

Hanging out with Hickory in White's Woods

By Dr. Dana Driscoll

White's Woods has many mature hickory trees including shagbark hickory (*Carya ovata*), shellbark hickory (*Carya laciniosa*), bitternut hickory (*Carya cordiformis*), and pignut hickory (*Carya glabra*). Hickories are in the walnut family that also includes black walnuts, butternuts, and pecans (which grow further south). Most people know about hickory because of its use in food. Hickory-smoked meats have a sweet and rich bacon-like flavor. Both fresh hickory nuts off the tree, as well as hickory syrup--which is made from the bark, not the sap--are delightful.

Hickory trees can grow up to 100 feet tall and can live over 350 years with extraordinary specimens in Pennsylvania reaching 130 feet tall. They have thick bark, and on shagbark and shellbark species, the bark appears "shaggy" where strips of bark appear like they are flaking off the tree and can peel off the tree easily. Hickory has a "compound" leaf that has multiple smaller leaves opposite each other, with anywhere from 3-12 leaflets. Shagbark hickories have 3-5 leaflets, while shellbark has larger leaves with 5-9 leaflets.

Hickory has one of the more beautiful foliage displays, with their color coming later in the fall foliage season, from mid to late October. Hickory offers a stunning display of warm yellow-orange, making the tree stand out even in mountains at a distance. Once you learn to spot this distinctive color, it is easy to find hickory trees.

Like many other hardwood nut-bearing trees, hickory will start producing nuts after 40 years of growth, and, thereafter, will produce bountiful harvests of nuts that are important to wildlife including squirrel, raccoon, and deer. The names of the various types of hickories tell us a good deal about whether or not we want to eat the nuts. The most delicious of the nuts are shagbark and shellbark hickories—both of these have a very sweet and savory nutmeat. Pignut and bitternut hickories, as the names suggest, have very bitter nuts that are not palatable. An easy way to tell the difference is by looking at the bark. If the tree has shaggy bark, it likely has tasty nuts.

Like other hardwood nut trees, hickory will produce a large crop of nuts, called a "mast year," every two-five years. Last year was a major mast year for Indiana County, so we won't see another for a while. No one knows exactly when a mast year will occur or even what triggers the cycle.

Hickory nuts have both an outer husk and an inner shell. You can remove the outer husk. As the husk dries out, it is easy to remove and will split into four equal sections. The inner shell is hard and contains the nutmeat. When you crack the inner shell with a hammer, you can use a nut pick to take out the delicious nutmeat. The shell is complex, however, and the nutmeats require a lot of patience. An alternative is to create a nut milk. Crack open hickory nuts with a hammer, breaking them into small pieces ½" or less. Save all of the bits—shell and nutmeat. Put about one cup of these cracked nuts in a pot with a lid and four cups water and bring to a boil. Boil for 15 minutes. Ten minutes into the boil, add twigs from black birch (*Betula lenta*) and again put the lid on. Take the heat off and optionally add needles from white pine (*Pinus strobus*) or eastern hemlock (*Tsugae canadensis*). Let this steep for five minutes, strain, and add maple syrup or honey. This is

an incredibly delicious drink. Note that all four of these tree species are found in White's Woods and in many other parts of the region.

Hickory trees are wonderful trees to get to know, as they form the overstory of one of the most traditionally common forest types: the oak-hickory forest. Oak-hickory forests were selectively planted and maintained by Native Americans as these trees produce bountiful harvests of nuts. The Native Americans maintained these forests long-term with controlled burns. Oak and hickory trees have thick bark that can protect themselves from fire while competitor trees such as red maple (*Acer rubrum*) and black cherry (*Prunus serotina*) will succumb to the flames. These competitor trees are shade tolerant and might have outcompeted younger oak or hickory trees if the fires had not been set.

This information suggests two things. First, if you want to continue to see oaks and hickories in beautiful forests like White's Woods, we have to protect older trees from logging—because once a forest is logged, it will likely be naturally replaced with faster growing species. But second, we have to plant lots of oaks and hickory trees. When you are out gathering delightful and delicious nuts, take half of them and with a stick, put them back in the ground, especially in areas that are regrowing or, alternatively, in edge spaces. This way, we can preserve the legacy of hickory for future generations.

Dr. Dana Driscoll, a professor of English at IUP, has been teaching wild food foraging, herbalism and sustainable living for more than 10 years. The Naturally columns are brought to you each month by the Indiana Gazette and Friends of White's Woods to showcase the wonders of nature in our area.