2022 POSTER CONTEST

Healthy Soil: Healthy Life

NACD and NACD Auxiliary Soil Info, Rules, Poster Ideas and Tips





What is Soil Health?

According to United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), soil health, also referred to as soil quality, is defined as the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals and humans.

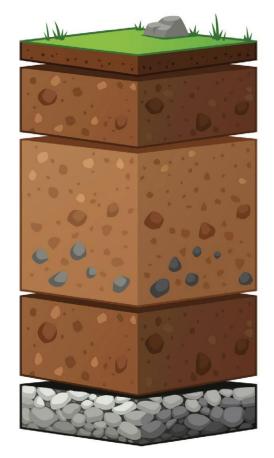




What is soil made up of?

Soil is more than just one layer. It has multiple layers, just like a cake, that are called horizons.

- The **0 Horizon** is a thin top layer of organic material like decomposing plant materials or the remains of animals and feces.
- The **A horizon** is commonly referred to as topsoil. It is usually dark brown in color and rich in nutrients.
- The **B horizon** is often referred to as subsoil. It contains minerals or organic matter that have been carried down from upper horizons by water.
- The **C horizon** is the parent material of the soil composed of broken up bedrock or sediments.
- The **R layer** is the unweathered parent material of the soil.





Soils are Habitats!



Soil provides a habitat for animals. Lots of bugs, worms and other critters live in the soil. Some are so small you need a hand lens to see them. Earthworms living in your yard, garden or farm field are a real good sign that you have healthy soil. They make holes that help water and air get deep into the soil that makes it easier for roots and plants to grow.



How does healthy soil help us have a healthy life?









The food we eat comes from plants and trees that grow in soil. Farmers and ranchers take good care of the soil on their land. Then, healthy soil grows the healthy food we need to have a healthy life.



How Do Farmers Help Soils?

- Planting cover crops. Cover crops are plants that can protect and put nutrients back into the soil, they aren't grown for food.
- Rotating crops. This is when farmers plant different crops on the same patch of land at different times of the year. This keeps soil healthy by ensuring that soils stay nutrient rich, since not all the same nutrients are being used with each crop.
- Keeping soil intact. Tilling is a process that breaks up the soil to make it easier for crops to grow. But, breaking up soils means that they may be washed away by rain or blown away by the wind. Keeping soil intact by having no-till fields keeps soils in place and keeps moisture in the soil.
- Using buffer zones. A buffer zone is an area of vegetation between fields that are used to grow crops. Sometimes they are
 also near streams and lakes. These green spaces can keep soils in place and out of bodies of water.







You Can Also Help Soil by Becoming a Soil Scientist!



If you like science, being outside and exploring the environment, becoming a soil scientist might be the career for you!





What is Soil Science?

Soil science is the study of soils as a natural resource. This includes understanding soil formation, classification, and mapping; learning about the unique properties of soil including their physical, chemical and biological properties and how fertile they are; and understanding how soil can be managed based on these characteristics.





Take Care of Your Soil!

Only about 10% of Earth's land surface has suitable soil for producing our food supply, housing, cities, schools, hospitals, air to breath and more! Our healthy life above ground depends upon healthy soil below our feet! It is vital that we practice good soil conservation.





Help is Here!



"Out of the long list of nature's gifts to man, none is perhaps so utterly essential to human life as soil." — Hugh Hammond Bennett

Your local conservation district is eager to help you care for your soil. Contact them for information at:

https://dlnr.hawaii.gov/swcd/contacts/

WHAT MAKES A GOOD POSTER?

- Attracts attention
- Is simple and concise
- Uses colors and white space effectively
 - Text is large enough to be easily read



When forming ideas for your poster...

- Research the topic of the theme
- Brainstorm ideas and make a list
- Use the theme as your title:

"Healthy Soil: Healthy Life"

- Use some of the important issues from this presentation
- Look around your community for ideas
- Talk to professionals in the industry
- Research soil health and use the information you find



Poster TIPS

Do...

- limit text and balance a combination of illustrations and words.
- be as neat as you can and be sure to erase any penciled sketches or guidelines.
- blend colors when using crayons or colored pencils.
- research the theme topic as a way to brainstorm poster ideas.



Poster TIPS Cont.

Don't...

- use staples, tacks or tape.
- use fluorescent-colored posters.
- create a poster that is all words or all illustrations.
- have your parent or others draw your poster for you to color in.
- try to include too many ideas. A single message clearly illustrated is most effective.



Judging

Judging Criteria	Weight
Conservation Message	50%
Visual Effectiveness	30%
Originality	10%
Universal Appeal	10%

