

**2007 South Carolina FFA Association  
State Forestry Contest**

**Hosted by  
Forestry Management Technology Programs  
Horry-Georgetown Technical College in Georgetown, South Carolina**

**Saturday, April 21, 2007**

**Schedule:**

9:00 – 10:00 AM.....Registration  
10:00 AM.....Written Test / Team Event  
11:00 – 1:00 PM.....Concurrent Practicum(s)  
12:30 PM – 1:30 PM.....Lunch provided by Horry-Georgetown Technical College  
1:30 PM.....Awards Presentation

**Skills to be covered in 2007**

**Plant Identification** – A selected number of plants (20-25) will be chosen from the state identification list (found on the website). Students will be asked to identify the trees by their common name. Samples provided can be a standing live tree, a photograph and / or a specimen sample.

**Equipment Identification** – Twenty (20) pieces of equipment utilized within the forestry industry will be chosen from the state identification list (found on the website). The actual equipment will be available for display.

**Written Test** – A 50 question multiple choice / True False exam will be given. Questions for the exam may be taken from any area within the forestry industry but should be consistent with what is taught in the classroom. Sample test can be found online.

**Practicum:**

NOTE: *One of the following Practicum will be selected as the team event. The others will be performed individually.*

**Tree Measurement - Timber Cruising for Board Volume (100 points)**

1. Using forest measuring tools, (such as Biltmore Scale Stick, Tree Diameter or Logger's tape, or Clinometer), each participant will measure pre-numbered standing trees on a fractional acre plot for board foot volume as specified by the event superintendent. The participant will record the DBH (Diameter Breast Height) computed to the nearest inch and the merchantable height of each tree, height rounded down to the nearest 8' log. (Potential Log Counts are 1, 1.5, 2, 2.5, 3, 3.5, 4 etc.) The participant must convert the volume to a one-acre basis. (Ten trees will be identified.)

**Recommended Equipment:** Tree Diameter or Logger's Tape, 100' Tape for Distance, Clinometer (Suunto clinometer, Haga clinometer, or Tangent Height Gauge). No electronic instruments will be allowed.

2. The following minimum diameters and log length will be used:

**Minimums:** DBH - 12 inches      Height-16 feet      Top Diameter-8 inches

3. Board foot volume tables will be provided for calculation at the event. (Reference Volume Table will be Scribner Log Rule, Form Class 78, Gross Tree Volume (Board Feet) by Number of Usable Logs)
4. **Scoring:** Three points will be allowed for the correct DBH and three points for the correct height. Forty (40) points will be allowed for the correct volume per acre. Five points will be deducted for each five percent plus or minus from the correct measured volume.

### **Compass Practicum (100 points)**

1. The participant will use a **hand compass** and **pacing** to the nearest full foot to simulate the determination of the property lines on a tract of timber. The compass course will have ten marked points. The student will start at any point and record the compass reading and distance to the next point. Azimuth readings shall be recorded.

**Recommended Compass Type:** Silva Ranger Azimuth Compass with sighting mirror.

2. **Scoring:** A total of 100 points are possible: Ten points for each correct numbered site. Five points for correct azimuth. Five points for correct distance. Partial credit will be given with a deduction of one point for each two degrees or two feet the participant is off the correct answer.

### **Timber Management Evaluation for Thinning (100 points)**

1. The trees selected and designated for use in this part of the event may be all of one species or a mixture of species.
2. An area will be selected and identified by ribbons, paint, rope, etc. It will contain at least 15, and not more than 30 marked trees within a timber stand that needs thinning or some TSI work. All trees in the selected area will be considered as a forest management site, and the participants using one of the following options will score each marked tree:
  - a. Harvest (utilize the tree)
  - b. Leave - (the tree should remain in stand for a good reason)
  - c. Deaden - (Undesirable tree, not merchantable or beneficial to wildlife, should be deadened or cut down and left in woods)
3. The participants will be given a "situation" concerning the forest management objectives of the stand selected. Information that will be needed to help participants in their decisions will include:
  - a. Markets available - (including hardwood)
  - b. Wildlife habitat considerations - (scope, etc.)
  - c. Present condition of stand

d. Final goal of the management plan

This information will be given to participants at the site before they start evaluation of the stand either orally, by poster or a “handout” sheet.

4. Time: Participants will be given 30 minutes to make their decisions.
5. Scoring: Four points will be given for each correct decision up to a maximum total of 100 points, depending on the number of trees. (The possible score for this phase of the event will vary.)

**Map to Horry-Georgetown Technical College’s  
Timber Harvesting Heavy Equipment Operator Training Center  
(formerly International Paper’s Eight Oaks Seed Orchard)  
PLEASE NOTE ARROW DESIGNATING LOCATION OF CONTEST**

Location of the Center is:

Approximately 4 miles West of Georgetown, SC 29440 on Highway 17-A and Hwy 521

