

# Wisconsin Center for Environmental Education



Created in 1990, the WCEE envisions an actively engaged, educated population who create and maintain sustainable human and natural communities.

Mission: Provide leadership and resources to advance education for sustainable human and natural communities.

Council On Forestry – March 22, 2022



Wisconsin Center for Environmental Education  
College of Natural Resources  
**University of Wisconsin - Stevens Point**





[www.leafprogram.org](http://www.leafprogram.org)

LEAF: Wisconsin's K-12 Forestry Education Program



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# LEAF: Wisconsin's K-12 Forestry Education Program

- **What does LEAF do?**
  - LEAF connects formal and non-formal educators in Wisconsin with quality forestry education materials
- **What is LEAF?**
  - Partnership between the WI DNR-Division of Forestry and the WCEE at UW-Stevens Point.
- **What is LEAF's Impact?**
  - 310,000+ Wisconsin students have been exposed to forestry education
  - A total of 426 school forests are registered throughout the state
  - Over 6,000 teachers have been trained to use LEAF materials

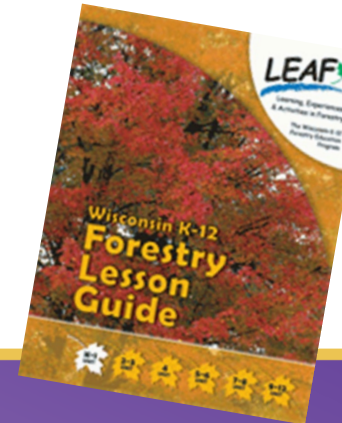


# LEAF: Wisconsin's K-12 Forestry Education Program

## ➤ What LEAF Offers

- **Professional Development for Educators**
  - School staff in-service trainings
  - Workshops
- **Curriculum Materials**
  - Free to download
  - Grade-specific curricula tied to educational standards
- **Hands-on forestry education kits**
  - Free to borrow from statewide locations
  - Contain real forestry tools and suggestions for connecting to curriculum
- **Support for Outdoor Classrooms**
  - School Forests
  - Project Learning Tree (PLT)

