LEAF

Learning, Experiences, & Activ

What is a dichotomou

A dichotomous key is one tool that can be used to identify t
flowers, animals, rocks, fish, and more! A dichotomous key
the user to the correct name of an item. "Dichotomous" mea
a dichotomous key will always give two choices in each ste

How to use this ke

1. Use leaves from a tree or find a picture of a tree you wan
appropriate match to the right.

or

2. Click one of the numbers below to identify one of our m
matching pictures you have identified the tree correctly.

or

3. Choose a tree from the species list below that you want t

Choose a tree to identify

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27

Do you know what kind of tree this pinecone is from?

Use this key to find out!
Choose number 7 from the list above.

Tree has needles -- **Coniferous Trees**
Example:

Tree has broad leaves -- **Deciduous Trees**
Example:

List of tree species in this key.

(this list is not an answer key
to the mystery trees above)

Common name	Scientific name
1. American Beech	*Fagus grandifolia*
2. Balsam Fir	*Abies balsamea*
3. Basswood	*Tilia americana*
4. Big Toothed Aspen	*Populus grandidentata*
5. Black Ash	*Fraxinus nigra*
6. Black Cherry	*Prunus serotina*
7. Black Spruce	*Picea mariana*
8. Black Walnut	*Juglans nigra*
9. Cottonwood	*Populus deltoides*
10. Eastern Hemlock	*Tsuga canadensis*
11. Jack Pine	*Pinus banksiana*
12. Northern White Cedar	*Thuja occidentalis* - *Picea abies*
13. Norway Spruce	*Acer rubrum*
14. Red Maple	*Quercus rubra*
15. Red Oak	*Pinus resinosa*
16. Red Pine	*Pinus sylvestris*
17. Scotch Pine	*Carya ovata*
18. Shagbark Hickory	*Acer saccharum*
19. Sugar Maple	*Larix laricina*
20. Tamarack	*Populus tremuloides*
21. Trembling Aspen	*Fraxinus americana*
	Betula papyrifera

22. White Ash	***Quercus alba***
23. White Birch	***Pinus strobus***
24. White Oak	***Picea glauca***
25. White Pine	***Betula alleghaniensis***
26. White Spruce	
27. Yellow Birch	

This Tree Identification Key was created for *Wisconsin Forestree-Bridging the Gap Between Environment and Economy*, Central Wisconsin Environmental Station, 2001 under a grant from the Wisconsin Department of Commerce. Modified and maintained by the LEAF Program with permission.

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For website related comments contact: leaf@uwsp.edu

So far you have chosen:

tree has needles

(click a choice above to go back to that part of the key)

Needles in bundles or groups

Example:

Needles single or flattened and scaly

Example of flattened, scaly needles:

So far you have chosen:

- **tree has needles**
- **needles in bundles or groups**

(click a choice above to go back to that part of the key)

Needles in clusters

Example:

You have a:
Tamarack
(Larix laricina)

Needles 2-5 per bundle

Example:

Tamarack *Larix laricina*

Learn more about the tarmarack in the
Silvics of North America

Identify a new tree

So far you have chosen:

- **tree has needles**
- **needles in bundles or groups**
- **needles 2-5 per bundle**

(click a choice above to go back to that part of the key)

Five needles per bundle

Example:

You have a:
White pine
(Pinus strobus)

Needles in pairs

Example:

White Pine *Pinus strobus*

Learn more about the white pine in the
Silvics of North America

Identify a new tree

So far you have chosen:

- **tree has needles**
- **needles in bundles or groups**
- **needles 2-5 per bundle**
- **needles in pairs**

(click a choice above to go back to that part of the key)

Needles 3-4 inches long

Example:

You have a:
Red Pine
(Pinus resinosa)

Needles under 2 inches

Red Pine *Pinus resinosa*

Learn more about the red pine in the Silvics of North America

Identify a new tree

So far you have chosen:

- **tree has needles**
- **needles in bundles or groups**
- **needles 2-5 per bundle**
- **needles in pairs**
- **needles under 2 inches long**

(click a choice above to go back to that part of the key)

Bark dark gray

Example:

You have a:
Jack Pine
(Pinus banksiana)

Bark orange-brown, cones 1-2.5 inches long

Example:

