

SOIL EVALUATION

PURPOSE

To develop proficiency in the accurate recognition, comparison and evaluation of soil characteristics as they apply to land use and management.

OBJECTIVES

Participants in this career development event will become proficient in the following areas:

1. Be able to accurately identify soil characteristics
2. Understand how soil plays a role in land use and management
3. Understand how soil plays a role in the environment
4. Develop analytical skills in the comparison of different soil samples
5. Develop reasoning skills for effective and accurate evaluation

RULES AND REGULATIONS

1. A chartered FFA chapter may enter 2 teams. Team competition is limited to one four (4) member team with top three (3) scores from each pit used to determine team score. Alternates are permitted and will judge separate from the teams.
2. District competition has no bearing on eligibility for state competition.
3. Three soil pits will be evaluated using the [Oregon Soil Judging Scorecard](#) and the [Interpretation Guide](#).
4. A fourth soil pit will be used by the official judges for orientation and interpretation to local soil conditions only. Practice scorecard will be collected before the CDE begins.
5. No advisors will be allowed in the pits until after all cards have been turned in at the end of the contest, and there would be absolutely no talking between advisors & students until every card has been turned in.
6. Students may bring the following materials:
 - a. Clipboard
 - b. Water bottle
 - c. Cutting tool for selecting soil
 - d. Writing utensil
 - e. Soil Sample holder
7. Rotation Time Management:
 - a. Practice Pit is open a minimum of one hour before the event begins. Divide students into 3 groups.
 - b. Starting at Pit 1: divide the group into two halves (A and B)
 - c. A's get 10 minutes in the pit to begin
 - d. B's get the following 10 minutes (or as soon as the pit clears, whichever is sooner)
 - e. Pit is open for 20 additional minutes
 - f. Rotation is 40 minutes total
 - g. At Pit 2, switch roles between A's and B's
 - h. Schedule may be adjusted by State Staff/Superintendents to accommodate very high or low participation numbers

NATIONAL EVENT

1. National rules allow a state to enter up to five (5) teams in the International Land Pasture and Range Judging Event held each spring.

2. Team members who have previously participated in a national CDE are ineligible to participate at state and national levels as team members.

ALIGNMENT TO AFNR CONTENT STANDARDS & OREGON EMPLOYABILITY SKILLS

- Employability 01. Adhere to workplace practices
- Employability 02. Exhibit personal responsibility and accountability
- Employability 03. Practice cultural competence
- Employability 04. Demonstrate teamwork and conflict resolution
- Employability 05. Communicate clearly and effectively
- Employability 06. Employ critical thinking to solve problems
- Employability 07. Demonstrate creativity and innovative thinking
- Employability 08. Demonstrate fluency in workplace technologies
- Employability 09. Plan, organize, and manage work
- Employability 10. Make informed career decisions
- AGPL01.01.05 Determine the environmental factors that influence and optimize plant growth.
- AGPL01.02.02 Collect and test soil/media and/or plant tissue.
- AGPL01.02.04 Identify soil slope, structure, and type.
- AGPL01.02.05 Evaluate soil/media permeability and water-holding capacity.
- AGPL01.02.06 Determine the chemical properties of soil/media.
- AGPL01.02.07 Determine land use capability.
- AGPL01.03.04 Describe the optimal and allowable characteristics of the growing media for plant growth.
- AGPL01.04.01 Manage water conditions for plant growth.
- AGPL01.04.02 Explain how soil draining and water-holding capacity can be improved.
- AGPL01.04.04 Identify categories of soil water.
- AGPL01.05.03 Describe techniques to reduce soil compaction.