

State FFA Forestry Career Development Event

The State FFA Forestry Career Development Event will be conducted for teams of up to four contestants from each participating chapter of whose scores the top **FOUR** will be counted. Participants must come prepared to work outside in adverse weather conditions. They should have **heavy coats**, other warm clothes, **rain gear and footwear**. Contestants are expected to bring their own clipboards, pencils and calculators.

EVENT RULES

1. No team member or team coach shall visit the event facilities to observe plant materials and facilities after May 1. Any team, team member or coach reported and proven to do so will cause the elimination of that team from competing in the State Forestry Career Development event.
2. **Tools and Equipment:** All tools and equipment will be furnished for the event. Participants must use the tools and equipment furnished at the event site.
3. **Written Materials:** All written materials will be furnished for the event. No written materials such as tests, problems and worksheets shall be removed from the event site.

PHASE I: BASIC KNOWLEDGE AND CONCEPTS, GENERAL KNOWLEDGE EXAM (100 POINTS)

Forty-five objective-type multiple-choice questions and five photo or sample identifications of common tree disease/damage agents will be selected from areas of the forestry industry reflected in the event objectives. This phase of the event will test participant's knowledge and understanding of basic principles of forestry.

TIME: Each individual will be allowed 30 minutes to complete this phase of the event.

SCORING: Each answer has a value of two points, for a total maximum score of 100 points.

POSSIBLE TYPES OF TREE DISEASE / DAMAGE AGENTS

Aphid (inc. Adelgid Aphid)
Beetles
Butt or heart rot
Canker
Chemical damage
Cicada
Damping off
Fire damage
Girdling
Gypsy moth
Ice damage
Leaf spot
Lightning damage
Mechanical logging/construction damage
Needle cast
Nematode
Rust
Sawfly
Scale
Spider mite
Spruce budworm
Sunscald
Tent caterpillar
Wetwood or slime slug
Wind damage
Woodborer

PHASE II: TREE IDENTIFICATION (90 POINTS)

Fifteen to twenty five specimens from the following list will be displayed for participants to identify by common names. Each specimen will be designated by a number.

TIME: Each participant will be allowed 30 minutes to complete this phase, or approximately two minutes for each specimen station.

SCORING: Five points will be given for each specimen that is correctly identified.

LIST OF POSSIBLE SPECIMENS

Alder	Quaking Aspen
Apple	Red Cedar
Balsam Fir	Red Maple
Balsam Poplar	Red Oak
Beech	Red Pine
Big Tooth Aspen	Service Berry, Shad Bush
Black Ash	Spruce
Black Walnut	Striped Maple
Box elder/Ashleaf Maple	Sugar Maple
Cherry	Tamarack / Larch
Cottonwood	White Ash
Eastern Hophornbeam	White Birch
Elm	White Oak
Gray Birch	White Pine
Hemlock	Willow
Northern White Cedar	Yellow Birch
Norway Spruce	

PHASE III: EQUIPMENT IDENTIFICATION and MAP INTERPETATION (125 points)

A – Equipment Identification

15 pieces of equipment from the following list will be displayed for participants to identify by technical names. Each piece of equipment, or part referred to, will be designated by number. A model tree stump may also be included from which participants will be expected to identify certain features. (a handy reference for this test is either a Forestry Suppliers or Ben Meadows catalog)

TIME: Each participant will be allowed 15 minutes to complete this portion of the phase III.

SCORING: 5 points for each correct answer - total 75 points.

LIST OF POSSIBLE SPECIMENS

Abney Level	Plant Press
Altimeter	Plastic Flagging
Back Tank Fire Pump	Processor
Bark Gauge	Pulaski Forester Axe
Boom-Delimiter	Pull-Through Delimiter
Brand Hammer	Relaskop
Cable Skidder	Safety Glasses
Canthook	Safety Hard Hat
Chaps	Scale Stick
Clambunk Skidder	Self-Propelled Loader
Clinometer	Slasher
Data Recorder	Soil Sampler
Densimeter	Soil Test Kit (some type)
Diameter Tape	Staff Compass
Dot Grid	Stereoscope
Drip Torch	Survey Instrument
Ear Protectors	(some type)
Feller Forwarder	Tally Book
Fiberglass Measuring Tape	Tally Meter
Fire Rake	Target
Fire-Swatter	Timber Scribe
Fire Weather Kit	Tracked Feller-Buncher
Flow/Current Meter	(Harvester)
Forwarder	Tracked Skidder
Grapple Skidder	Tree Caliper
GPS Receiver	Tree Injector
Hand Compass	Tree Marking Gun
Hand Lens/Field	Tree Planting Hoe or Bar
Hip Chain	Tree Stick
Hypo-Hatchet	Water Sampler
Increment Borer	Water Test Kit
In-Woods Delimiter	Wedge Prism
Jacob Staff	Wheeled Caliper
Knuckle Boom Loader	Wheeled Feller-Buncher
Log rule	(Harvester)
Logger s Tape	Whole Tree Chipper
pH Meter	
Planimeter	

B - MAP INTERPRETATION - TEAM EVENT

1. Participants will be furnished a United States Geological Survey topographical map with specific points marked to be identified. The participant shall know legal description, recognize topographic map symbols, understand the meaning of map symbols and size and location of 40 acres or more in a section. Participants shall also need to be able to refer to map to provide information on distance, direction and/or elevation.
2. Ten points on the map will be clearly marked with a number or arrow pointing to the section, symbol, or area on the map to be identified.
3. Legal descriptions will be written or described according to the following:

NW Northwest
T Township
SE Southeast
R Range
S Section (640)
1/4 Quarter of a section (160acres)

Time: Participants will have 15 minutes to complete this portion of phase III

Scoring: 15 team points will be awarded for each correct answer – total score 150 pts.

PHASE IV: COMPASS PRACTICUM

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 five 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.

Time limit: 30 minutes.

SCORING: 10 points will be awarded (5 for correct distance and 5 for correct direction) for the compass position (50 points total).

PHASE V: CHAINSAW PART IDENTIFICATION

A. Chainsaw Part Identification. Each participant will identify parts of a chainsaw. These parts will be labeled on a saw or will be removed from the saw. Possible parts include (but are not limited to):

- Spark plug
- Throttle
- Throttle safety catch
- Choke
- Chain catcher
- Chain brake
- Bar
- Air filter
- Parts of a saw tooth

TIME: Each participant will be allowed up to 20 minutes to

SCORING: A total of 50 points are possible.