



LEAF Program - October 2018

# Wisconsin School Forest News

## ***Tools for School Forest Success***

The following tools have been created to help you track progress at the school forest. You can find these tools on the [LEAF School Forest Website](#).

**School Forest Use Tracking Tool**: use this worksheet to track the details of your school forest field trips. You can record the number of students, grade levels, lessons, and parent volunteers for each year. Use this data to complete the annual school forest survey in May.

**School Forest Field Trip Evaluation Form**: this form can be completed by the teacher(s) who participated in a field trip to the forest. It allows for each lesson to be evaluated and an assessment of the trip overall.

**School Forest Handbook**: the handbook contains great information about setting-up and sustaining your school forest program.

**Examples of WI School Forests** The websites, photos, and descriptions showcase school forests that exist in Wisconsin. Browse through here if you are looking for shelter, trail, teaching area, and sign ideas.



## ***Educational Resources***

**School Forest Science Lessons** Curriculum connections and lessons are available to support content in Biology, Chemistry, Physics, and Human Anatomy & Physiology. If you have lessons that you currently do with students at the school forests in these content areas, please submit them so that the online resource can continue to grow!

**LEAF Curriculum** is online in PDF form and can easily be downloaded at NO COST. We want you to use it!

**LEAF Supplemental Kits** are available for FREE check-out throughout the state. A series of different kits have been compiled to help you incorporate forestry education into your curriculum. The **K-8 Lesson Guide Kits** were created to supplement the K-1, 2-3, 4, 5-6, and 7-8th grade lesson guides. **Forest Health Kits** focus on learning about invasive species, disease, and insect collection. **Forestry Education Kits** contain equipment and materials for teaching tree measurement, identification, and orienteering. They also contain 10 GPS units. A **FOREST Products Kit** is coming soon!

**LEAF Tree Identification Tools** include a Winter Tree identification key, online dichotomous key, printable tree key, and full-color printable tree cards.

**Citizen Science projects** are an excellent way to incorporate scientific inquiry, math, language arts, real world research, and Next Gen Science Standards. Check out the diverse list of opportunities on the **School Forest Environmental Monitoring** webpage. All of these projects are relevant for K-12 students (however some are more appropriate at specific grade levels). There is something of interest for everyone!

**Wisconsin Worm Watch**: Survey your school forest for the impacts of invasive earth worms. Did you know all earthworms are invasive in the forest? The data collected through the **Wisconsin Worm Watch survey** is very valuable to Forest Health Specialists in the WDNR. Information provided in the surveys helps them understand the distribution of invasive earthworms across Wisconsin and their impact on local forests. In this lesson, students will use language arts, science, critical thinking, and math skills to participate in a citizen science project and determine if invasive earthworms are present in a forest.

**LEAF Videos** **LEAF videos** provide an overview of forestry education. Videos include: What Is a Forest?, Why Are Forests Important?, How do we Sustain Forests?, What is the Future?, Wisconsin's Forest Communities, and How are Forests Managed? These videos can be used to introduce forestry to students and in conjunction with LEAF or other forestry lessons. LEAF also has a tutorial video for **TREE MEASUREMENT** along with informational videos about **FOREST MANAGEMENT** and **FOREST PRODUCTS**.

## Grants!

### Environmental Education in Wisconsin Grant Portal



There are numerous grants available to help fund education and improvements at your forests. Hurry! Some good ones are due in November. The grants section of [eeinwisconsin.org](http://eeinwisconsin.org) is organized by the month in which the grant is due.



### Go Outside Fund

The Go Outside Fund (aka GO Fund) provides funding that helps connect students and teachers with outdoor, nature-based learning experiences. Teachers or partner organizations may apply for funding to purchase field supplies, or pay for field trip transportation, substitute teachers, or educator costs. Grants up to \$500 are available. All information can be found at: <http://www.wisconservation.org/grants/go-outside-fund>. There are multiple grant opportunities throughout the year. Submit all materials to Caitlin Williamson by **September 30<sup>th</sup>, December 31st, March 31st, or June 30th**. Applicants will be notified one month following the submission deadline.

## Smartphone Apps that may interest you...

[Merlin Bird ID](#): Instant bird identification help for 400 North American birds from the Cornell Lab of Ornithology

[Fifty Trees of the Midwest](#) from Purdue University Extension. Visit this news article to learn more about the app and how to purchase it.

