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.

*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 earthworms. 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!

The 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 the eerwisc.org is organized by the month in which the grant is due.

School Forest Survey Highlights

“THANK YOU!” to all who completed the school forest survey at the end of the school year. We had 88 surveys submitted and you provided a great snapshot of how school forests are being used in WI. Please keep your eyes open for the next survey in May 2018. Here are a few highlights from the survey:

- The greatest school forest accomplishments identified by school forests include: an increased or maintained use of the school forest and facility development or improvement occurred at the forest.
- The most commonly listed goals for school forests in the next 1-3 years are: maintain current utilization levels or increasing use, develop or improve facilities and trails, and develop or implement curriculum at the school forest.
- A total of 9,334 community members used 72% of the school forests that responded.
- Sustainable forest management activities took place at 78% of the responding forests. The most frequently listed management activities were invasive species control, trail additions and improvements, and tree planting.
- All subjects were covered by a lesson at a school forest somewhere in the state! This includes core subjects, foreign language, and the arts. The most frequently covered subject areas at school forests are science, physical education, English/Language arts, and math.
- Greater than 65% of the school forests that responded were used by students in PreK-5th and 6th-8th grades and more than 70% of the school forests were used by students in 9th-12th grades.

You may see some similarities in the overall results with the answers you provided. Click on the hyperlink to see full results of the 2016-2017 School Forest Survey. Congrats to the Cedarburg Middle School and Lake View Elementary (Madison Metropolitan School District) School Forests, which were the lucky winners randomly chosen to receive an Acorn Naturalist gift certificate for completing the survey.

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.

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, 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.
**Upcoming LEAF Workshops and Courses**—substitute stipends available

Registration deadlines approaching!

More information and registration for each can be found on [LEAF's Professional Development calendar](http://goo.gl/Cqj7X0).

**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. The workshop will include time to apply new techniques to existing plans and share ideas with others, and a variety of ready-to-use activities will be supplied so teachers can integrate relevant lessons.

* November 8, 2017: meeting at CESA 4 in West Salem from 9:00 AM to 3:30 PM. Cost: $150.
* April 12, 2018: meeting at CESA 9 in Tomahawk from 8:30 AM to 3:30 PM. Cost $100.
* April 19, 2018: meeting at CESA 3 in Fennimore from 8:30 AM to 3:30 PM.

**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. The workshop will include time for collaboration and lesson planning, and a variety of ready-to-use activities will be supplied so teachers can integrate relevant lessons right away.

* November 15, 2017: meeting at CESA 9 in Tomahawk from 8:30 AM to 3:30 PM. Cost: $100.

**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. The workshop includes time to begin the process of infusing forestry activities into your existing curriculum, and a variety of ready-to-use activities will be supplied so teachers can integrate relevant lessons right away.

* December 6, 2017: meeting at CESA 1 in Pewaukee from 8:30 AM to 3:30 PM. Cost: $150

**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. The workshop will 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.

* March 15, 2018: meeting at CESA 4 in West Salem from 9:00 AM to 3:30 PM. Cost: $150.
* April 24, 2018: meeting at CESA 1 in Pewaukee from 8:30 AM to 3:30 PM. Cost: $150.

**Project Learning Tree (PLT) Opportunities**

**PLT: Creating a Safe and Healthy School Environment.** Attend this free Green & Healthy Schools workshop and receive training in Project Learning Tree’s GreenSchools curriculum. Find more details and register at [this link](http://goo.gl/Cqj7X0).

* November 29, 2017 at Miron Construction Co., Inc. in Neenah from 9:00 AM to 3:00 PM.

**PLT K-8 Workshop:** Project Learning Tree’s engaging interdisciplinary activities provide unique ways to bring more STEM concepts and critical thinking into your classroom. PLT activities share a foundation with NGSS, and are correlated with CCSS for math and literacy. More information about PLT’s K-8 curriculum can be found at [http://goo.gl/Cqi7X0](http://goo.gl/Cqi7X0).

* December 9, 2017 at Pringle Nature Center in Bristol from 12:30 to 4:30 PM Cost: $35

**Project Learning Tree Online Modules** are also available. Visit LEAF’s Professional Development Calendar to learn more.
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.

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.
- **River on the Web** is used by students, teachers, and citizen scientists to collect chemical and biological data from rivers, lakes and streams.
- **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.

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.

Wisconsin Youth Summit

If you’ve done **student led projects at your school forest**, please consider attending and presenting at the WI Green Schools Network (WGSN), **7th Annual Wisconsin Youth Summit (YS)**! The event will be held **Thursday, April 12, 2018** on the UW-Stevens Point campus with lodging at the Lions Camp in Rosholt. The YS is designed for both educators and students to learn! Students from around the state will present community projects that they have completed locally and take home new ideas for projects inspired by their peers’ stories through formal presentations or participation in a poster session. A keynote speaker as well as outdoor explorations will be a part of the YS. The number of attendees is limited, so please **use this form to hold your spots**. Specific attendee details, photo consents, and releases will be sent to you after completing this form and payment will be collected later. At this time, expected costs are estimated at: $20 per attendee, $35 for overnight, $10 for Friday optional activity.

Contact me with any school forest related questions!

**Gretchen Marshall**, Wisconsin School Forest Program Coordinator

800 Reserve St.- Rm 110 TNR, Stevens Point, WI 54481
Phone: 715-346-2633  Fax: 715-346-4698
E-mail: Gretchen.Marshall@uwsp.edu  Website: [www.leafprogram.org](http://www.leafprogram.org)