

Forest Visualization

Lesson 1, activity 5

Read this description after reviewing the "Four Common Tree Species in Wisconsin" handout with students. Help them to visualize a forest of white pine, red maple, white oak, and quaking aspen.

You are standing on a small hill inside a forest. High above you are the tops of the giant white pine trees reaching 100 feet into the air. They are many of these white pines in the forest and they have thick, rough bark and trunks so large you can't touch the tips of your fingers together as you reach around the trunk. Dry, brown needles are scattered along the path where you are standing and long pinecones with sticky sap on them are scattered everywhere.

Also in the canopy are large red maple trees. You remember times when you threw their helicopter-like seeds into the air and watched them spin to the ground. These seeds are an important food source for wildlife, which you can't see but can hear. The 'caw-caw' of a crow, the screechy cry of a blue jay, and rustling in the dry leaves on the ground from a squirrel running from tree to tree looking for food are sounds around you. Seeing the red maples and hearing the rustle of leaves makes you think of the forest in the fall when all the maple leaves have turned to a brilliant shade of red.

The sun is shining, creating spots of light on the forest floor where it is not blocked by branches and leaves. Summer is near so all the trees are full with leaves rustling and needles whistling in the breeze. The white pines and red maples are not the only trees you can see as you look toward the sky. You can also find the leaves of a white oak with their rounded, finger-like tips. These trees can live up to 600 years but in this forest the oak are still young and haven't reached the canopy yet. They fill the understory and add to the variety found in the litter layer when their acorns drop. These brown, shiny nuts with rough little caps are a favorite to the gray squirrels running on the forest floor.

Near the edge of the forest where you first entered is another kind of tree. The triangular leaves with toothed edges fluttering back and forth in the wind help to identify this tree as a quaking aspen. Its bark is smooth and gray and its leaves are a bright shiny green on the top. The quaking aspen needs a lot of light to grow, which is why it is on the edge of the forest, not deep inside where it would be shaded by other trees. The aspen are young pioneer species that only reach 80

feet in height when mature. These aspen are small in size compared to the towering white pines in the heart of the forest.

Together all of these trees are part of a balanced community. Over time the larger trees will die and create openings in the forest for younger saplings to sprout and reach the canopy. The cycle of the forest will continue.

Now visualize each of the four trees in the forest separately. *White pine, red maple, white oak, quaking aspen.* Which is the biggest? *White pine.* Which is the smallest? *Quaking aspen.* Can you see the structure of the forest? *The four trees-white pine, red maple, white oak, and quaking aspen make up the tree composition and help to create the structure of this forest.*

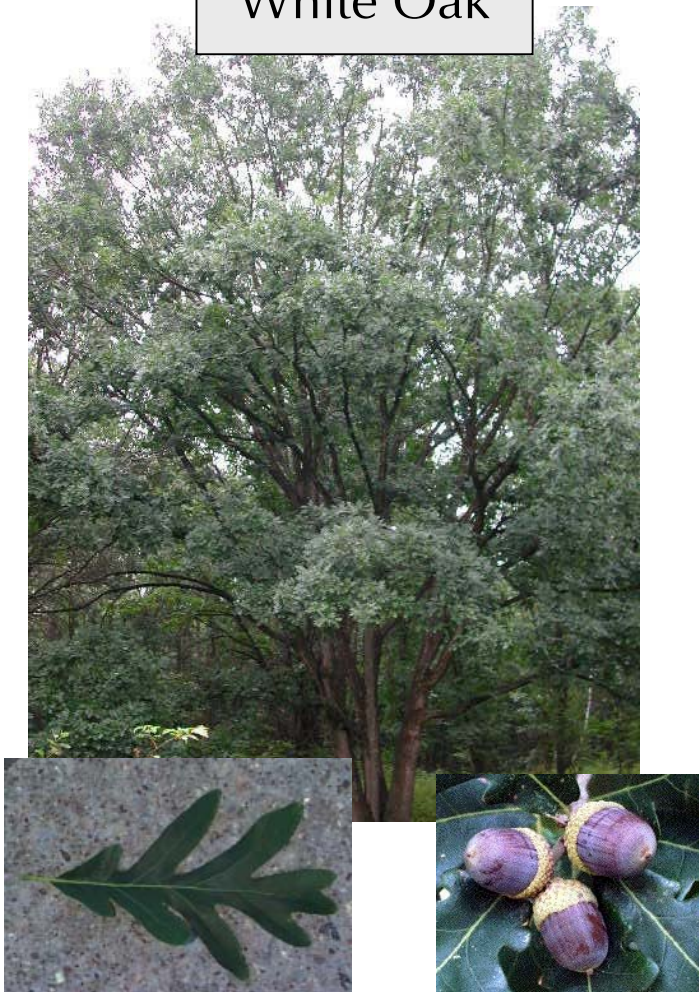
White Pine



Red Maple



White Oak



Quaking Aspen

