Forest Facts

IDENTIFYING TREES

There are many reasons people need to identify trees. Knowing which trees are growing on a site can tell us about the soil, climate and other environmental conditions there. Certain trees make good lumber, paper, medicines, food or other products that people need. Some animals depend on particular trees for food or shelter. Other plants in a forest may grow best in the shade of certain types of trees. Sometimes trees from other areas become invasive and need to be removed. If you are choosing a tree to plant in your yard, you want to know which trees might grow best there, and what their needs are, so that you can take the best care of your tree. In all of these examples, being able to identify trees correctly is very important.

WHAT IS A TREE?

A tree usually has one main stem, called a trunk, which is hard and woody. When fully grown, a tree is at least 15 feet tall, and the trunk is at least 3 inches across. Smaller woody-stemmed plants are usually called shrubs.

IDENTIFYING FEATURES

Leaves may be broad and flat, like those of an oak tree, or needle-like, like those of a pine tree. Leaf shapes for many trees are distinctive, making leaves one of the easiest features to use in identification.

Bark is the outer covering of the tree trunk and branches. Its color and texture vary from one species to another.

Twigs are the slender stems near the ends of branches. Twig features are useful to observe in winter, when many trees have no leaves.

Reproductive parts include flowers, seeds, nuts, pods, cones or other seed-containing parts. These are unique to the species of tree.

The **form** of a tree is its overall shape and structure. Some trees have a "look" that you can learn to recognize from a distance.

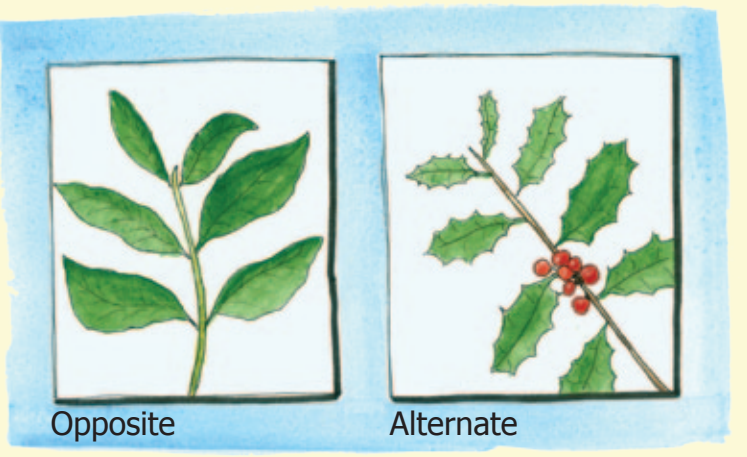
The **place where a tree is growing naturally** can also give us clues about the tree's identity. This is true because different species prefer different growing conditions. For example, some trees grow best on drier sites, while others tend to grow on wetter sites.

LEAF CHARACTERISTICS

Identifying trees is easiest when the leaves are present. When looking at leaves, ask yourself these questions:

