



Arbor Day Foundation™

What Tree Is That?

*A guide to the more common trees
found in North America*

arborday.org

WORDS TO KNOW

ALTERNATE — leaves that are staggered, not placed directly across from each other on the twig.

BLADE — the flat part of a leaf or leaflet, characteristic of broadleaf trees.

BRACT — a modified leaf that bears a flower.

BROADLEAF — a tree with leaves that are flat and thin, and generally shed annually.

BUD SCAR — the marks remaining after bud scales drop in spring.

COMPOUND LEAF — a leaf with more than one blade. All blades are attached to a single leafstem. Where the leafstem attaches to the twig there is a bud.

CONIFER — a cone-bearing tree.

DECIDUOUS — shedding all leaves annually.

DRUPE — a fruit with an outer skin, a succulent middle part, and a hard inner shell enclosing a single seed.

ENTIRE — a leaf margin with smooth, untoothed edges.

EVERGREEN — trees with needles or leaves that remain alive and on the tree through the winter and into the next growing season.

INVASIVE — plant known to reproduce rapidly and quickly spread over a large area.

LEAF SCAR — the mark left on the twig where the leaf was previously attached.

LOBES — projections that shape a leaf.

MARGIN — the edge of a leaf.

MIDRIB — the primary rib or central vein of a leaf.

OPPOSITE — 2 leaves that are directly across from each other on the same twig.

PALMATE — blades or lobes or veins of the leaf arranged like fingers on the palm of a hand.

PERSISTENT — remains on the tree for more than one year.

PETIOLE — the leafstalk that connects the blade(s) to the twig.

PINNATE — blades or lobes or veins of the leaf arranged like the vanes of a feather.

SAMARA — winged fruit.

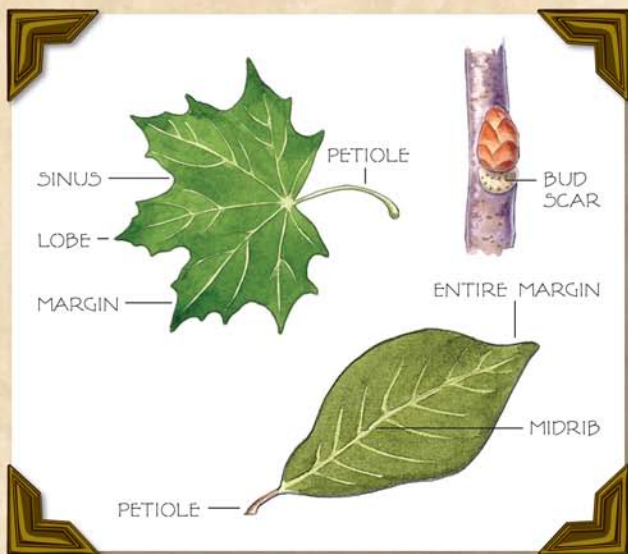


SIMPLE LEAF — a single leaf blade with a bud at the base of the leafstem.

SINUS — indentation between lobes on a leaf.

SPURS — stubby, often sharp twigs.

TEETH — notches on the outer edge of a leaf.





DEAR FRIEND:

Trees shade and cool our homes, bring songbirds close by, and mark the changing seasons. Children can climb them or build a tree house in their branches. For all of us trees are a source of lumber, food, and countless products—and they beautify our communities and the countryside.

But equally important, trees keep our water clean, reduce soil erosion, clean the air we breathe, and fight global warming.

If trees are to provide all these benefits, we need to care for the trees we have and plant more. Planting and caring for trees is something each of us can do to improve our community and help the environment.

If we are to have trees in abundance, it is important to be able to identify them so we will know how to care for them and plant the right trees in the right place.

And it's just plain fun to be able to identify trees, either those in your neighborhood or on a trip far from home.

To help you learn to identify trees, the Arbor Day Foundation has prepared this key for your use.

I hope you will use this guide regularly to help you appreciate trees—one of nature's great wonders.



Best regards,

John Rosenow
Chief Executive



Arbor Day Foundation™

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First printing 2009

Printed in Canada

LIBRARY OF CONGRESS CATALOGING-IN-
PUBLICATION DATA

ISBN: 978-0-9634657-5-7

What Tree Is That?

