donor advised funds to protect natural areas in northern Illinois.

Making a grant through your donor-advised funds is an easy and convenient way to make a difference for clean water, clean air, and a healthy environment.

For giving assistance, contact: Jill Kennay at 815/964-6666 or by email at jkennay@naturalland.org Phone: 815/964-6666

Call the NLI office at 815/964-6666 or email info@naturalland.org to request one or both of the following brochures be mailed to you.



They provide great tips on what to plant in your yard: *Healthy Hedges* and *Healthy Home Landscapes*.

*We estimate the white oak tree on the cover to be 250 years old.

Join or renew your membership.

You can play a part in protecting nature with your annual or monthly membership gift. Visit: www.naturalland.org/membership today.

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Upcoming Events

Join us for Virtual Book Discussions at 7:00 p.m. on Zoom.

Registration is required for these free programs. A Zoom link will be emailed to registrants the day before the book discussion. Visit the calendar at www.NaturalLand.org for more information and to register.

Tuesday, March 9

The Omnivore's Dilemma: A Natural History of Four Meals, led by **Laura Sjoquist**, member of NLI's Education Committee. This book takes a look at how our choices about food impact us and the natural world.

Tuesday, April 27

NATURAL VOICES: Celebrating Nature With Opened Eyes, led by **City of Rockford Poet Laureate Christine Swanberg**. Swanberg was the Editorial Consultant and is one of the authors featured in this nature themed poetry and prose anthology published by NLI in 2018. April is **National Poetry Month** and April 22 is **Earth Day**. What better way to celebrate both than by doing it together? This book is available in the NLI office for a \$12 donation, or for \$15 including shipping when you order on our website, www.NaturalLand.org/merchandise/.

