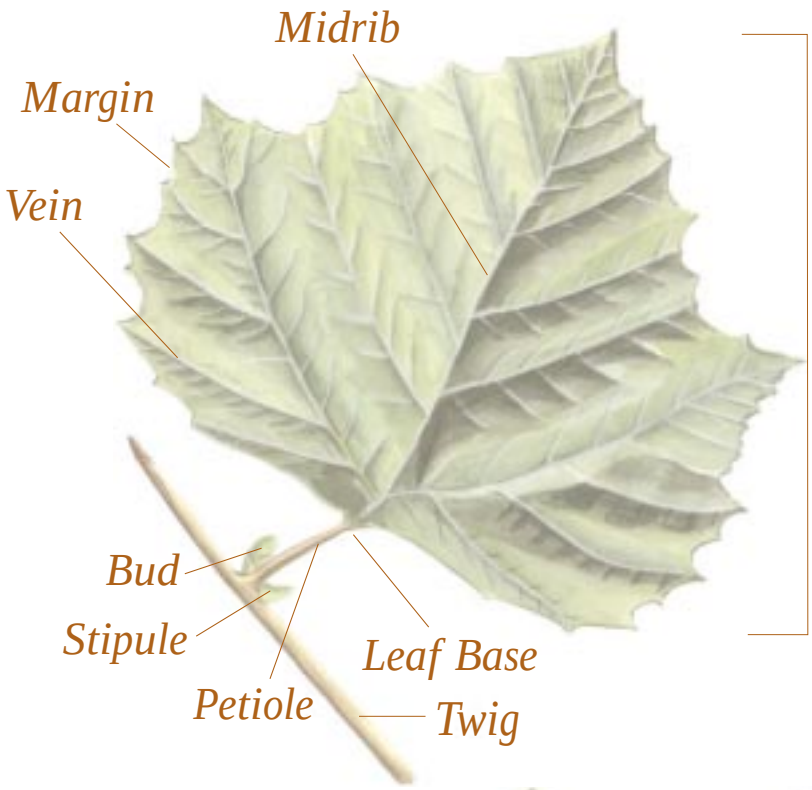
TREE IDENTIFICATION: *Leaves*



Leaves of different tree species have the same basic parts but can vary greatly in appearance. Some trees have needle or scale-like leaves directly attached to the twig or grouped on the twig by a paperlike sheath called a fasicle. Other trees have broad leaves with a waxy, smooth or hairy surface, and either a single blade or a more complex structure of leaflets. Each of these characteristics — the general shape of the leaf, the leaf's texture and the way the leaf is attached to the twig — can be used to help identify trees.

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COMPOSITION

SIMPLE COMPOUND

To determine whether a tree has simple or compound leaves, examine the twig where the leaf is attached for a leaf scar and a leaf bud. The blade of a simple leaf consists of a single segment beyond the bud. Examples: oak, sweetgum and red maple. The blade of a compound leaf consists of multiple segments (leaflets) beyond the bud. Examples: white ash, black walnut and buckeye.

FASCICLED NON-FASCICLED

The needles of coniferous trees are either attached singly to the twig or held in small bundles, or fascicles, by a fascicle sheath, which is attached to the twig. Loblolly, longleaf, slash and other pine trees have needles in fascicles while the needles of fir, bald cypress and spruce trees are attached singly to the twig.

SURFACE

The upper and lower surfaces of leaves can be waxy, hairy, flaky, bumpy, pitted or scaly, depending on the tree species. The following are a few of the many terms used to describe variations in leaf surfaces:

Glabrous
smooth, without hairs, bumps or pits of any type
Example: the upper surface of sycamore leaves

Papillate
with pimple-like bumps
Example: the lower surface of white ash leaves

Scurfy
with tiny scales
Example: the lower surface of black oak leaves

Glaucous
with white, flaky wax deposits
Example: the lower surface of sweet bay magnolia leaves

Glandular
with hairs that have swollen tips
Example: the lower surface of paper birch leaves

Pubescent
with fine, soft, erect, short hairs
Examples: the lower surface of American elm

Tomentose
with curly, matted, woolly hairs
Example: the lower surface of magnolia leaves

Scabrous
with rough, short, bristly hairs
Example: the upper surface of slippery elm leaves

Stellate
with hairs that have branches or "arms"
Example: the lower surface of post oak leaves