

Stewardship Notes

Indiana Division of Forestry



Forest Management Concepts

When you meet with a professional forester to determine forest management objectives for your woodland, the forester may use a bewildering array of technical terms to explain management techniques. A basic understanding of technical forestry terms will help you better understand the management plan for your woodland.

Stand

A stand is a contiguous area of woodland containing trees of similar species, size and age. Stands often correspond to soil or topography types and are strongly influenced by the land-use history of the area.

Basal Area

A way of explaining the crowdedness or density of a stand. The basal area of a tree can be thought of as the surface area of the top of the stump if the tree was cut at 4.5 feet above the ground. The total surface area of all the stump tops in an acre is the basal area per acre.

Basal area measurements are expressed in square feet per acre. In the field, the forester often uses an instrument called a wedge prism to measure basal area. Why not just measure trees per acre to get a handle on stand density? Knowing only the number of trees per acre fails to explain the crowdedness of a stand; a stand of large trees is more crowded than one with the same number of trees of smaller diameter. A basal area for typical mature oak-hickory stands range from 80 to 120 square feet.

The Concept of Basal Area



