

7.000 SITE TREE DATA

Site trees are a measure of site productivity expressed by the height to age relationship of dominant and co-dominant trees. If suitable site trees are available, site tree data are required for every accessible forestland condition class defined on a plot. **An individual site tree may be used for more than one condition class where differences in condition classes are not the result of differences in site productivity.** For example, when different condition classes are caused solely due to differences in reserved status, owner class, and/or disturbance-related differences in density (e.g., heavily thinned vs. unthinned), a site tree may be used for more than one condition class. **When in doubt, do not use a site tree for more than one condition class.**

SITE TREE SELECTION

Select at least 1 site tree for each accessible forest land condition class; select tree from a species common to the condition class being sampled, based on regional or local tree species selection criteria (Appendix 2 lists preferred site tree species by region).

- Refer to Appendix 2 – EASTERN U.S. SITE-TREE SELECTION CRITERIA
- Select trees off the subplot where possible
- Use only trees that have remained in a dominant or co-dominant crown position throughout their entire life span
- If possible, trees should be 5.0 in DBH, or larger
- Trees should be at least 20 years old

Trees that are visibly damaged, trees with ring patterns that exhibit signs of suppression, and trees with rotten cores should be rejected. If there are no acceptable site trees, record that in the plot notes and leave this section blank.

NOTE: On remeasure plots do not use the site code from the plot print-out or data recorder history as a basis to collect site index. Always refer to the CORE list. If a plot has been coded **0** or **7**, then site index cores must be collected for each condition class on the plot. Site index cores are also required for any forested condition class with a number higher than 1, **and for all forested condition classes on new plots.**

7.001 SITE TREE NUMBER -- Record the corresponding record number of the site tree within the plot, beginning with 1 for the first site tree. Note that since site trees are generally not tally trees, this number will generally be different from TREE NUMBER.

When Collected: All site trees
Field width: 1 digit
Tolerance: No errors
MQO: At least 99% of the time
Values: 1 to 9

7.005 SUBPLOT NUMBER -- Enter the code that indicates the nearest subplot for the data being collected.

When collected: All subplots
Field width: 1 digit
Tolerance: No errors
MQO: At least 99% of the time
Values:

- 1 Center subplot
- 2 North subplot
- 3 Southeast subplot
- 4 Southwest subplot

7.100 CONDITION CLASS NUMBER -- Record the CONDITION CLASS NUMBER that the site index data from this tree represent.

When collected: All site trees
Field width: 1 digit
Tolerance: No errors
MQO: At least 99% of the time
Values: 1 to 9

7.105 CONDITION CLASS LIST -- List all CONDITION CLASS NUMBERS that the site index data from this tree represent.

When Collected: All site trees
Field width: 5 digits
Tolerance: No errors
MQO: At least 99% of the time
Values: 1 to 9 or 10000 to 98765

7.110 SPECIES -- Record the appropriate SPECIES code from the list in Appendix 2 – EASTERN U.S. SITE-TREE SELECTION CRITERIA. If you encounter a species not listed in Appendix 2 and are not sure if it should be utilized as a site tree, consult your Field Supervisor.

When Collected: All site trees

Field width: 3 digits

Tolerance: No errors for genus; No errors for species

MQO: At least 99% of the time (genus); At least 95% of the time (species)

Values: **See Appendix 2 for valid site tree species**

7.120 DIAMETER -- Record the actual diameter for each tallied tree to the last whole 0.1 in. Measure DBH at 4.5 ft above the ground. If abnormalities are present that prevent taking a diameter measurement at 4.5 ft, the tree is probably not a good candidate for a site tree.

When Collected: All site trees

Field width: 3 digits (xx.y)

Tolerance: +/- 0.1 in per 20.0 in of diameter on trees with a measured diameter

MQO: At least 95% of the time

Values: 001 to 999

7.130 SITE TREE LENGTH -- With a clinometer or other approved instrument, measure the total length of the site tree from the ground to the top of the tree. Record to the nearest 1.0 ft. SITE TREE LENGTH must be measured; no estimates are permitted on site trees.

When Collected: All site trees

Field width: 3 digits

Tolerance: +/- 10% of true length

MQO: At least 90% of the time

Values: 001 to 999

7.140 TREE AGE AT DIAMETER -- Record the tree age as determined by an increment sample. Bore the tree at the point of diameter measurement (DBH/DRC) with an increment borer. Count the rings between the outside edge of the core and the pith. Do not add years to get total age.

When Collected: All site trees

Field width: 3 digits

Tolerance: +/- 5 years

MQO: At least 95% of the time

Values: 001 to 999

NOTE: Site trees may or may not reflect stand age. Do not record stand age tree information in the site index section, unless all variables are collected and these trees are intended as site trees. Use the “Stand Age Worksheet” for determining stand age (see Chapter 4, page 75).

