

## **Forest Identification**

*Article #155, April 2010*

*By Bill Cook*

Interest in tree identification becomes active in the spring, like many other events in the forest at this time of year. Many forest owners and forest visitors feel a sense of accomplishment in being able to identify most of the trees and shrubs in nearby forests, not to mention the wildflowers, ferns, mushrooms, and other life forms.

However, while tree ID by itself can be engaging and interesting, the forest ecology implications run much deeper.

Have you wondered 'why' a certain collection of trees is growing in that particular place?

Or, what sort of forest might grow there after these trees die?

Or, how might you affect changes to achieve the kind of forest that you prefer?

The fact that certain kinds of trees grow in certain places at a certain time is not an accident. The current forest can tell a story of soils, water, and past management (or mismanagement). It can also offer insights into the future.

Knowing the growing characteristics of each tree species is a natural extension of tree ID. The science is called silvics. Each tree species has a unique set of silvical characteristics that include things like tolerance of shade, nutrient and water needs, growth rate, lifespan, reproduction strategy, and maximum size. Species with some common characteristics tend to grow in association with each other and this forms the basis of different forest types.

Forest types are usually named after the dominant trees because trees have a huge impact on everything else that lives in the forest. Knowledge of these dynamic associations will tell you what wildlife to expect or where a favorite wildflower might be found. So, understanding forest types offers more enjoyment and satisfaction than knowing just the trees.

For example, Northern Hardwoods is the most common forest type in Michigan. It's a confusing name, which is unfortunate. It doesn't mean all hardwoods that grow in the north. It's a particular forest dominated by sugar maple, yellow birch, basswood, and sometimes beech. There are a number

of Northern Hardwood variations, all reflecting differences in soils, water, and other ecological factors.

Relative proportions of each tree species will say a lot about past conditions, current ecology, and future potential. The eye of a forester, or other knowledgeable person, will quickly interpret these subtle differences. As forests change, and they constantly do, the forest types change. This fairly predictable process is called forest succession. An experienced observer can visualize what was, as well as what might be.

In addition to many forest types, there are various ages and conditions of each forest type. For example, a young aspen forest type will have very different habitat conditions than a mature aspen forest. Any successful grouse or woodcock hunter will know this. And true to forest succession, aspen often changes into other forest types consisting of tree species more tolerant of increasingly shady conditions. A look at what's regenerating under the aspen will suggest what the forest will look like in another 50 years.

There are lots of forest typing systems, which can be confusing. In broad terms, something like 'upland hardwood' would include a large number of tree species and forest types that have certain similar groupings. These might also be called 'mesic hardwoods' or 'xeric hardwoods' if water availability is given more importance. Typing can become increasingly specific (and complicated) depending upon the need of the forest owner or user.

For most forest owners, it's a good idea to talk with a forester to describe your forest in terms that reflect your goals. There isn't any single 'correct' way to categorize forests. So, finding and using a scheme that makes sense to you is important . . . that's if you enjoy knowing and managing your forest resource.

For tree ID, I recommend a book such as 'Trees of Michigan' by Linda Kershaw. For forest type ID, try 'Michigan Forest Communities' by Donald Dickmann. For the U.P. and adjacent regions, try the following website [<http://uptreeid.com>].

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### **Trailer**

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