

FORESTRY

CAREER DEVELOPMENT EVENT

Rules for the State FFA Event

Sponsor

This event is currently sponsored by the North Carolina Farm Bureau with in-kind contributions by the College of Forest Resources at North Carolina State University.

State Event Superintendent

The superintendent for this event is Mr. David Harris, Western Region Agricultural Education Coordinator, Department of Agricultural and Extension Education, Mountain Horticultural Crops Research and Extension Center, 455 Research Drive, Fletcher, NC 28732-9216
Phone: 828.684.3562 Fax: 828.684.8715 E-Mail: david_e_harris@ncsu.edu

Eligibility and General Guidelines

This event is open to all FFA chapters and FFA members in good standing. Members winning a previous state event in this area or that have participated in a previous national event in this area are ineligible. This event will be held during the North Carolina State FFA Convention.

Teams may consist of three or four individuals. The fourth lowest team member score is not considered except in the case of a tie. No alternates are allowed in state events. Any alternate found participating in a state event will result in team disqualification. FFA members and advisors may not visit the site of a state career development event within fourteen days of the start of the event. Teams that violate this rule will be disqualified.

FFA members in good standing may also participate as individuals in this event. A chapter may have up to two members participate as individuals as long as the chapter does not have a team participating in the event. Their scores will only count toward individual recognition, and will not be tallied as a team score. Three members participating in this event from the same chapter constitute a team.

The top three individuals in the federation event are eligible to participate in the regional event as individuals regardless of their team placing. The top three individuals in the regional event are eligible to participate in the state event as individuals regardless of their team placing.

The use of cellular phones, Personal Digital Assistants (PDA's) or any other mobile electronic communication device is prohibited during any state-level career development event. Any violation of this rule by any team member will result in total team disqualification.

Any member found cheating in any state-level career development event will result in total team disqualification for that event.

At the North Carolina FFA State Convention, members may participate in only one career development event with the exceptions of Creed and Parliamentary Procedure or Prepared Public Speaking and Parliamentary Procedure.

State Career Development Event Participation

The appropriate numbers of teams based on event participation from each region are eligible to compete in the state career development event. The top three individuals in the regional event are eligible to participate in the state event as individuals regardless of their team placing. Teams and individuals advancing to state event participation must be certified by the regional FFA advisor.

Procedures for Administering the Event

1. The event will consist of four sections, with each member of the team participating in all sections.
2. No two members of any one team will participate in the same section at the same time.
3. Each section of the event will have a maximum time limit of thirty minutes, requiring orderly movement of all participants in sequence from the section that they were assigned at the beginning.
4. The following items are to be provided by each participant:
 - Tree Scale Stick (Biltmore Stick)
 - Clipboard
 - Pencil
 - Hand Held Calculator
5. Participants may not exchange calculators.
6. Judges will only give objectives in the Timber Marking Section.
7. The four sections of the Forestry Career Development Event are:
 - Sawtimber Estimation: Each participant will provide their own scale stick. Calipers, diameter tapes or other measuring instruments will not be allowed. The official sawtimber tally card is based on the International 1/4 inch Rule and is included in the supplemental material on subsequent pages. Estimates will be made to the nearest half log (eight feet) of merchantable timber and to inch diameter classes on each tree recorded. The cutoff point at the top of the tree will be a minimum diameter of eight inches or at the point where merchantability stops due to limbs or other defects. Standing trees will be tagged with numbers. The total board feet of each tree will be computed and recorded but only the total volume determined by the participant will be graded. The tally sheet will be turned in to the designated official at the end of the thirty-minute time period. The total possible points for this section will be one hundred (100) points. One point will be deducted for each ten (10) board feet of variance from the total volume as determined by the event officials.
 - Pulpwood Estimation: Each participant will provide their own scale stick. Calipers, diameter tapes or other measuring instruments will not be allowed. The official pulpwood estimation tally card is based on the cord volume table of form classes 75-79 and is included in the supplemental material on subsequent pages. Diameter breast height (DBH) estimates will be made to the nearest one inch class (5", 6", 7", 8", 9", 10", 11", 12") and merchantable height measurements to the nearest five-foot (5') class to a minimum top diameter. Standing trees for judging will be tagged with numbers. DBH, merchantable length estimates and cord volume contents of each individual tree will be computed and recorded to the nearest thousandth of a cord but only the

total volume determined by the participant will be graded. Tally sheets will be turned in to the designated official at the end of the thirty-minute time period. The total possible points for this section will be one hundred (100) points. One point will be deducted for each 1/100th of a cord variance from the total cords as determined by the event officials.

