



The earth is important because it sustains all living things... including us! In the Natural Resources project you can learn more about the web of life and how you can make a difference in the environment. Also, find out how you can obtain a career or hobby as you explore and learn in the great outdoors!



## Exploring 4-H Natural Resources Spark Activity: Soil Your Undies Challenge

How healthy is your soil? Take this challenge to find out! Most soils contain billions of microscopic organisms. A teaspoon of healthy soil contains more microbes than there are people on the planet! Soil microbes feed on organic matter, like cotton underwear. No matter where you live, the quick and dirty way to test your soil health is by “planting” a pair of new, cotton underwear in the ground. Wait at least 60 days, and then dig them back up. The more the underwear are deteriorated, the healthier your soil.

1. Plant a pair of new, cotton underwear horizontally about 3 inches deep in the site you are curious about. Do not forget to mark the spot you planted!
2. Wait at least 60 days. This gives your soil microbes time to do their magic! Then dig the undies back up.
3. Share your results by sending a photo of your “harvest” and a little info about your operation to [orinfo@nrcs.usda.gov](mailto:orinfo@nrcs.usda.gov).

Keep track of the following: underwear planting date, underwear harvest date, burial location description, rainfall during experiment, and any living organisms present when “harvesting” your underwear. Describe your results and what you found!



## 4-H Project Levels and Goals

### Beginner

- Explore natural and man-made environments
- Learn about domestic and wild animals
- Build a miniature ecosystem
- Build an indoor wildlife habitat or insect zoo
- Conduct a splash erosion experiment

### Intermediate

- Make a compost column
- Develop a habitat improvement plan
- Investigate watersheds and share what you learned
- Conduct a soil percolation test

### Advanced

- Conduct a nature hike
- Design a landscape using trees
- Make a video on a natural resources topic
- Interview someone with a natural resources career

## Put Your Project Into Action

### Show Your Skills

- Create a photo collage of natural resources in your neighborhood or community
- Conduct a science experiment about a natural resource (water, soil, etc.) and create a display to share what you've learned with others
- Compare types of natural resources typical in different states in the US or countries in the world

### Service and Leadership

- Clean up your local park
- Plant a tree or native plant
- Remove invasive species
- Create a conservation poster
- Teach a workshop for a county 4-H program
- Teach at local Conservation Days

### Entrepreneurship

- Upcycled product business
- Create and market a compost system
- Develop & design rain barrels

### Technology Connection

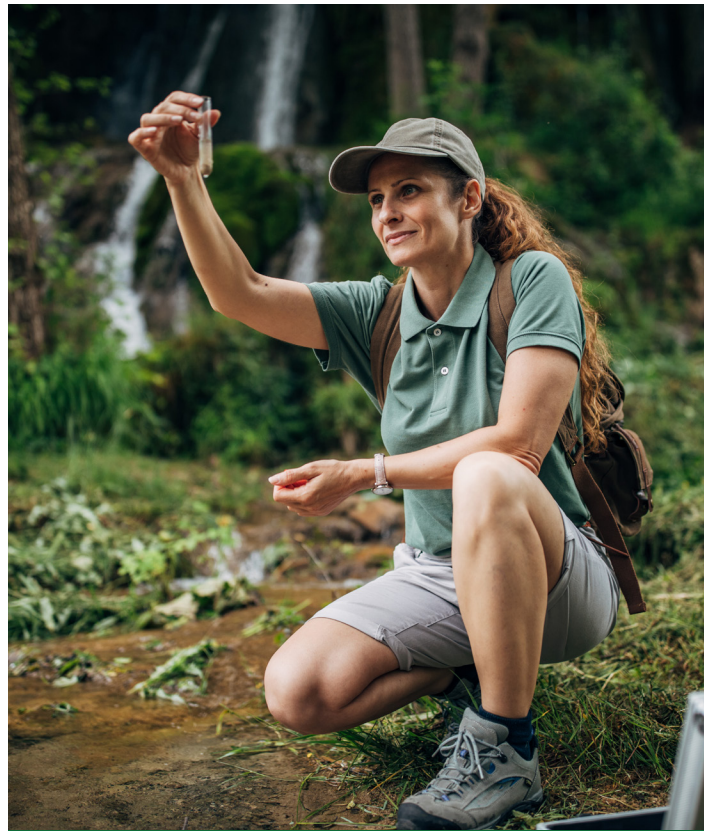
- Create a YouTube video on any natural resource topic
- Develop a social media resource

### Connecting with a Mentor

- University of Illinois Extension
- Soil and Water Conservation District

### Events

- Overnight 4-H camp
- 4-H day camps
- Illini Summer Academies
- Envirothon – sponsored by Soil and Water
- Conservation Days
- Meetings of local outdoor activity clubs such as bird watching, canoeing, or hiking groups.



### Careers Related to Natural Resources

Urban Forester  
Wildlife Manager

Biologist  
Water Resource Engineer

## Start a Conversation

How do you relate to your environment?  
What are examples of different parts of an ecosystem?  
How are careers in Natural Resources essential to our world?

## Want to learn more?

[go.illinois.edu/4Hnaturalresources](https://go.illinois.edu/4Hnaturalresources)

**Explore more at Illinois 4-H!**  
[4-H.extension.illinois.edu](https://4-H.extension.illinois.edu)



**Illinois Extension**

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

College of Agricultural, Consumer and Environmental Sciences

University of Illinois | U.S. Department of Agriculture | Local Extension Councils Cooperating.  
University of Illinois Extension provides equal opportunities in programs and employment.

**Credits:** Step Into Nature – Illinois 4-H Publication | Explore the Natural World – Illinois 4-H Publication | Blaze the World – Illinois 4-H Publication | You're your Undies Challenge- USDA / NRCS | University of Illinois Extension staff that contributed to this resource include Peggy Doty, Jodi Baumgartner, Nicole Groezinger and Curt Sinclair | 4-H Spark Sheets are a collaborative effort of 4-H staff, volunteers, alumni and teens from across Illinois. A big thanks to the many contributors and reviewers!