Category 1: Nature Category 2: Garden

LCCN: #2008939816



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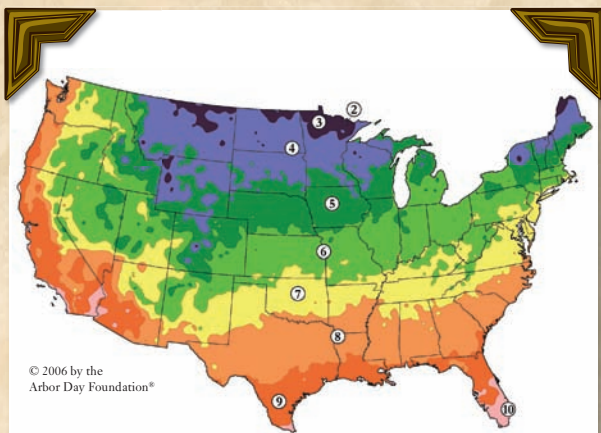
HOW TO USE THIS BOOK

This book is intended to be used as a field guide to assist you in identifying trees by their leaves. In some cases, fruiting bodies, seeds, bark or other parts are helpful in making an identification.

1. Examine several leaves or needles from the same tree. Choose typical ones to identify. Avoid choosing oddities or rarities. Also observe fruiting bodies, flowers, seeds, and bark.
2. Beginning on page 6 with Box 6A, there is a series of questions about the leaves and other tree parts. Each answer leads to another question until the identity of the tree is discovered.

Each featured tree is listed alphabetically in the index, pages 142–148, for quick reference. The words printed in CAPITAL LETTERS are defined in context when they first appear and in alphabetical order in the Glossary on the inside flap.

ARBOR DAY HARDINESS ZONES



Go to arborday.org
to find the zone for your zip code.

Zone	Avg. Annual Low
2	-40°F through -50°F
3	-30°F through -40°F
4	-20°F through -30°F
5	-10°F through -20°F
6	0°F through -10°F
7	10°F through 0°F
8	20°F through 10°F
9	30°F through 20°F
10	40°F through 30°F

It is helpful to know where in the country a tree is most likely to grow. Hardiness zones in the U.S. are noted with the leaf art for each species. For example, zones 4-9 means that a tree is “hardy” in zones 4,5,6,7,8, and 9, according to the arborday.org Hardiness Zone map above, based on the most recently compiled average annual minimum temperatures recorded by U.S. weather stations. Suitable hardiness means a tree can be expected to grow in the zone’s temperature range. However, local variations such as moisture, soil, winds, and other conditions might affect a tree’s adaptability to a particular locale.

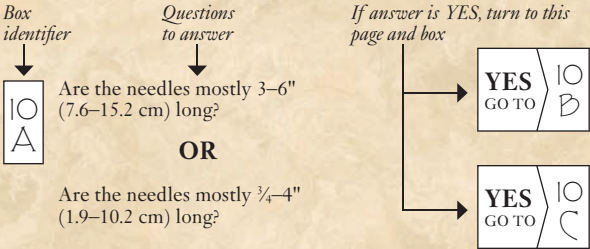
TREES IDENTIFIED IN THIS BOOK

This tree key was written for use in the colored area in the United States and Canada. Only the more common trees are identified. Cultivars (special selections of a species), uncommon species, and palm trees have not been included.



HOW TO USE THIS KEY:

1. In each box there are two or more questions. Each yes answer is followed by a GO TO direction which indicates a page number and box identifier.
2. Read each question in the box. Follow the directions by the question most correctly answered yes, moving to the page and box number indicated.
3. By repeating this process and turning to the pages indicated, the yes answer will direct you to the box that names the tree. The color of the **YES GO TO** box will match the color of the tree's box identifier. Compare the leaf drawing with your leaf sample.

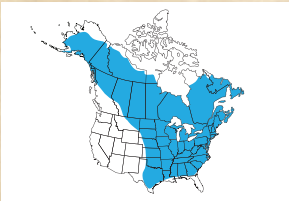


If you have some idea about the tree's name, you may also look it up in the index, which lists the page where each species is shown.

START HERE

5
A

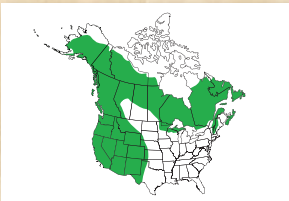
Do you live east of the Rocky Mountains or in the blue shaded area of Canada or Alaska?



