Land Judging CDE

Purpose
The purpose of the Land Judging Career Development Event is to stimulate interest, encourage proficient development and excellence in land management as taught in agricultural education. Students evaluate soil characteristics including texture, slope and drainage and then classify the land in a capacity class. Recommendations for land treatments are made with consideration given to farm, residential and urban uses.

Sponsor
Duke Energy, the Soil Science Society of North Carolina, and MVP Southgate currently sponsor this event.

State Event Superintendent
The superintendent for this event is Dr. Jason Davis, State FFA Coordinator, NCSU, Campus Box 7654, Raleigh, NC 27695 Phone: 919.513.0216 Fax: 919.513.3201 Email: jason_davis@ncsu.edu

Eligibility and General Guidelines
This event is open to all FFA chapters and FFA members in good standing. FFA Members may not participate in a Career Development Event that leads to a state level event after July 1, following their high school/early college graduation. Members winning a previous state event in this area or that have participated in a previous national event in this area are ineligible.

Each chapter may send one team to compete at the state event. **Teams shall consist of three or four members. The top three scores will count towards the team total.** 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 seven 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.

The use or possession of cellular phones 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.
The North Carolina FFA Association, in keeping with the FFA mission and purposes, does not permit the use of tobacco products, e-cigarettes, vapes, or Juuls at any FFA facility or at any FFA activity.

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

*The North Carolina FFA Association strives to promote a positive image at all Official FFA Events. The dress code policy was established to address the issue of appropriate attire at all Official FFA Events. Members should adhere to this policy for all events. A ten percent reduction will be applied to all individual scores from a chapter if a participant from that chapter violates the dress code during that career event.*

**Procedures for Administering the Event**
The *Handbook of Land Judging in North Carolina* contains information and other materials related to the contest.

Procedures for setting up a contest are described in the Appendix of the handbook.

**Scoring and Related Items**
1. All judge cards will be completed by contest officials before the contest begins.
2. The official judge will check to ensure that all official answers conform to the information in the handbook.
3. Land treatments will be scored as follows:
   a. When possible, equal value will be assigned to all applicable treatment (e.g. 5 points each for 6 treatments). When that is not possible, some treatments will be assigned a 1 point higher value than others. The higher values will arbitrarily be assigned in order beginning with the first treatment selected by the judges (e.g. 5 points for the first 2 treatments when there is a total of 7 treatments).
   b. The treatments indicated by the student will be considered until the student has selected a number of treatments equal to the number selected by the judges. Ex: the judges selected 7 treatments, and treatment 20 represents the participant’s 7th selection. No consideration will be given to the marked selections below treatment 20. In cases where the student selects fewer treatments than the judges, all marked treatments will be scored.

**Procedure for Determining the State Event Winner When Scores are Tied**
In the event a tie score exists, apply the following method:
1. Compare the alternate scores. The lowest team member score is the alternate score.
2. If this method fails to break the tie, co-winners will be declared. In the event of a tie that prevents the top five teams, eligible for national competition, to be determined the following procedure will be used to determine the fifth place team. Compare the total team score (including the alternate score) for the sections of the event that carries the highest point value: Soil Characteristics, Recommended land treatments, Urban Uses, Land Capability Class and Special Environmental Concerns. If a tie continues, the fifth place team will be determined by a coin toss between the team advisors.

**Procedure for Determining the State Event Winner When Scores are Tied for Individual Participants**

Ties in scores between individuals will be broken by comparing the scores of the portion/section of the event that carries the highest point value: Soil Characteristics, Recommended Land Treatments, Urban Uses, Land Capability Class and Special Environmental Concerns.

**State Awards**

The awards for the state event will be presented annually on site at the conclusion of the state event to include a team 1st, 2nd and 3rd place plaque and a travel monetary award.

**National Career Development Event Participation**

The top five (5) teams in the state are eligible to participate in the National Land and Range Contest. It is the responsibility of the FFA Chapter Advisor to complete all necessary national certification forms and return them to the State FFA Coordinator by the assigned due date.