[Great Lakes Early Detection Network \(GLEDN\)](#) The GLEDN app allows you to map and report invasive species infestations with your smartphone or tablet. Your reports will be added to EDDMapS, a national database of invasive species reports.

## Order Your Free Seedlings Now!

**DO YOU WANT TO RESTORE PART OF YOUR SCHOOL FOREST?** Now is the time to place your tree seedling orders through the DNR Nursery. You can order seedlings until April. That may seem like a long way off, but spring and Arbor Day will arrive before you know it. Now is the time to plan and order. Popular species of trees go fast. If you desire to plant a certain species, get your order in early. Once they are gone, they are gone!

Available seedling types and descriptions can be found in the [Nursery Seedling Catalog](#) and DNR's [tree and shrub inventory](#). The catalog does a great job explaining the growing requirements, providing pictures, and a distribution map of each species. You may already know which species you want to plant, but if not, be sure to do your research first. Our school forests are very diverse. Consult your management plan and DNR forester to find out which species of trees are most suitable for your property.

**Follow these steps to place your seedling order:** Once you have decided which species to plant at your school forest, fill out either the [online form](#) or the paper [form](#). You will see the section "Free Order"...choose registered school forest. One other thing to note: school forests do not need to order the "bulk" amount of trees. You may order less than the "minimum requirements" listed; however, there is a maximum number of trees school forests can receive. The maximum is 5,000 trees and 3,000 shrubs. If you have any questions, please contact the Griffith State Nursery at 715-424-3700 or your local [WDNR forester](#).



**Welcome Steve Schmidt!** Steve is working part-time with the LEAF Program to assist with school forest needs. He will be working on various school forest projects and may be in contact with you regarding some of those. Steve isn't new to the school forest world. He has coordinated the school forest program at the Rudolph Environmental Center (Newman Catholic's school forest) for many years and previously taught high school Science.

## Updating the School Forest Database

Steve has been busy verifying and updating the school forest database to make sure information regarding your forest property is accurate in the system. Please let us know if you have sold, acquired, or made changes to your school forest property. Also let us know if you have updated a forest management plan, have had a recent timber harvest, or have a new contact for your school district's forest. All of this information is extremely helpful in maintaining accuracy of the program and helps us answer questions on a daily basis. If you have any changes, contact LEAF staff member Steve Schmidt at [Steve.Schmidt@uwsp.edu](mailto:Steve.Schmidt@uwsp.edu).

## Invasive Species Monitoring and Information



The WI First Detector Network (WIFDN) is a program run through UW Extension that looks to identify the distribution of invasive species in our state. WIFDN provides access to expert resources on invasive species in Wisconsin and allows student participation in authentic research through citizen science. WIFDN resources provide information regarding invasive species identification, biology and ecology, mapping, and monitoring using a free smartphone/tablet app. If you are interested in helping monitor invasive species in your forest, please contact WIFDN's Coordinator Anne Pearce at ([anne.pearce@wisc.edu](mailto:anne.pearce@wisc.edu), 608-262-9570). To learn more about WIFDN, visit the website: <http://fyi.uwex.edu/wifdn/>. Sign up for the WIFDN Update. Each month you'll receive timely invasive species information and resources (they have videos too!) for classroom use.

## School Forest Site Visits



Please let me know if and when you have student field trips or if you are harvesting timber from the forest. This allows me to observe the diversity of our school forest programs and student learning opportunities. In turn, I share this information with other educators that have questions or are looking for ideas. You are a wonderful network of school forest educators and I appreciate the ability to share how you operate your forests with others.

## Green & Healthy Schools Wisconsin

Schools across Wisconsin are demonstrating their commitment to a more sustainable Earth, stronger communities and healthier, more productive learning environments for students by choosing to become [Green & Healthy Schools](#). If you are not a Green & Healthy School, [apply now](#)! There are nine focus areas of this program and school forests are located within the [School Site](#) section. If you have answers to the following questions, you will be able to complete this section....

- \* Describe how your school encourages educational use of the school grounds, school forests, and outdoor teaching sites. (Examples: field trips, education plans, etc.)
- \* Describe professional development offered to staff regarding use of school grounds school forest, and/or outdoor teaching sites. (Examples: In-services, LEAF courses, PLT courses, etc)
- \* Describe additional progress your school has made to encourage educational use of the school grounds, school forests, and outdoor teaching sites.



