

SOIL AND LAND CAREER DEVELOPMENT EVENT

Purpose

Soil is one of the most, if not most important natural resources of our environment. Soil supports and influences the crops we grow for food and fiber, the water we drink, and the air we breathe. The soils of the world fit for plant growth must sustain all the plants, animals and humans that make the Earth their home. The soil acts as a filter for the water entering the groundwater supply, as well as interacting with or being eroded by the water that flows over the surface. Soil has a direct effect on the air we breathe when it becomes airborne and is evident when dust settles or obscures vision. Soil takes long periods of time to develop but can be destroyed or eroded away in very short periods. It is only through proper stewardship of soil that life on Earth can be sustained and improved.

Objectives

- Enables each participant to learn how to recognize the physical features of the soil.
- Determine land capability for crop production
- Evaluate management practices needed for proper stewardship
- Investigate the soils in the region, the environment that surrounds them and their effect on their daily lives.

General Rules and Regulations

Participants may wear modified official FFA dress for this event (black slacks or jeans for females or black jeans for males and appropriate footwear, appropriate clothing for inclement weather).

Team make-up:

A chapter team will consist of five individuals.

The top three teams from each FFA District will be eligible to participate at the state event.

Format and Scoring:

The Idaho State Soil and Land Evaluation program is a cooperative effort of many individuals and organizations. The program was initiated at Burley in 1971 when Soil Conservation Service soil scientist, Glen Logan, worked with a group of Future Farmers of America at a state event. He also went with them to Oklahoma City and participated in the national event. Since that time the program has grown to include over 500 FFA and 4-H youths competing in regional events throughout Idaho and the state event at Burley, Idaho. Five regional land judging field days and the state event are held during the month of October each year.

What are Land and Home Site Evaluation?

Land and home site evaluation is an event designed to "evaluate" a soil or set of soils. The purpose of land and home site evaluation is to teach participants to recognize soil factors and to assess soil characteristics. This will help the participants to make wise decisions in managing and using soil and land resources. Land evaluation can help participants understand:

1. Basic soil properties.
2. How physical and chemical soil properties affect crop growth.
3. Why various soils respond differently to management practices.
4. The influence of topographic features on soil productivity and conservation.
5. Soil and water conservation practices.
6. How soil properties may be used as a basis for selecting a home site.

How Land Evaluation Works

Land and home site evaluation is a training method similar to livestock evaluation, using classes of "fields" instead of classes of animals. "Fields" are evaluated according to established criteria for their suitability and limitations for various uses. A "field" refers to a plot of land 100 feet square selected from a uniform portion of a farm or other area. Land and home site evaluation consists of four "fields", three for land evaluation and one for home site evaluation. A soil profile is exposed to allow participants to examine soil depth, topsoil depth, and soil structure. Containers with topsoil and subsoil are placed near the profile for determination of texture and permeability. Official scoring of the fields is by qualified scientists. The officials set climatic conditions, soil test information, and other factors such as flooding and water table information that are not obvious. These conditions are given on a placard located at each site.

Awards:

Awards will be presented at an awards ceremony. Awards are presented to teams as well as individuals based upon their rankings.

The agencies and organizations involved in the Idaho Soil and Land Evaluation program include:

- University of Idaho - Department of Plant, Soil and Entomological Sciences (Soil Science Division)—Extension soil specialists and soil scientists coordinate the overall state program, schedule and organize regional events and the state event, provide technical support, and conduct the regional and state events. They maintain the official handbook, *Soil and the Environment, A Land and Homesite Evaluation Handbook and Training Guide* (Bulletin 795).
- Idaho Division of Professional-Technical Education: The Agriculture and Natural Resources Program Manager assists in the development and coordination of the regional and state events. Idaho agricultural science and technology instructors, the University of Idaho Department of Agricultural Education and 4-H Youth Development, and district FFA organizations support the program.

- University of Idaho Cooperative Extension System—County Extension faculty work with FFA and 4-H leaders and members in preparing and participating in the regional and state events.
- U. S. Department of Agriculture, Natural Resources Conservation Service—USDA-NRCS soil scientists and soil conservationists work to organize, provide technical support, and conduct the regional and state events.
- Idaho Association of Soil Conservation Districts— IASCD Auxiliary and individual Soil Conservation Districts each support the program through planning, conducting events and contributing financial resources supporting the events and/or to the Land Judging Endowment. The East and West Cassia Soil Conservation Districts have been the major organizers and sponsors of the state event in Burley for many years.

The Instructional Handbook:
Soil and the Environment, a Land and Homesite Evaluation
Handbook and Training Guide (Bulletin 795)

Copies of the instructional handbook can be ordered from University of Idaho Agricultural Publications, P. O. Box 442240, Moscow, Idaho 83844-2240, phone 208-885-7982. Cost is \$2.50 each, but with orders filled in multiples of ten copies the price is \$1.25 each.

Maynard Fosberg Land Judging Endowment

In 1985 the Maynard Fosberg Land Judging Endowment was established to help support the program financially and provide a scholarship to an incoming freshman in soil science that participated in the Soil and Land Evaluation Program. Partial support for the Soil and Land Evaluation Events comes from the endowment interest. Individuals and organizations make donations to the endowment.