You have a:
Scotch Pine
(Pinus sylvestris)

So far you have chosen:

needles single or flattened and scaly

(click a choice above to go back to that part of the key)

Needles square, round or scaly

Example of round needles:

Needles flat

Example:

So far you have chosen:

- needles single or flattened and scaly
- needles square, round or scaly

(click a choice above to go back to that part of the key)

Needles scaly and flattened

Example:

You have a:
Northern White Cedar
(Thuja occidentalis)

Needles square or round

Example:

Northern White Cedar

Thuja occidentalis

Learn more about the northern white cedar in the Silvics of North America

Identify a new tree

So far you have chosen:

- **needles single or flattened and scaly**
- **needles square, round or scaly**
- **needles square or round**

(click a choice above to go back to that part of the key)

Needles 1/3-3/4 inch long, twig hairless

Example:

You have a:
White Spruce
(Picea glauca)

Needles 1/4-3/4 inch long, new twigs have hair, grows in wet areas

Example:

You have a:
Black Spruce
(Picea mariana)

Needles 1/4-3/4 inches long, droopy branches, cones 4-7 inches long

Example:

You have a:
Norway Spruce
(Picea abies)

White Spruce *Picea glauca*

Learn more about the white spruce in the Silvics of North America

Identify a new tree

Black Spruce *Picea mariana*

Learn more about the black spruce in the Silvics of North America

Identify a new tree

So far you have chosen:

tree has broad leaves

(click a choice above to go back to that part of the key)

Opposite branching

(side branches, leaves, and leaf scars grow from the stem directly across from each other)

Example:

Alternate branching

(side branches, leaves, and leaf scars do not grow directly across from each other)

Example:

So far you have chosen:

- tree has broad leaves
- opposite branching

(click a choice above to go back to that part of the key)

Compound leaves

(A single leaf with numerous leaflets. Leaflets are smaller parts of leaves that often resemble leaves themselves and join together along the leaf stem. A leaf actually begins where the woody twig ends.)

Example:

Simple leaves

(The leaf stem is the same as the main vein for that leaf.)

Example:

So far you have chosen:

- **tree has broad leaves**
- **opposite branching**
- **compound leaves**

(click a choice above to go back to that part of the key)

9-11 leaflets, leaflets do not have stems

Example:

You have a:
Black Ash
(Fraxinus nigra)

5-9 leaflets, leaflets have stems, smile-shaped leaf scar

Example:

You have a:
White Ash
(Fraxinus americana)

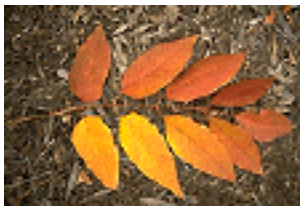
Compound leaf.
Opposite branching.

Black Ash *Fraxinus nigra*

Learn more about the black ash in the
Silvics of North America

Identify a new tree

Photo: Scott Biggs



Opposite branching
Compound leaves

Photo: Scott Biggs

White Ash *Fraxinus americana*

Learn more about the white ash in the
Silvics of North America

Identify a new tree

So far you have chosen:

- **tree has broad leaves**
- **opposite branching**
- **simple leaves**

(click a choice above to go back to that part of the key)

Leaf margins smooth, 5 lobes

Example:

You have a: Sugar Maple *(Acer saccharum)*

Leaf margins notched, 3-5 lobes

Example:

You have a: Red Maple *(Acer rubrum)*

** Photos:
Oregon State Univ.,
Dept. Horticulture

**

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** Opposite branching

Sugar Maple *Acer saccharum*

Learn more about the sugar maple in the
Silvics of North America

Identify a new tree

Photo: Dan Lineberger

Red Maple *Acer rubrum*

Learn more about red maple in the
Silvics of North America

Identify a new tree

** Photos:
Oregon State Univ.,
Dept. Horticulture

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American Beech
Fagus grandifolia

Learn more about the American beech in Silvics of North America

Identify a new tree

Balsam Fir ***Abies balsamea***

Learn more about the balsam fir in the Silvics of North America

Identify a new tree

Basswood *Tilia americana*

Learn more about the basswood in the Silvics of North America

Identify a new tree

Big Toothed Aspen
Populus grandidentata

Learn more about the big toothed aspen in
Silvics of North America

Identify a new tree

Black Cherry *Prunus serotina*

Learn more about the black cherry in the Silvics of North America

Identify a new tree

Photo: Dan Lineberger

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Photo: Oregon State Univ.,
Dept. Horticulture