➤ Visit [www.leafprogram.org](http://www.leafprogram.org) for more info

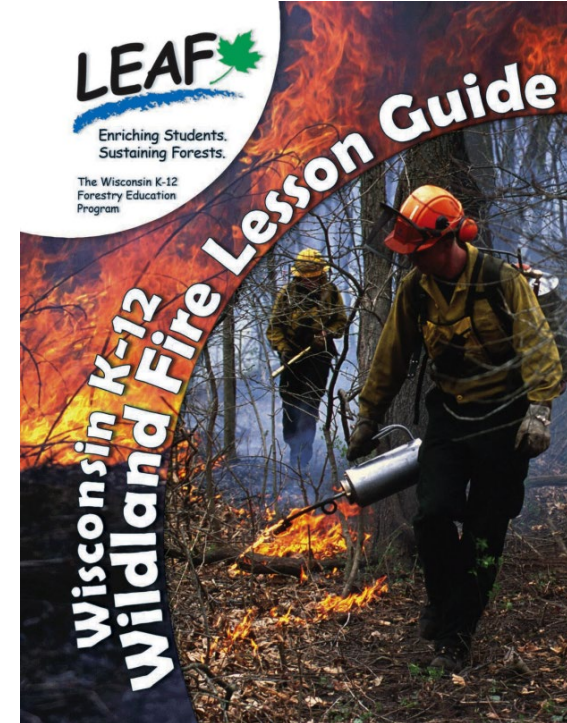
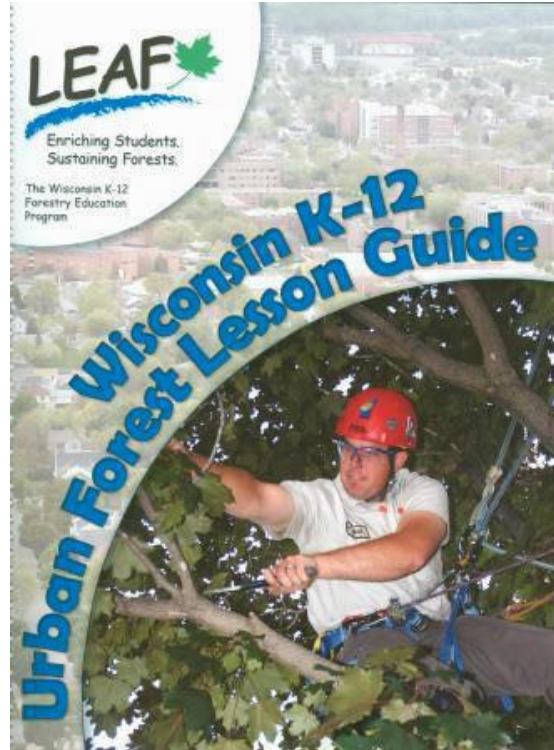
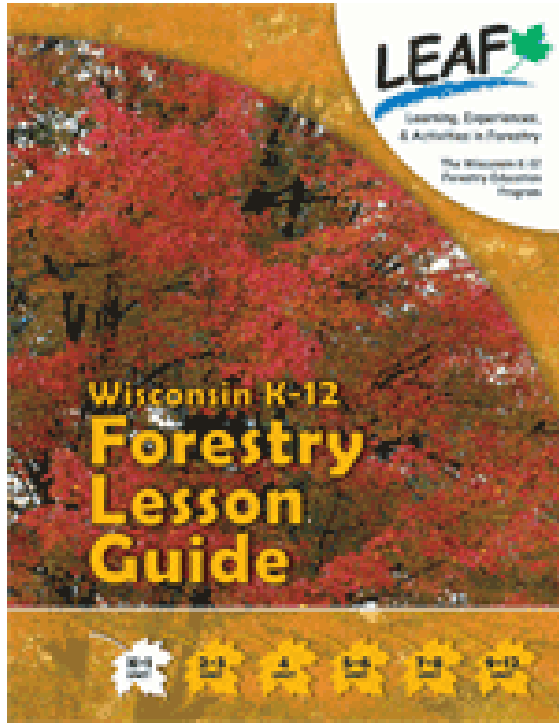


# Resources for educators to use...

Numerous resources and tools that support forestry education...







# LEAF Curriculum and Lessons

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# Trunks and Kits

- 29 Kits and Trunks Available
- Ready to go
- Most can ship (share shipping costs)



Forest Health Kit



Forestry Kit

*(11 kits each throughout the state)*



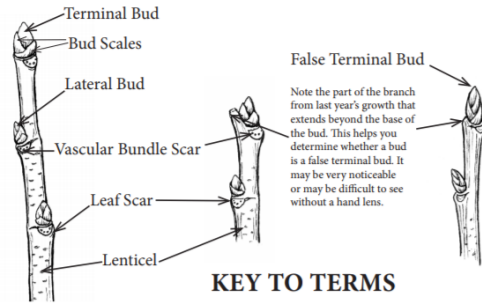
LEAF K-1 Lesson Guide Kit



Wildland Fire Kit



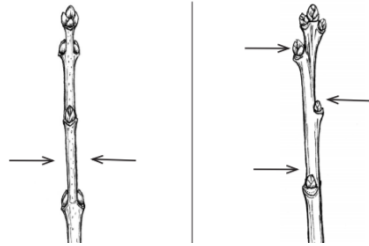
## WINTER TREE IDENTIFICATION KEY



KEY TO TERMS

1. Leaf scars opposite...Go to 2 OR 1. Leaf scars alternate...Go to 3

START HERE



## Dichotomous Tree Identification Key

A dichotomous key is a tool that can be used to identify trees.

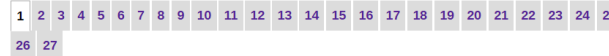
"Dichotomous" means "divided into two parts." Therefore, a dichotomous key will always give you two choices in each step and following all the steps will lead you to the name of the tree you're identifying.

How to use this key

1) Use the leaves from a tree or find a picture of a tree you want to identify and click on the most appropriate match to the right.

OR

2) Click one of the numbers below to identify one of our mystery trees. If you end up with two matching pictures you have identified the tree correctly.



