

# LAND EVALUATION

## 3 or 4 Team Members

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### I. PURPOSE

It has been said that the soil is our most basic natural resource. Not only agriculture, but all life on earth is dependent upon the wise use of soil. The Land Career Development Event introduces students to factors involved in the stewardship of soil, which include soil texture, permeability, total depth, percent slope, prior erosion loss, and how quickly surface water moves across the landscape. Students use these factors to determine Land Class, and to recommend certain land management and conservation practices to ensure the sustained productivity of agricultural sites.

### II. EVENT FORMAT

#### A. Team Make-up

1. An entry may consist of three or four participants. The three high scores will be tabulated as the team score with the low scorer being considered an alternate.
2. Members of teams competing in the National Event are ineligible for further participation.

#### B. Equipment

1. Transparent plastic clipboards and/or clean manila folders will be allowed. A clear plastic bag may be used to keep materials clean and dry when inclement weather threatens.
2. No books, paper, rulers or other materials are needed or permitted.
3. Pencils and the most current scan sheet must be brought by the contestants.
4. Knives to assist in locating soil horizons are permitted.
5. No cell phones or pagers are allowed.
6. A hand towel or rag may be used for cleaning contestants' hands
7. An additional information sheet will be provided for each field.
8. Individuals wishing to record their answers may do so on the back of the additional information sheet provided at the site.
9. Answer sheets will be provided when the event is over so that the advisors may review the fields with their team.

#### C. Schedule

1. Eligible teams should register for the event on [judgingcard.com](http://judgingcard.com) as soon as possible after spring qualifying events are held.
2. The land event will be conducted concurrently with the range and pasture event. Therefore, it may be necessary to coordinate with other advisors in order to get the students to event sites on time.
3. Check in will begin at 7:30A.M. in the Teaching Pavilion at Tarleton State University
4. Judging should begin at 9:00A.M. (Depending upon travel time to event location)
5. Twenty minutes will be allowed to evaluate each site

#### **D. General Rules**

1. Four different fields will be used and field boundaries will be clearly indicated.
2. The fields to be judged will be selected and scored by experts in Soil Science.
3. Advisors are not permitted to go with participants.
4. A pit will be excavated inside a staked area. The boundaries of the area to be judged will be indicated by four corner stakes flagged in white. Two additional stakes flagged in red and located 100 feet apart will be located inside the area to be judged. Slope judgments should be made on the area between the red flagged stakes. Topsoil and subsoil samples will be labeled for texture and permeability judgments.
5. Land judging consists of two parts: (1) judgment of various land class factors and (2) selection of land treatments.
6. The land class will be determined by characteristics of the soil exposed in the pit and observations of landscape conditions -- slope, gullies, etc. -- inside the staked area.
7. The land treatments will involve three considerations:
  - a. soil characteristics,
  - b. information presented on an "additional information sheet", and
  - c. vegetative conditions inside the staked area.
8. There are a total of 75 points per field in land judging – 45 in Part I and 30 in Part II.

#### **E. Part I-Land Classes (180 points)**

1. All of the factors are worth 4 points each, except for depth of soil which is worth 5 points and the last two, which are worth 8 points each. Credit for major factors will be given only when judgments are 100% correct. For example, no credit will be given for major factors if the student checks 2 correct factors and there are 3 correct factors.
2. The value for each correct judgment will be totaled to give the score for Part 1
3. The judgments in Part 1 are made by inspecting the soil profile, the topsoil and subsoil provided in boxes, and the land area inside the stakes.

#### **F. Part 2- Land Treatments (120 points)**

1. When possible, equal value will be assigned to all treatments (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 and 4 points for the last 5 treatments when there is a total of 7 treatments).
2. 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. Example: The judges selected 7 treatments, and treatment 20 represents the participant's 7th selection. No consideration will be given to marked selections below treatment 20. In cases where the student selects fewer treatments than the judges, all marked treatments will be scored.
3. The point value for each correct treatment eligible for consideration will be totaled to give the score for Part II.

4. The treatments recommended in Part II are selected by considering soil characteristics, vegetative conditions inside the staked area (presence or absence of brush), and information presented on an “additional information sheet”. The format for the additional information sheet is as follows:
  - a. Treatments should be selected by:
    - Soil deficiencies.
    - Do not consider present mechanical practices on the field.
    - Thickness of original topsoil.
    - Size of field.
    - Consider most intensive use of land for treatment purposes.
    - Other conditions.

## I. Scoring

Total Points

Individual.....300

Team .....900

## II. Tiebreakers

A. Ties for Team awards shall be broken as follows:

1. The team with the highest score on Field I, Part I will be the winner. If still tied;
2. The team with the highest score on Field I, Part II will be the winner. If still tied;
3. The team with the highest score on Field II, Part I will be the winner and etc.
4. In the event that's the ties are unbreakable in this manner, the team with the highest alternate score will be the winner.

B. Ties for individual awards will be broken by using the rules above but substituting “individual” wherever “team” occurs

## III. RESOURCES

A. “Oklahoma Land Judging Made Easy”

B. Texas Land Judging Manual by Jesse Tackett and Clyde Stahnke, updated in 2011 by Ernie Eckert, available through IMS.

**Note: If either resources conflict with each other, the Oklahoma Land Judging Made Easy will override the Texas Land Judging Manual.**