

A Guide through the Northeastern Deciduous Forest

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The name Pennsylvania, "Penns Woods," indicates a land lush with a wide variety of trees. In Pennsylvania the geographic ranges of many species typical of the northern Temperate Zone intersect with those of the south, producing a unique diversity of trees. Nearly all species of trees native to temperate eastern North America grow in the state. By studying the trees of Pennsylvania, students are introduced to some of the most prominent flora of the region.

This web site was created for freshman biology students to organize information and to foster work independent of the laboratory, such as tree identification in the autumn woods of Pennsylvania. Students are first presented with a slide show of the major trees found in the

Northeastern Deciduous Forest, then are guided through the forest of Hawk Mountain, Pennsylvania. On return to the classroom the following week, students are linked to the “Biology Place” (Peregrine Publishers, Inc. at www.biology.com), an interactive web-based classroom, where they are briefed on the specifics of tree identification and autumn color changes. Students are given a herbarium project assignment with the following objectives to be completed in a one-month period:

1. Identify one representative species from each of twelve different families of trees based on observation of leaf, fruit, and silhouette;
2. Collect specimens and construct a herbarium using a plant press;
3. Research the natural history of collected specimens;
4. Construct a dichotomous key to identify specimens in a collection.

This web site has proven to be invaluable because it offers students not only independence, but also a real project that extends beyond a typical two to three hour lab. Students thus learn critical evaluation skills as they realize their projects’ objectives.

Student and instructor use of this site is welcomed. The Botany Field Site can be found at www.lv.psu.edu/jxm57/trees.