Identify Here



[Tree has needles](#)  
Coniferous Trees



[Tree has broad leaves](#)  
Deciduous Trees



# Tree Identification







Forest is a catalyst and context for learning

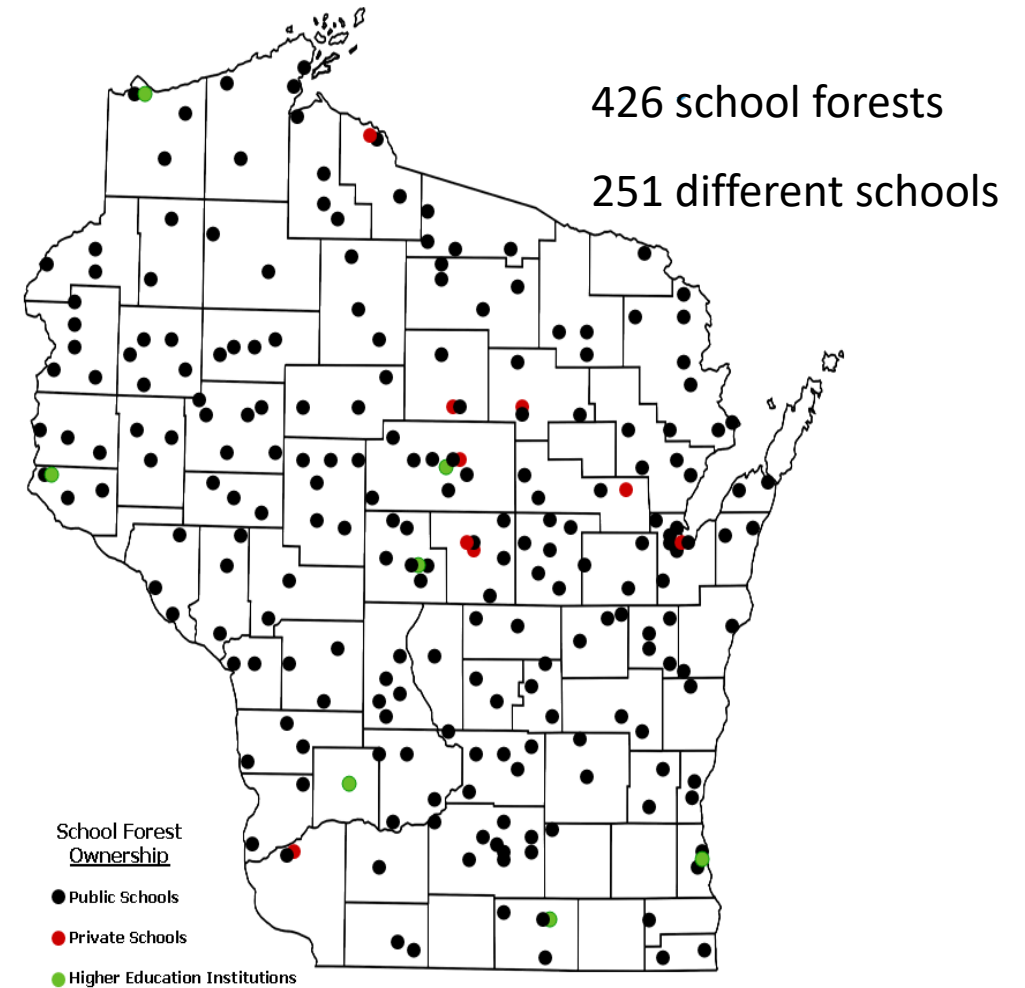
... for all ages and subjects



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# The WI School Forest Program



## A school forest is...

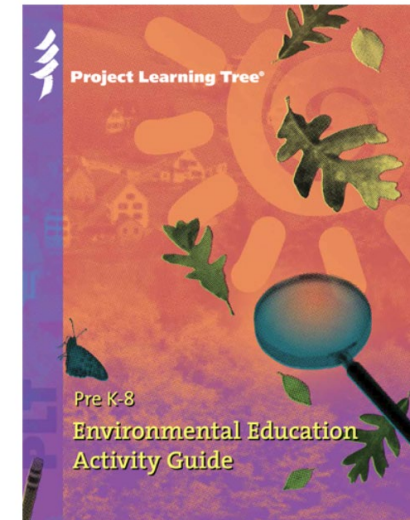
- land registered through state Community Forest Program *Wisconsin State Statute 28.20 Community forests.*
- owned or *controlled* by a school and used for environmental education and natural resource management





