

# ENVIRONMENT & SUSTAINABILITY



## Step It Up!

Pass it on! Now that you know how, share it with others. Here are ideas to get you started.

### Communication

- Do a presentation on the benefits of wind energy
- Create a "Trees of Iowa" poster
- Demonstrate how to collect and mount insects, leaves, plants, etc.
- Create a blog about an environmental issue
- Create a video on how to weatherize your home

### Citizenship

- Help out at your local park
- Write a letter to the editor about a conservation or environment issue that concerns you
- Create a Sustainability Team to reduce non-recyclable products

### Leadership

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

**4-H**  
GROWING TOGETHER

## Are You Into It?

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, animals, habitats, environmental issues, saving energy, renewable resources, or recycling! You pick the topic and then learn and make a difference. Become active in your community, school, club, and home.

- 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 real world, people's lives, the environment we all depend on.
- Gain experience in problem solving and decision-making using science process skills.
- Develop knowledge and skills related to environmental stewardship.

## Here's what you can do all year!

### Starting Out Basic / Level 1

- Choose an environmental focus (bugs, prairie, energy)
- Observe life cycles of animals that interest you
- Learn about energy cycles
- Create a collection and learn how to mount it (leaves, seeds, insects)
- Shadow or interview a local environmentalist
- Find out about Iowa's energy sources.

### Learning More Intermediate / Level 2

- Learn about different species on your vacation. Record habitat data about them
- Learn about tree diseases
- Plan and conduct experiments to test ideas
- Volunteer at an eco-fair for your community
- Study an environmental issue (acid rain, global climate change, soil erosion)
- Learn how to set up apiaries

### Expanding Horizons Advanced / Level 3

- Conduct a forestry quiz bowl for your community
- Organize a community service learning project to weatherize homes
- Monitor water quality with the IOWATER program
- Investigate the potential of various energy sources to power Iowa homes
- Enter a research project in a science or technology fair



# Take Environment & Sustainability further!

Here are other opportunities to explore the environment and sustainability:

- Contact your county ISU Extension Office for local workshops, activities, and events. <http://www.extension.iastate.edu/content/county-offices>
- Meet others interested in the environment? Check out 4-H camps and the Iowa 4-H Center. <http://www.extension.iastate.edu/4h/camping>
- Study an area of environmental science and enter the State Science + Technology Fair of Iowa. <http://www.sciencefairiowa.org/>
- Is it county fair time? Consider taking an exhibit, a piece of your project learning to the fair for judging and to show off what you have learned. It might get selected to go to the Iowa State Fair. <http://www.extension.iastate.edu/4h/statefair>
- Look for opportunities with your County Conservation Board. [www.mycountyparks.com](http://www.mycountyparks.com)
- Become an "official water quality monitor" by attending an IOWATER workshop with the Iowa DNR. [www.iowadnr.gov/Environment/WaterQuality/WaterMonitoring/IOWATER/WhoWeAre.aspx](http://www.iowadnr.gov/Environment/WaterQuality/WaterMonitoring/IOWATER/WhoWeAre.aspx)
- Attend Iowa 4-H Youth Conference and participate in workshops, motivational speakers and a community service project, bringing ideas back to your community. <http://www.extension.iastate.edu/4h/StateConference/>
- Interested in a college education in the fields related the environment and sustainability? Schedule a visit with Iowa State University to explore those majors. [www.iastate.edu](http://www.iastate.edu)

## Resources

4-H Resources	More Resources	Record Keeping
<ul style="list-style-type: none"> <li>• The Power of the Wind <a href="http://www.4-h.org/resource-library/curriculum/4-h-the-power-of-the-wind/">http://www.4-h.org/resource-library/curriculum/4-h-the-power-of-the-wind/</a></li> <li>• Exploring Your Environment <a href="http://www.4-h.org/resource-library/curriculum/4-h-exploring-your-environment/">http://www.4-h.org/resource-library/curriculum/4-h-exploring-your-environment/</a></li> <li>• Fishing <a href="http://www.4hfishing.org/">http://www.4hfishing.org/</a></li> <li>• Forestry <a href="http://new.4-hcurriculum.org/projects/forestry">http://new.4-hcurriculum.org/projects/forestry</a></li> <li>• There's No New Water <a href="http://www.4-h.org/resource-library/curriculum/4-h-theres-no-new-water/">http://www.4-h.org/resource-library/curriculum/4-h-theres-no-new-water/</a></li> <li>• Project Butterfly Wings <a href="https://www.flmnh.ufl.edu/wings/">https://www.flmnh.ufl.edu/wings/</a></li> <li>• Entomology <a href="http://www.4-h.org/resource-library/curriculum/4-h-teaming-with-insects/">http://www.4-h.org/resource-library/curriculum/4-h-teaming-with-insects/</a></li> </ul>	<ul style="list-style-type: none"> <li>• 4-H2Online <a href="http://www.4-h.org/youth-development-programs/4-h-science-programs/environmental-science-alternative-energy/4h2online/">www.4-h.org/youth-development-programs/4-h-science-programs/environmental-science-alternative-energy/4h2online/</a></li> <li>• National Youth Science Day Activities <a href="http://www.4-h.org/4-h-national-youth-science-day/past-experiments-archives/">www.4-h.org/4-h-national-youth-science-day/past-experiments-archives/</a></li> <li>• 4H Making an Entomology Exhibit <a href="http://www.extension.iastate.edu/sites/www.extension.iastate.edu/files/4h/4H422.pdf">www.extension.iastate.edu/sites/www.extension.iastate.edu/files/4h/4H422.pdf</a></li> <li>• Department of Energy <a href="http://www.eia.gov/kids">www.eia.gov/kids</a></li> <li>• Wind Energy Science Education <a href="http://www.kidwind.org">www.kidwind.org</a></li> <li>• National Wildlife Federation <a href="http://www.nwf.org/">www.nwf.org/</a></li> <li>• Water Rocks! <a href="http://www.waterrocks.org">www.waterrocks.org</a></li> </ul>	<p>Find all your record keeping tools at: <a href="http://www.extension.iastate.edu/4h/page/record-keeping">http://www.extension.iastate.edu/4h/page/record-keeping</a></p> <ul style="list-style-type: none"> <li>• 4-H Yearly Summary (4H 0096)</li> <li>• Basic 4-H Project Record (4H 0096A)</li> <li>• Experienced 4-H Project Record (4H 0096B)</li> <li>• Advanced 4-H Project Record (4H 0096C)</li> <li>• Recordkeeping Self-Evaluation (4H 98, PDF)</li> </ul>

## Exhibit Ideas

- 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.
- How has Iowa's wildlife changed through the years? Create a timeline with visuals of significant events.
- Create a survey on what other youth think and feel about today's environmental issues. Tweet your friends and keep a tally. Report out through a poster, video, etc.
- Create a video on pros and cons of sun, wind, nuclear, coal power.
- Develop a workshop that shows others how to be good environmental stewards.
- Create a new recipe. Write and illustrate a cookbook about catching and cooking fish.
- Create an original piece of artwork using natural objects. Explain how the objects are connected.
- Develop a display or notebook on forest diseases.

IOWA STATE UNIVERSITY  
Extension and Outreach

**4-H**  
GROWING TOGETHER

\*For more information or to obtain project materials contact your county ISU Extension Office or go to:  
[www.extension.iastate.edu/4h/projects/environment](http://www.extension.iastate.edu/4h/projects/environment)