YES GO TO 6
A

OR

Do you live west of the Rocky Mountains or in the green shaded area of Canada or Alaska?



YES GO TO 68
A



EASTERN START HERE

6
A

Does the tree bear cones and have leaves that are needle-like? **CLUE:** *These trees are called CONIFERS (cone-bearing) and most are EVERGREEN (tree with needles or leaves that remain alive and on the tree through the winter and into the next growing season).*

OR

Does the tree bear cones that are sometimes berry-like and have leaves that hug the twig and are scale-like or awl-shaped? **CLUE:** *These trees are called CONIFERS (cone-bearing) and most are EVERGREEN.*

OR

Does the tree have leaves that are flat and thin? **CLUE:** *These trees are called BROADLEAF (a tree with leaves that are flat and thin) and bear a variety of fruit and flowers. Most are DECIDUOUS (shedding all leaves annually).*



YES
GO TO

7
D



YES
GO TO

16
B



YES
GO TO

7
A

7
A

Are the leaves **SIMPLE** (one **BLADE** attached to a stalk or **PETIOLE**)?



YES 7
GO TO B

OR

Are the leaves **COMPOUND** (more than one **BLADE** attached to a single stalk or **PETIOLE**)?



YES 7
GO TO C

OR

Are the uniquely fan-shaped leaves mostly attached, in clusters, to short, **SPUR**-like branches? It is a **ginkgo**.



YES 25
GO TO B

7
B

Are the **SIMPLE** leaves **OPPOSITE** (2 leaves that are directly across from each other on the same twig)?



YES 18
GO TO A

OR

Are the **SIMPLE** leaves **ALTERNATE** (leaves that are staggered, not opposite each other on the twig)?



YES 24
GO TO B

7
C

Are the **COMPOUND** leaves **OPPOSITE**?

YES 20
GO TO D

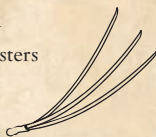
OR

Are the **COMPOUND** leaves **ALTERNATE**?

YES 58
GO TO B

7
D

Are the trees **EVERGREEN** with needles arranged in clusters of 2-5? These are pine trees.



YES 8
GO TO A

OR

Are the trees **DECIDUOUS**, with needles arranged in clusters of many on short, **SPUR**-like branches? These are larches.

YES 12
GO TO A

OR

Are the trees **EVERGREEN** with needles arranged singly?



YES 12
GO TO B

OR

Are the trees **DECIDUOUS** with singly attached needles of uneven length flattened along the twig, the cone a 1" (2.5 cm) diameter green or brown wrinkled ball? It is a **baldcypress**.

YES 14
GO TO D

8
A

Are the needles clustered in groups of 5 and the cones long with thin scales? It is an **eastern white pine**.

YES
GO TO 9
A

OR

Are the needles clustered in groups of 2 or 3, and the cone scales thick and often tipped with spines?

YES
GO TO 8
B8
B

Are the needles clustered in groups of 3?

YES
GO TO 8
C

OR

Are the needles clustered in groups of 2?

YES
GO TO 10
A

OR

Are the needles clustered in groups of 2 and 3 on the same tree?

YES
GO TO 10
D8
C

Are the needles 3–5" (7.6–12.7 cm) long, somewhat twisted, often sprouting in tufts from the trunk; cones 2–3½" (5.1–8.9 cm) long? It is a **pitch pine**.

YES
GO TO 9
B

OR

Are the needles 8–18" (20.3–45.7 cm) long, cones 6–10" (15.2–25.4 cm) long? It is a **longleaf pine**.

YES
GO TO 9
C

OR

Are the needles 6–9" (15.2–22.9 cm) long, cones 3–6" (7.6–15.2 cm) long? It is a **loblolly pine**.

YES
GO TO 9
D

9 A EASTERN WHITE PINE

Pinus strobus
Zones 3–8

The fabled tree eagerly sought by the first wave of loggers in America. The provincial tree of Ontario.



9 B PITCH PINE

Pinus rigida
Zones 4–7

The fire resilient conifer of the East, even producing new branches and needles after fire kills the green foliage.



9 C LONGLEAF PINE

Pinus palustris
Zones 7–10

A tall, stately pine of the South long sought by loggers.



9 D LOBLOLLY PINE

Pinus taeda
Zones 6–9

Our most important and widely cultivated timber species in the southern United States.