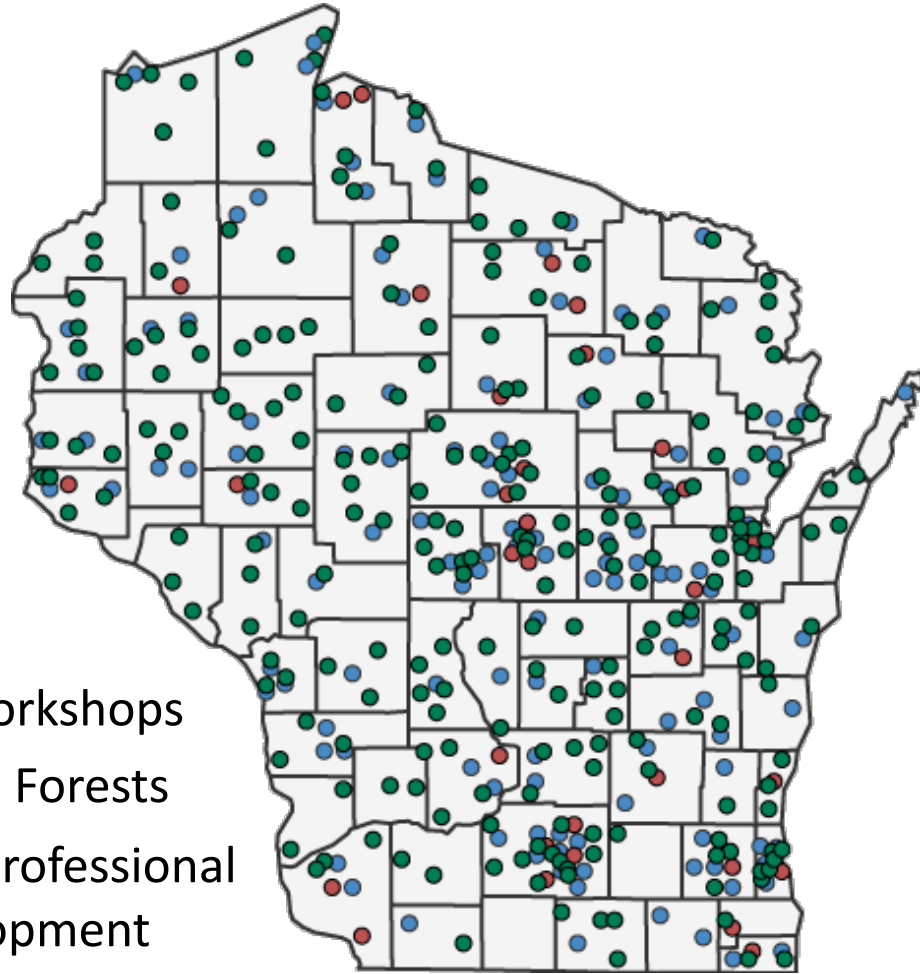
# Project Learning Tree (PLT)

PLT is a part of Sustainable Forestry Initiative Inc. (SFI)  
....LEAF coordinates the program for Wisconsin.



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# LEAF's Statewide Outreach



- **Communicate** by sharing resources, info, opportunities
- **Network** by connecting educators and forestry resources
- Provide **consultation** services for educators seeking answers to forestry questions
- Develop **partnerships** and relationships with educators and the forestry community





# Current Project Highlights...

## LEAF's HS Forestry Class Scope and Sequence with Lessons

LEAF's High School **FORESTRY** | SCOPE AND SEQUENCE  
Produced by LEAF for Teachers by Teachers

