

CHAPTER

16

**STAND &
STOCK TABLES**

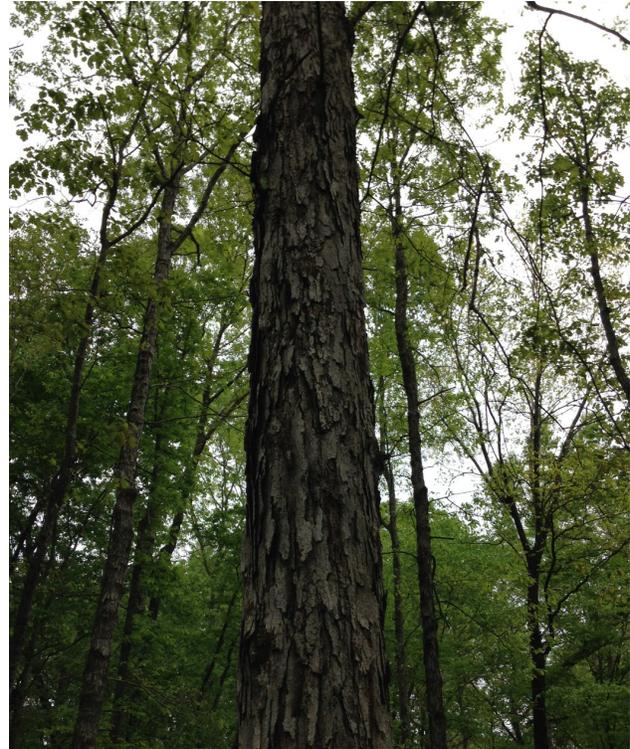


Stand & Stock Tables

Once a forest stand is inventoried, the information needs to be presented in a way that you can use it to make decisions. Foresters may present that information to a landowner in the form of a stand and stock table. Stand and stock tables are used to illustrate the composition and size of forest trees and stands at a given point in time.

A stand and stock table can be created from forest inventory information. This includes species and numbers of trees per acre by diameter and height classes. This information can be summarized by plot or for an entire stand. Volume and/or weight by diameter and height classes on a per-unit area basis are then added.

To develop a stand and stock table, summarize the number of trees from a completed forest inventory by diameter and height using the average total height of the trees in those classes. Then determine the number of trees per acre represented based on frequency and plot size. Using the volume/weight table of your choosing, determine the volume/weight per tree (table 16.1).



The inventory information gathered in the woods can be used to create a stand and stock table for use in decision-making about your forest.

Table 16.1. Stand Table Example

DBH (in.)	Average Total Height (ft.)	Number of Trees per Acre	Weight per Tree (lb.)
6	53	20	400
7	60	20	670
8	70	20	802
9	75	40	1,031
10	82	40	1,470
11	79	20	1,785
12	93	20	2,300

Stand table based on a 1/20-acre fixed-radius plot taken June 2018 on a 48-year-old longleaf pine stand located on the Solon Dixon Forestry Education Center, Dixie, Alabama

Stand and stock tables are used to illustrate the composition and size of forest trees and stands at a given point in time.

To complete a stand and stock table based on the information in table 16.1, simply multiply the weight per acre for each diameter class to get the weight per diameter class. Then sum the weight per class to get total weight represented by the sample. (See table 16.2.)

Table 16.2 is an example of a completed stand and stock table. The information represents a stand that has 180 trees per acre. The trees range in diameter from 6 inches to 12 inches. Using this table you quickly can see that the majority of trees (and weight) on this stand are in the chip & saw category. The total estimated weight per acre is 219,180 pounds or approximately 110 tons per acre (remembering that there are 2,000 pounds in 1 ton).

Table 16.2. Stand and Stock Table Example

DBH (in.)	Average Total Height (ft.)	Number of Trees per Acre	Weight per Tree (lb.)	Weight per Acre Pulpwood (lb.)	Weight per Acre Chip & Saw (lb.)	Weight per Acre Sawtimber (lb.)
6	53	20	400	8,000		
7	60	20	670	13,400		
8	70	20	802		16,040	
9	75	40	1,031		41,240	
10	82	40	1,470		58,800	
11	79	20	1,785		35,700	
12	93	20	2,300			46,000
Total/acre		180		21,400	154,780	46,000

Stand/stock table based on a 1/20-acre fixed-radius plot taken June 2018 on a 48-year-old longleaf pine stand located on the Solon Dixon Forestry Education Center, Dixie, Alabama