



ENVIRONMENT AND SUSTAINABILITY PROJECT AREA



Do you want to make the Earth a better place to live? It is all about the environment in this project, whether it's plants, animal habitats, environmental issues, saving energy, renewable resources, or recycling! You pick the topic and then learn to make a difference.

Ideas for Project Area Learning

- Develop an interest and understanding of environmental sciences and sustainable practices and technologies.
- Develop problem-solving and logical reasoning skills, then apply them to environmental issues.
- Improve communication and teamwork skills by working the way scientists and engineers do, in teams.
- Develop responsible attitudes about science and how science relates to the world, people's lives, and the environment we all depend on.
- Develop knowledge and skills related to environmental stewardship.
- Observe the life cycles of animals that interest you.
- Learn about energy cycles.
- Create any collection and learn how to mount it.
- Shadow or interview a local environmentalist.
- Find out about Iowa's energy sources.
- Learn about different species on your vacation.
- Learn about tree diseases.
- Plan and conduct experiments to test ideas.
- Volunteer at an eco-fair for your community.
- Study an environmental issue such as acid rain, global climate change, or soil erosion.
- Conduct a forestry quiz bowl for your community.
- Organize a community service-learning project to weatherize homes.
- Investigate the potential of various energy sources to power Iowa Homes.
- Enter a research project in a science or technology fair.

APPLY WHAT YOU'VE LEARNED

Communication

- Do a presentation on the benefits of wind energy.
- Create a poster of the various trees in Iowa.
- Demonstrate how to collect leaves and plants.

Civic Engagement

- Help at your local park.
- Write a letter to the editor about conservation or environmental issue that concerns you.
- Create a sustainability team to reduce non-recycled products.

Leadership

- Clean up a local pond or lake to help the local fish and wildlife.
- Plan and conduct an energy fair, teaching younger kids about wind and solar biomass and coal energy.
- Organize an environmental club in your community.

Entrepreneurship

- Provide a service to pick up people's compost.
- Write a business plan for starting a landscaping business/planting trees and plants.
- Make and sell products from recycled materials.

Goal Setting and Record Keeping

Goal setting is an ongoing process that guides your project area learning. Having goals is like having a road map to show you how to get you to where you want to go. Record keeping is also an ongoing process and another important life skill. In 4-H, you are encouraged to select from a variety of record keeping formats to meet your own personal needs and your preferred learning style. Keeping records of your learning experiences helps you determine how well you met your goals. Goal setting and record keeping improve your skills in organization, communication, planning, and evaluating.

Iowa 4-H Event Opportunities

- Participate in **county and state fair** exhibit classes.
- Check with your local county 4-H youth development staff to see if there are special events or **workshops in your county** that you want to attend to learn more about your project areas.
- Iowa 4-H members in grades 9–12 can apply for **State Project Area Awards** at State Recognition Day. Applications are open December through January.
- Meet young people from around the state who have completed grades 8–12, and share your interests at the **Iowa 4-H Youth Conference** held at Iowa State University in late June.
- Each March, hundreds of student researchers in grades 6–12 meet with professionals to discuss their findings and compete for scholarships during the **State Science and Technology Fair of Iowa**.

Share Your Learning With an Exhibit

- Develop a presentation or working exhibit that shows how to make a solar oven.
- Do a presentation on how to do a Home Energy Audit.
- Can you identify local trees? Make a poster to help others learn.
- What attracts butterflies to your garden? Find out and share your findings in a video.
- Create a new recipe and illustrate a cookbook about catching and cooking fish.
- Create an original piece of artwork using natural objects. Explain how they are connected.
- Develop a display or notebook on forest diseases.

CAREER CONNECTIONS

- **Conservation biologists** are scientists that study the ecology of organisms and look for ways to preserve species and habitats.
- **Lobbyists** use their knowledge about environmental issues and current policies to educate lawmakers and persuade them to create policies that benefit the environment.
- Engineering is used to help solve problems and conserve resources. For example, a **water resource engineer** develops equipment to conserve water and keep it clean for use.

EDUCATION CONNECTIONS

- Study **conservation biology** if you are interested in learning about living things and what you can do to conserve habitats.
- **Environmental science** is a general category of subjects and sciences that cover how the environment works and how to conserve it.
- Look into **civic engineering** if you want to design solutions to problems like water and energy conservation.
- **Rural sociology** students study human behavior and how rural environments impact people.

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