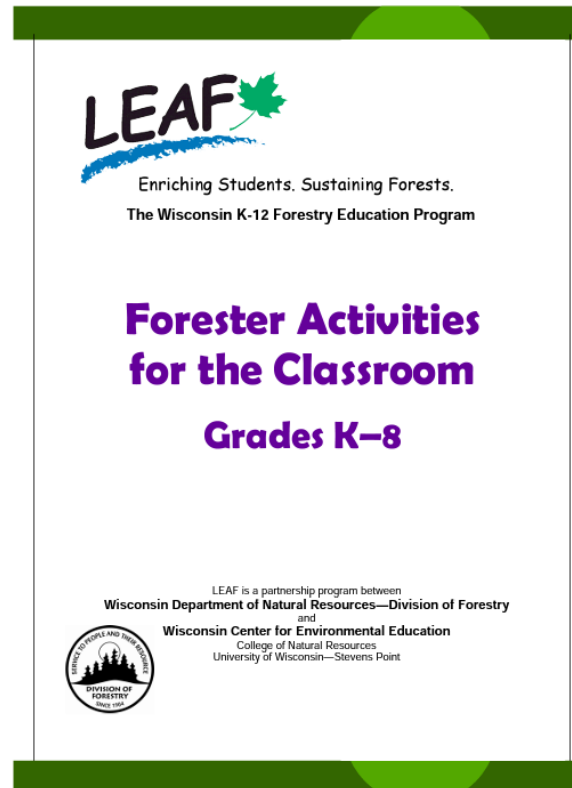
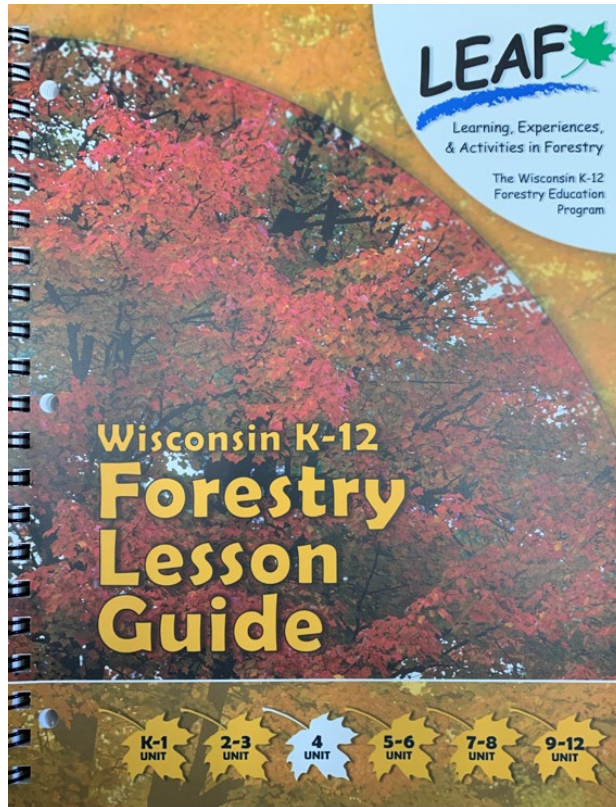
High School Forestry Scope and Sequence

UNIT 1	FOREST HISTORY & INTRODUCTION
UNIT 2	FOREST ECOLOGY
UNIT 3	TREE ID/DENDROLOGY
UNIT 4	FOREST HEALTH
UNIT 5	FOREST MEASUREMENT
UNIT 6	SILVICULTURE & FOREST MANAGEMENT
UNIT 7	FIRE
UNIT 8	FOREST PRODUCTS
UNIT 9	URBAN FORESTRY
UNIT 10	SAFETY

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# Current Project Highlights...



## Updating LEAF Curriculum

- Updated K/1, 2/3, 5/6, 7/8, 9-12 lesson guides
- 4<sup>th</sup> Grade – American Indian and teacher work groups
- Forester Lesson Guide





# Current Project Highlights...

## Wisconsin Forestry Workforce Development Initiative



- Partnership with Wisconsin Forestry Center (WFC)
- Establish a forestry career pathway program consisting of applied high school curriculums in forestry and immersive training programs.
- WEDC grant– WFC would appreciate letters of support from others in the forestry community
- Les Werner or Haley Frater