**Bibliography**

**PART ONE - SOIL CHARACTERISTICS**
*(Place an X in the proper square)*

<table>
<thead>
<tr>
<th>Texture</th>
<th>Structure</th>
<th>Consistency (Moist)</th>
<th>Consistency (Wet)</th>
<th>Permeability</th>
<th>Depth to Limiting Layer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandy</td>
<td>Single Grain</td>
<td>Loose</td>
<td>Not-Sticky</td>
<td>Rapid</td>
<td>Very Shallow (&lt;12&quot;)</td>
</tr>
<tr>
<td>Loamy</td>
<td>Granular</td>
<td>Fruable</td>
<td>Sticky</td>
<td>Moderate</td>
<td>Shallow (12-24&quot;)</td>
</tr>
<tr>
<td>Clayey</td>
<td>Blocky</td>
<td>Firm</td>
<td>Very Sticky</td>
<td>Slow</td>
<td>Moderately Deep (24-36&quot;)</td>
</tr>
<tr>
<td></td>
<td>Flaty</td>
<td></td>
<td></td>
<td>Very Slow</td>
<td>Deep (&gt;35&quot;)</td>
</tr>
</tbody>
</table>

**The Surface Layer - (Top 6 inches)**

**The Subsurface Layer**

<table>
<thead>
<tr>
<th>Texture</th>
<th>Structure</th>
<th>Consistency (Moist)</th>
<th>Consistency (Wet)</th>
<th>Depth to Limiting Layer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandy</td>
<td>Single Grain</td>
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<tr>
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<tr>
<td></td>
<td>Flaty</td>
<td></td>
<td></td>
<td>Deep (&gt;35&quot;)</td>
</tr>
</tbody>
</table>

**Total Soil Characteristics**

<table>
<thead>
<tr>
<th>Slope</th>
<th>Drainage</th>
<th>Flooding</th>
<th>Surface Water Removal</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2%</td>
<td>Well</td>
<td>No hazard</td>
<td>Rapid</td>
</tr>
<tr>
<td>2-6%</td>
<td>Moderately Well</td>
<td>Potential hazard</td>
<td>Moderate</td>
</tr>
<tr>
<td>6-10%</td>
<td>Somewhat Poorly</td>
<td>In flood plain</td>
<td>Slow</td>
</tr>
<tr>
<td>10-15%</td>
<td>Poorly</td>
<td>Very Poor</td>
<td>Slow</td>
</tr>
<tr>
<td>15-25%</td>
<td>Steep</td>
<td>Very Poor</td>
<td>Very Slow</td>
</tr>
</tbody>
</table>

**Score Part 1**
Max Points = 43

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**PART TWO - LAND CAPABILITY CLASS**
*(Place an X in the proper square)*

| I | II | III | IV | V | VI | VII | VIII |

**Score Part 2**
Max Points = 10

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**PART THREE - RECOMMENDED LAND TREATMENTS**
*(Select treatments and write the number of each treatment in the boxes below, beginning on the left side)*

**Tillage Systems**
1. Conventional tillage, conserve crop residue
2. Conservation tillage, manage crop residue
3. Long-Term No Till

**Conservation Cropping Systems**
4. Row crop each year
5. Soil conserving crop 1 year in 4
6. Soil conserving crop 1 year in 3
7. Soil conserving crop 1 year in 2
8. Soil conserving crop 2 years in 3
9. Soil conserving crop 3 years in 4

**Supporting Practices**
10. Contour farming
11. Strip cropping
12. Terrace and maintain terraces
13. Construct diversion
14. Establish grassed waterway
15. Establish field border
16. Establish windbreak
17. Install water table control
18. Install surface water management
19. Stabilize sediment source areas
20. Establish recommended grass and/or legumes

**Score Part 3**
Max Points = 27

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**PART FOUR - URBAN USES**

The soil characteristics judged in PART ONE determine the limitations of a soil for urban uses. Rate each side as to the soil limitations of slight, moderate and severe for each urban use listed below. *(CHECK APPROPRIATE COLUMN)*

<table>
<thead>
<tr>
<th>Soil Limitations</th>
<th>Septic Systems</th>
<th>Basements</th>
<th>Foundations</th>
<th>Sanitary Landfills</th>
<th>Landscaping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slight</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Moderate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severe</td>
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</tbody>
</table>

**Score Part 4**
Max Points = 15

**Special Environmental Concerns**
*(from back)* Max Points = 5

**TOTAL SCORE**
Max Points = 100
Special Environmental Concerns

Check True or False for each of the following statements:

1. This appears to be a hydric soil. Check with authorities before draining and/or clearing site.
2. Risk of groundwater contamination when wet (from soluble nutrients and/or certain pesticides).
3. Deep leaching of soluble nutrients may restrict rates of animal or municipal waste application.
4. Proximity to water body may restrict application of certain pesticides and waste materials.
5. High risk of off-site damage from eroding sediments if vegetative cover is destroyed or absent.

Special Environmental Concerns Score

Max Points = 5
(Transfer this score to bottom front of scorecard)