## School forests and Forestry education on TV

Tune into the TV show *Into the Outdoors* on October 20th for the latest program that features Wisconsin's forests and a few of our school forests as well! LEAF partnered with *Into the Outdoors* to help provide additional audio visual resources for your classroom. Their educational website offers free videos and companion lessons. It will take a bit to fully get all of the classroom materials complete for the new show airing in October, but previous shows regarding [Forest Ecology](#) and [Sustainable Forestry](#) are already online.

## Contact me with any school forest related questions!

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LEAF - Wisconsin's K-12 Forestry Education Program  
College of Natural Resources  
**University of Wisconsin - Stevens Point**

## **Upcoming LEAF Workshops** – *substitute stipends may be available*

More information and registration for each can be found on [LEAF's Professional Development calendar](#). Start planning now so you don't miss these opportunities coming up late fall, winter, and next spring!

*All workshops include time for collaboration and lesson planning, and a variety of ready-to-use activities will be supplied so teachers can implement outdoor learning right away.*



**Step Outside and Into Engagement: Outdoor Classroom Leadership:** Harness the benefits of the most interactive instruction possible: learning on school grounds, outside the four walls of the classroom. Conducting class outside offers many academic, social and emotional benefits for students. Studies link outdoor learning to improvement in attitudes toward school, increased student achievement, higher attendance, increased social development, and physical health benefits. Learning outdoors is even linked to a reduction of ADHD and ADD symptoms among some students. This workshop is designed to provide K-12 teachers with training in conducting class outside on any type of school grounds in order to engage and inspire students in learning. Guidelines, rules, safety considerations, resources and handouts will be provided so teachers have everything they need to lead confidently. Classroom management practices that fit within existing PBIS models and are specific to the outdoors will be discussed.

\*October 24, 2018 : meeting at CESA 4 in West Salem from 8:30 AM to 3:30 PM. Cost: \$150.

**Developing Elementary Literacy Skills through Outdoor Learning:** Use the outdoors to engage students and inspire the reading and writing process. Taking classes outside on school grounds provides the opportunity for an immersive and inspired literacy experience. Activities provided are intended to be integrated into an existing balanced literacy model. Examples of activities include practicing use of sensory and figurative language, using observations for informational writing, word choice exercises, creating group poetry, and much more.

\*January 24, 2019: meeting at CESA 11 in Turtle Lake from 8:30 AM to 3:30 PM.

\*April 11, 2019: meeting at CESA 4 in West Salem from 8:30 AM to 3:30 PM. Cost: \$150.

**Addressing Middle and High School Disciplinary Literacy through Forestry Education:** This workshop is designed for the science, social studies or agriculture teacher who wants to gain practice with integrating disciplinary literacy skills into content area teaching and learning. Using examples provided from both outdoor and classroom-based forestry education activities, we will explore how to maximize CCSS-connected opportunities for reading, writing, speaking and listening within teachers' existing curriculum.

\*January 24, 2019 : meeting at CESA 11 in Turtle Lake from 8:30 AM to 3:30 PM.

\*March 5, 2019: meeting at CESA 4 in West Salem from 8:30 AM to 3:30 PM. Cost: \$150.

\*March 26, 2019: meeting at CESA 3 in Fennimore from 8:30 AM to 3:30 PM.

**Introduction to Forestry Education in the K-12 Classroom:** Teach students the importance of Wisconsin's forests to our ecological, economic, and social well-being. This introductory workshop will present principles, activities and techniques to integrate hands-on forestry education into the K-12 science, social studies, agriculture, mathematics, technology education, ELA, and general elementary classroom. Standards alignment, STEM connections, literacy, and a brief introduction to outdoor teaching will be discussed.

\*January 18 2019 : meeting at CESA 6 in Oshkosh from 8:30 AM to 3:30 PM. Cost: \$125

### ***Other Professional Development Opportunities***

The [Wisconsin Center for Environmental Education](#) has a host of professional development opportunities available this school year. Check out the [professional development calendar](#) to see each PD event listed in the month it will occur. Click on the PD link you are interested in to learn more and register. You will find all K-12 Energy Education Program (KEEP), Green and Healthy Schools, LEAF, and PLT professional development information and registration here.

## Project Learning Tree (PLT) Opportunities provided through LEAF.....



**Project Learning Tree Tremendous Science E-unit Training for K-2nd Grade Teachers:** Join us for the day and get hands-on practice using Project Learning Tree's new K-2 science curriculum unit, *Tremendous Science*. This new resource is everything you expect from PLT: engaging, student-centered activities that help teach students *how* - not what - to think about the environment and their place within it. This new curriculum is constructed around the Next Generation Science Standards, aligned with the Common Core and the C3 Framework, and organized in a 5E Instructional Model.