- **Tree Identification:** Each participant will identify twenty (20) trees. Trees common to the area should be used for local and federation events, but at the regional and state level, any of the trees on the official list can be used. A tree species may be used more than once if necessary. Trees will be numbered one to twenty. Participants are to write the appropriate number in the correct space on the tree identification answer sheet. The total possible points for this section will be one hundred (100) points. Five (5) points will be deducted for each incorrect answer.
- **Timber Marking:** Each participant will examine a stand of marked trees and, on the timber marking form, indicate which trees should be left standing and which should be cut. Factors to consider as a basis for cutting/removing trees are: disease, insects, dead, suppression, crowding, shape, maximum growth reached or other conditions which will prevent trees from producing a profitable yield of sawtimber. Special Note: In every event, the officials will inform participants of the specific objective of the thinning process involved prior to the beginning of this section. All trees within the area of those marked must be considered if they will have an effect on the marked trees. The total possible point for this will be one hundred (100) points. Four (4) points will be deducted for each incorrect answer.

Procedure for Determining the State Event Winner When Scores are Tied

In the event a tie score exists, apply the following methods in sequential order until the tie is broken:

1. Compare the alternate scores. The lowest team member score is the alternate score.
2. Compare the total team scores for the identification component and the higher scoring team is the winner.
3. If these methods fail to break the tie, co-winners will be declared and a run-off event will be held to determine which team will represent North Carolina at the National FFA Convention. The run-off event will follow the same rules as the state event.

Special Note: In the event a tie exists between first, second or third place teams on the regional level, the tied teams will be allowed to participate in the state event. In the event a tie exists in a federation event that sends teams directly to state competition, the tied teams will be allowed to participate in the state event.

Dress Code

Participants are required to follow the North Carolina FFA Association Career Development Event Dress Code. Participants should wear long pants, an appropriate shirt with a collar or an appropriate high school or FFA t-shirt. A ten percent reduction in the total team score will be taken if a participant violates the dress code.

State Awards

The following awards will be presented annually at the state FFA convention provided sponsorship is available:

State Winning Team	\$500, first place team plaque, pins for team members
Second Place Team	Second place team plaque, pins for team members
Third Place Team	Third place team plaque, pins for team members
High Scoring Individual	Plaque

National Career Development Event Participation

State winning teams advancing to national career development event participation will be automatically registered for the national event. It is the responsibility of the Chapter FFA Advisor to complete all necessary national certification and waiver forms and return them to the State FFA Coordinator by the assigned due date.

State winning CDE Teams that choose not to participate at the national level should contact the state office by Sept 1 prior to national convention. Teams that fail to inform the state office prior to Sept 1 will be ineligible to participate in that same CDE for the next year (chapters may appeal to the State FFA Board of Directors). Teams that do not compete at the National Convention will be required to pay back the \$500 travel award.

PULPWOOD ESTIMATION FORESTRY CAREER DEVELOPMENT EVENT

Cord Volume Table

Merchantable Rough Cord Volume Using Merchantable Stem Length
Form Classes 75-79

Diameter Breast Height (inches)	Merchantable Length of Stem (feet)									
	20	25	30	35	40	45	50	55	60	65
5	0.026	0.031	0.035	0.040						
6	0.036	0.042	0.048	0.054	0.060	0.067				
7	0.047	0.055	0.062	0.070	0.077	0.085	0.092	0.100		
8	0.060	0.069	0.079	0.088	0.098	0.108	0.117	0.126	0.136	
9	0.071	0.082	0.093	0.104	0.115	0.125	0.136	0.147	0.158	0.169
10	0.089	0.102	0.116	0.129	0.143	0.156	0.170	0.184	0.197	0.211
11	0.105	0.120	0.136	0.151	0.167	0.183	0.198	0.214	0.229	0.245
12	0.122	0.141	0.159	0.177	0.196	0.214	0.232	0.251	0.269	0.287