Black Walnut *Juglans nigra*

Learn more about the black walnut in the Silvics of North America

Identify a new tree

Cottonwood *Populus deltoides*

Learn more about the cottonwood in the Silvics of North America

Identify a new tree

Eastern Hemlock

Tsuga canadensis

Learn more about the eastern hemlock in Silvics of North America

Identify a new tree

Jack Pine ***Pinus banksiana***

Learn more about the jack pine in the
Silvics of North America

Identify a new tree

Norway Spruce *Picea abies*

Identify a new tree

Red Oak *Quercus rubra*

Learn more about the red oak in the Silvics of North America

Identify a new tree

Scotch Pine *Pinus sylvestris*

Learn more about the scotch pine in the
Silvics of North America

Identify a new tree

Compound leaf.
Alternate branching.

Shagbark Hickory
Carya ovata

Learn more about the shagbark hickory in Silvics of North America

Identify a new tree

** Photos:
Oregon State Univ.,
Dept. Horticulture

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Trembling (Quaking) Aspen
Populus tremuloides

Learn more about trembling aspen in the
Silvics of North America

Identify a new tree

Photo:
Oregon State Univ.,
Dept. Horticulture

Photo: Oregon State Univ.,
Dept. Horticulture

White (Paper) Birch

Betula papyrifera

Learn more about white birch in the
Silvics of North America

Identify a new tree

White Oak *Quercus alba*

Learn more about the white oak in the
Silvics of North America

Identify a new tree

Alternate branching.

Bark can be papery.

Yellow Birch

Betula alleghaniensis

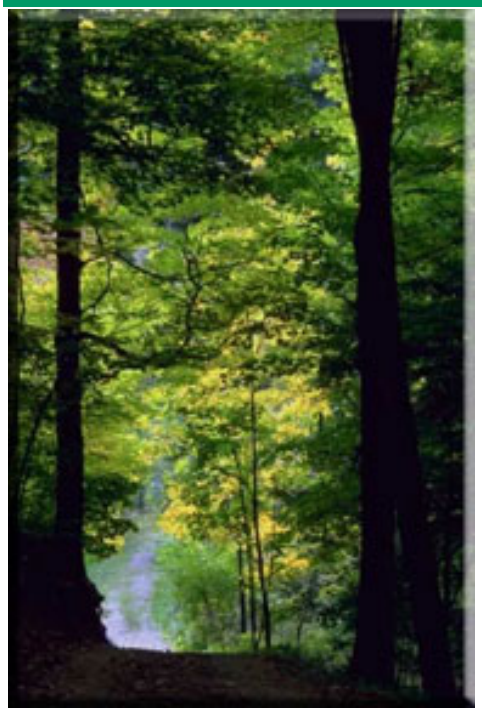
Learn more about the yellow birch in the Silvics of North America

Identify a new tree

LEAF

The Wisconsin K-12 Forestry Education Program

Learning, Experiences, & Activities in Forestry



About Us

LEAF connects formal and non-formal educators in Wisconsin with quality forestry education materials. This is done through:

- Professional development for educators
- The Wisconsin K-12 Forestry Lesson Guide
- Distribution of materials from the existing forestry education community
- School forest services and consulting

LEAF is a partnership program between:

- Wisconsin Center for Environmental Education in the College of Natural Resources at the University of Wisconsin-Stevens Point
- Wisconsin Department of Natural Resources-Division of Forestry

The LEAF Program operates under a set of guiding principles:

- Wisconsin's forests can be managed sustainably for economic, ecologic, and social benefits.
- By becoming informed and active participants in decision making processes, citizens can sustain forests.
- To develop informed and active citizens, forestry education should be infused in Wisconsin's K-12 schools.

What's New?	
	LEAF is hiring! **See the Position Announcement (PDF) and Position Description (PDF) for information.** **Spring workshop dates and locations** **LEAFlet - December 06 electronic newsletter General** **LEAFlet - December 06 electronic newsletter School Forest**

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