# Applied Forestry High School Curriculum

	Required Training Modules					
	Tree Identification	Forest Health	Forest Products	Forestry Equipment	Chainsaw Safety and Tree Felling*	Skills Camp**
<b>Content Areas</b>	General Tree Anatomy/Structure	General forest health	Types of forest products and services	Common equipment and their purpose	Chainsaw mechanics	Equipment operation
	Dichotomous key use	Invasive species identification and management/control	Primary and secondary wood products	General safety, inspection, and operation	Chainsaw maintenance	Tree felling
	Tree identification by: leaf, twig, and form	Forest diseases identification and management/control	Types of lumber		Chainsaw safety	Tree identification
	General silvics for common species	Forest pest identification and management/control	Wood identification		Directional Felling**	Forest health prescription writing
		Tree risk identification and mitigation	Log grading		Mechanical advantage**	Milling and drying
			Lumber grading			Log and lumber grading

\* Certificate bearing

\*\*Off-site training by program staff





# Key steps to move forward with HS Students:

## 1. Administration Approval

- State credential piece: If add as a new component of curriculum, need state credential
  - DWD industry-backed certificate
  - Transcribed credit

## 2. Equipment

## 3. Professional Development

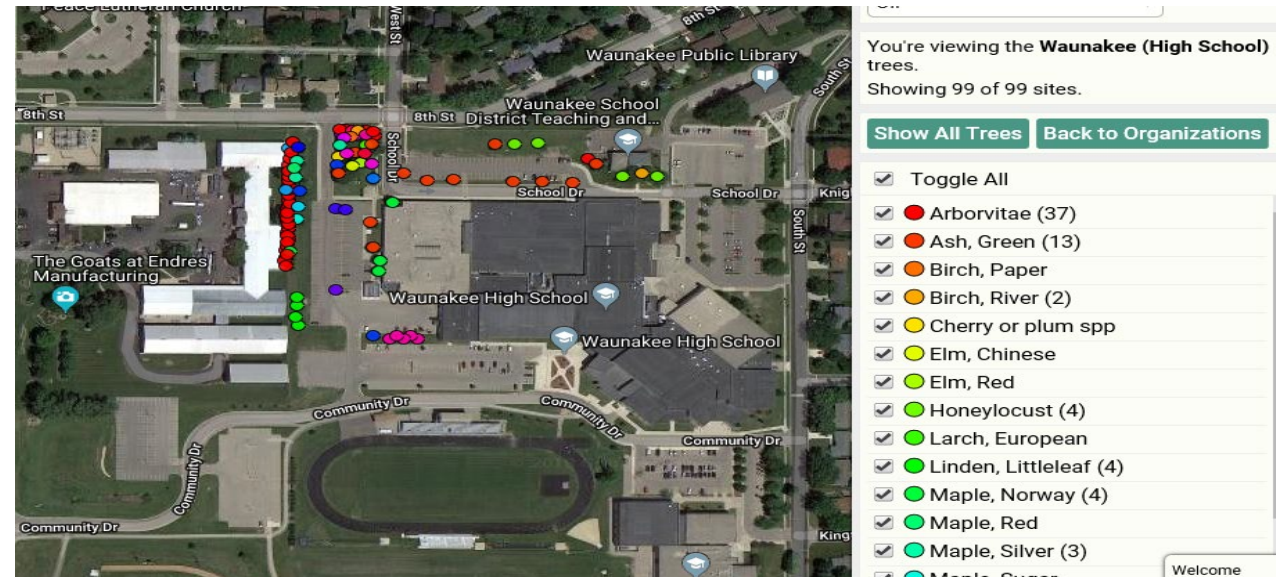




# Current Projects...



- Forest Products



- Urban Forestry –
- Community Tree Map





# Partners and Networking....

## Other projects that involve partners.....

- SAF Wheels to Woods grant/DEI initiative
- Natural Resources Foundation School Forest Field Trips
- WWOA articles
- School Forest Database updates
- FFA Forestry Career Development Event – statewide contest
- Forest Products and Urban Forestry
- Forest Exploration Center education support
- Forest History Association
- Wisconsin Society of Science Teachers
- Wisconsin Assoc. of Agriculture Educators





Questions?

[www.leafprogram.org](http://www.leafprogram.org)



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