Pulpwood Estimation Tally Sheet

Tree Number	Diameter (Inches)	Merchantable Height (Feet)	Volume Cords
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
Total Volume Cords			

Participant Name: _____

Chapter Name: _____ Participant Number _____

SAWTIMBER ESTIMATION FORESTRY CAREER DEVELOPMENT EVENT

Tree Diameter	Gross Volume of Tree, International 1/4 Inch Rule Form Class 78											
	Volume (Board Feet) by Number of Usable 16 Foot Logs											
	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	
10	36	48	59	66	73							
11	46	61	76	88	96							
12	56	74	92	106	120	128	137					
13	67	90	112	130	147	158	168					
14	78	105	132	153	174	187	200					
15	92	124	156	182	206	225	242					
16	106	143	180	210	241	263	285					
17	121	164	206	242	278	304	330					
18	136	184	233	274	314	344	374					
19	154	209	264	311	358	392	427					
20	171	234	296	348	401	440	480	511	542			
21	191	262	332	391	450	496	542	579	616			
22	211	290	368	434	500	552	603	647	691			
23	231	318	404	478	552	608	663	714	766			
24	251	346	441	523	605	664	723	782	840			
25	275	380	484	574	665	732	800	865	930			
26	299	414	528	626	725	801	877	949	1021			
27	323	448	572	680	788	870	952	1032	1111			
28	347	482	616	733	850	938	1027	1114	1201	1280	1358	
29	375	521	667	794	920	1016	1112	1210	1308	1398	1488	
30	403	560	718	854	991	1094	1198	1306	1415	1517	1619	
31	432	602	772	921	1070	1184	1299	1412	1526	1640	1754	
32	462	644	826	988	1149	1274	1400	1518	1637	1762	1888	
33	492	686	880	1053	1226	1360	1495	1622	1750	1888	2026	
34	521	728	934	1119	1304	1447	1590	1727	1864	2014	2163	
35	555	776	998	1196	1394	1548	1702	1851	2000	2156	2312	
36	589	826	1063	1274	1485	1650	1814	1974	2135	2298	2461	
37	622	873	1124	1351	1578	1752	1926	2099	2272	2444	2616	
38	656	921	1186	1428	1670	1854	2038	2224	2410	2590	2771	
39	694	976	1258	1514	1769	1968	2166	2359	2552	2744	2937	
40	731	1030	1329	1598	1868	2081	2294	2494	2693	2898	3103	

Sawtimber Estimation Tally Sheet

Tree Number	Diameter (Inches)	Number Logs	Volume Board Feet
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
Ttl. Volume BdFt.			

Participant Name: _____
 Participant Number: _____
 Chapter: _____

TIMBER MARKING FORESTRY CAREER DEVELOPMENT EVENT

Tree	Leave	Cut	Points Earned
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
Total Points			

Participant _____

Participant Number _____

Chapter _____

TREE IDENTIFICATION FORESTRY CAREER DEVELOPMENT EVENT

- | | |
|------------------------|------------------------|
| _____ American Holly | _____ Persimmon |
| _____ Ash | _____ Post Oak |
| _____ Beech | _____ Red Cedar |
| _____ Birch | _____ Red Maple |
| _____ Black Cherry | _____ Redbud |
| _____ Black Gum | _____ Scarlet Oak |
| _____ Black Locust | _____ Shortleaf Pine |
| _____ Black Oak | _____ Sourwood |
| _____ Black Walnut | _____ Southern Red Oak |
| _____ Chestnut Oak | _____ Sweet Gum |
| _____ Cottonwood | _____ Sycamore |
| _____ Cypress | _____ Tupelo Gum |
| _____ Dogwood | _____ Virginia Pine |
| _____ Elm | _____ Water Oak |
| _____ Hemlock | _____ White Oak |
| _____ Hickory | _____ White Pine |
| _____ Loblolly Pine | _____ Willow Oak |
| _____ Long Leaf Pine | _____ Yellow Poplar |
| _____ Northern Red Oak | |

Participant _____

Participant Number _____

Chapter _____

Total Points Earned _____