\*October 16, 2018 at Summit Environmental Elem. School in La Crosse from 10:00 to 3:00 PM Cost: \$40

\*October 17, 2018 at UW Milwaukee in Milwaukee from 10:00 to 3:00 PM Cost: \$40

\*October 18, 2018 at Lake View Elementary School in Madison from 10:00 to 3:00 PM Cost: \$40

**Project Learning Tree "Carbon & Climate" E-Unit Workshop for 6th-8th Grade Teachers:** Get hands-on practice using PLT's new 6th-8th grade science curriculum unit, *Carbon & Climate*. This new resource is engaging, with student-centered activities that help teach students *how* - not what - to think about the environment and their place within it. This new curriculum is constructed around the Next Generation Science Standards, and aligned with the Common Core.

\*October 24, 2018 : at UW Platteville in Platteville from 9:00 to 3:00 PM Cost: \$40

**Working Toward a "Three Dimensional" Approach to K-8 Science Learning:** The Next Generation Science Standards and Wisconsin Standards for Science encourage a multifaceted approach to teaching and learning. This more holistic view also mirrors many of the goals of environmental education, making the environment a great context for learning science. In this workshop, we will dissect lessons from Project Learning Tree's Environmental Education Activity Guide and look for the crosscutting concepts, disciplinary core ideas, and science practices they contain. We will then take the next step of connecting these lessons to your existing curriculum to help create well-rounded science units that are ready for the upcoming school year.

\*October 23, 2018 : meeting at CESA 3 in Fennimore from 8:30 AM to 3:30 PM

\*February 5, 2019 : meeting at CESA 4 in West Salem from 8:30 AM to 3:30 PM. Cost: \$150.

**Project Learning Tree Early Childhood Workshop:** Foster a sense of wonder in young children through Project Learning Tree's *Environmental Experiences for Early Childhood*. Designed for all early childhood educators, PLT's hands-on activities address different learning styles while integrating nature exploration, literature, art, music and movement into 30 learning experiences. This workshop will focus on using PLT activities to get young children outdoors.

\*October 25, 2018: meeting at Ice Age Visitor Center in Campbellsport from 4:30 PM to 7:30 PM Cost: \$10

\*October 30, 2018: meeting at Phillips Elementary School in Phillips from 4:00 PM to 6:30 PM Cost: \$35

\*November 17, 2018: meeting at Heckrodt Nature Center in Menasha from 11:00AM to 2:00 PM Cost: \$40

**Project Learning Tree "Energy in Ecosystems" E-unit Workshop for 3rd-5th Grade Teachers:** Join us for the day and get hands-on practice using Project Learning Tree's new 3rd-5th grade science curriculum unit, *Energy in Ecosystems*, as well as elementary energy education materials from the KEEP Program. Project Learning Tree's new resource is engaging with student-centered activities that help teach students *how* - not what - to think about the environment and their place within it. This new curriculum is constructed around the Next Generation Science Standards, aligned with the Common Core and the C3 Framework, and organized in a 5E Instructional Model.

\*November 6, 2018: meeting at UW Stevens Point in Stevens Point from 9:00 PM to 3:00 PM Cost: \$40

**Project Learning Tree "Climate Change and Our Forests" Workshop for Secondary Educators:** Perhaps more than any other current events issue, the topic of climate change challenges science teachers and students to accurately convey data, reveal assumptions, and engage critical-thinking skills. PLT resources can help educators meet these challenges, introducing and educating students to some of the complex issues involved in climate change. With these resources, as with all PLT materials, educators can help students learn how to think, not what to think, about the environment. PLT's Southeastern Forests and Climate Change is a rigorous, high school level guide that helps educators teach about climate change impacts on forest ecosystems, the role of forests in sequestering carbon, and strategies for reducing greenhouse gas emissions and adapting to changing climatic conditions. Participants will also receive PLT's new Carbon & Climate middle school curriculum, which contains outstanding NGSS-based lessons that can be adapted for the secondary level.

\*December 12, 2018: meeting at Schmeckle Reserve in Stevens Point from 12:00 PM to 4:00 PM Cost: \$40

More information and registration for each can be found on [LEAF's Professional Development calendar](#). Start planning now so you don't miss these opportunities coming up late fall, winter, and next spring!