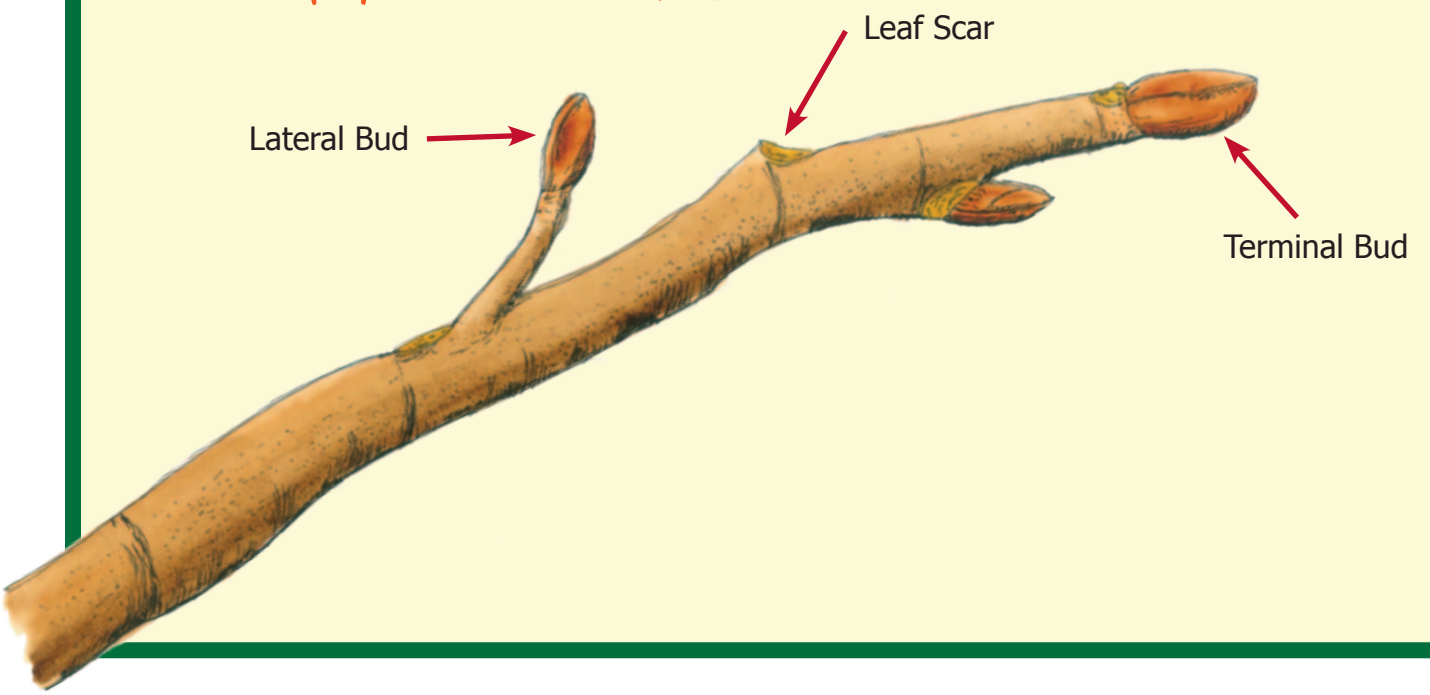
- Are they deciduous (falling off in winter) or evergreen (staying on the tree all year)?
- How are they arranged on the stem? Are they directly opposite each other, or do they alternate with each other in a zigzag pattern?
- Are they simple (having only one part) or compound (having more than one part)?
- Are the veins and/or leaflets pinnate (branching off from different places along the main vein or stem) or palmate (branching out from a single point at the base)?

LEAF ARRANGEMENT



- What do the leaf margins (edges) look like? Are they smooth, jagged, wavy, or do they have tiny teeth? Are there lobes (parts of the leaf that stick out from the main part, like your ear lobe)? If so, are the lobes pointed or rounded?
- How would you describe the shape of the leaf base and the leaf tip?
- Do the leaves have any special features, like a strong smell or fuzzy texture?

TWIG FEATURES



Leaf Forms

Needle-like

Scale-like

Palmately Lobed, Simple

Pinnately Lobed, Simple

Palmately Compound

Pinnately Compound

Leaf Marginss

Entire

Wavy

Finely Toothed

Coarsely Toothed

Doubly Toothed

Incurved Teeth

Bluntly Toothed

Lobed

BARK CHARACTERISTICS

Some examples include:

MORE TIPS FOR IDENTIFICATION

- Details matter when it comes to identifying trees. You must be very observant, using your senses of sight, touch and sometimes smell.
- Use a good field guide, preferably one with a scientific key.
- Use a hand lens, especially in winter, to look at tiny details.
- Practice, practice, practice! The more you look at trees, the more familiar they will become.

QUESTION:

Where can you purchase an inexpensive tree identification guide to Virginia trees?

ANSWER:

Visit www.dof.virginia.gov

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To see how much you learned, check out the crossword puzzle at www.dof.virginia.gov/edu/resources/puzzle_Identifying-Trees.pdf.