



4-H Agriculture and Natural Resources Materials for Educators

Most of the following are available from each county Extension office or can be ordered online at <https://www.extension.iastate.edu/store/>.

4-H Project Materials

These materials are designed for youth and their project leader/teacher in a club setting.

Youth can explore animal feeding, care, selection, and judging, fitting and showing, management, health, reproduction, genetics, and a variety of other related topics through these project guides. The 40 page Group Activity Guides are for older youth, teacher, and project leaders and include ready-to-use activities. Level 1 is designed for 9 to 11 year olds; Level 2 is for 12 to 14 year olds; and Level 3 is for 15 to 18 year olds.

Animal Science

Beef

- Bite Into Beef, Level 1, 4H 252A
- Here's the Beef, Level 2, 4H 252B
- Leading the Charge, Level 3, 4H 252C
- Beef Helper's Guide, 4H 252 LDR

Dairy

- Cowabunga!, Level 1, 4H 398A
- Moooving Ahead, Level 2, 4H 398B
- Leading the Way, Level 3, 4H 398C
- Dairy Helper's Guide, 4H 398 LDR

Goat

- Getting Your Goat, Level 1, 4H 396A
- Stepping Out, Level 2, 4H 396B
- Showing the Way, Level 3, 4H 396C
- Goat Helper's Guide, 4H 396 LDR

Horse

- Head, Heart, & Hooves, Level 2 (1), 4H 510A
- Stable Relationships, Level 3 (2), 4H 510B
- Riding the Range, Level 4 (3), 4H 510C
- Horse Helper's Guide, 4H 510 LDR

Poultry

- Scratching the Surface, Level 1, 4H 656A
- Testing Your Wings, Level 2, 4H 656B
- Flocking Together, Level 3, 4H 656C
- Poultry Helper's Guide, 4H 656 LDR

Rabbit

- What's Hoppening? Level 1, 4H 663A
- Making Tracks, Level 2, 4H 663B
- All Ears! Rabbit Level 3, 4H 663C
- Rabbits Helper's Guide, 4H 663 LDR

Sheep

Rams, Lambs & You, Level 1, 4H 703A
Shear Delight, Level 2, 4H 703B
Leading the Flock, Level 3, 4H 703C
Sheep Helper's Guide, 4H 703 LDR

Swine

Squeal Appeal, Level 1, 4H 721A
Hamming It Up, Level 2, 4H 721B
Going Whole Hog, Level 3, 4H 721C
Swine Helpers Guide, 4H 721 LDR

Entomology

Bug Watcher, Level 1, 4H 423A
Boys and girls, ages 9-11, can learn about insects—parts, growth, environment; observing, attracting and capturing insects; and discovering bees.

What's Bugging You? Level 2, 4H 423B
Youth expand their knowledge of entomology through a series of activities. Examples include: recognizing insects used in advertising and creating products, designing insects, investigating careers in entomology, reading insect control labels, examining and insect's environment, testing what types of sugar bees like.

Dragons, Houses and Other Flies, Level 3, 4H 423C
Entomology Helper's Guide, 4H 423 LDR
This includes information on teaching life skills through learning about insects. Activities include working together as a team to move like an insect. Conducting jumping contests, and investigating insect distribution patterns in neighborhoods.

Gardening

See Them Sprout, Level 1, 4H 465A
Let's Get Growing—Vegetable Garden, Level 2, Grades 6-7, 4H 465B
Take Your Pick—Vegetable Garden, Level 3, Grades 8-10, 4H 465C
Vegetable Garden Helper's Guide, 4H 465 LDR
Youth in grades 4-12 can learn to plan, plant, care for, harvest, and store garden produce. While watching it grow, they can learn different aspects of the garden including horticulture careers. The Helper's Guide includes additional background information, tables, group activities and solutions to questions posed in the youth manuals.

Plant Science

Ears to You—Plant Science Project Guide, 4H 220
Exploring the World of Plants and Soils, Unit I, 4H 222A
Exploring the World of Plants and Soils, Unit II, 4H 222B
Exploring Plants and Soils, Leader's Guide, 4H 222 LDR

Sportfishing

4H Fish Iowa Responsible Angling Guide, 4H 335
Learn how to fish! Written for youth and families. Teachers who want information on Iowa fishing will find this a great resource.

Take the Bait, Level 1, 4H 337A
Reel in the Fun, Level 2, 4H 337B
Cast Into the Future, Level 3, 4H 337C
Sportfishing Helper's Guide, 4H 337 LDR

Veterinary Science

From Airedales to Zebras, Level 1, 4H 760A
All Systems Go! Level 2, Grades 6-8, 4H 760B
On the Cutting Edge, Level 3, Grades 9-12, 4H 760C
Veterinary Science Helper's Guide, Grades 3-12, 4H 760 LDR

Materials Written for Teachers/Leaders

K-3 Grades

Clover Kids (Ohio)

Cloverbud Curriculum for use with Clover Kids, 4H 900

Clover Kids Leader Guide—Working with K-3rd Grade Youth, 4H 900 LDR

This K-3 curriculum includes an agriculture/environment unit with weather fun, nature fun, five senses, healthy choices, problem pollution, reuse/recycle. Each topic includes several ready-to-use activities.

Gifts of Gold, 4H 901, set of 3 books: Seeds, Stalks & Science; Food, Family & Fun; Harvest, Husks & Harmony (included are 4H 901 BOOK and 4H 901 TAPE)

This K-3 curriculum sows the seeds of history, science, culture, crafts and nutrition through learning about corn. Each of the lessons includes activities about people, foods, science, songs and stories. Three lesson books, Corn is Maize book, and Gifts of Gold in Song audio tape.

Growing in the Garden, 4H 905A, free with training

This K-3 classroom curriculum grows curiosity to experience and learn more about agriculture, natural resources, food, and people. Standards and benchmarks from several Iowa schools were used to develop 10 lessons per grade in science, social studies, history, language arts, health, music, and art. Students have fun doing hands-on activities while they develop life skills such as learning to learn, critical thinking, responsibility, communication, and healthy life-style choices. The curriculum, activity sheets, USDA Food Guide Pyramid for Youth, Getting Started gardening guide, several children's books, and two musical cassettes are free to those teachers participating in training conducted by ISU specialists. Available through training. Call Janet Anderson at 515-292-9638 or 515-450-4973 or e-mail at janeta@iastate.edu.

4th-8th Grades

Energizing Your Future with Energy, Economics and the Environment, 4H 325

This leader's guide will help youth age 5 and up learn about the interactions among energy, economics, and the environment. The activities explore energy and energy sources then translate energy use into dollars and "sense". The intent is to encourage youth to become environmental stewards.

Project NEW—Nature, Energy, Water (130180)

Project NEW is an environmental/conservation education resource for teachers and youth in grades 4-9. Developed by AEA-11 and ISU Extension 4-H, this resource contains a CD ROM complete with information and activities on Iowa's habitats, energy, and water resources. It contains photos from some of Iowa's most well-known photographers and video clips. Each module also contains a set of written activities that enable the student to access the information individually and as a group. A teacher's guide is included. Order from Media Services, Heartland AEA-11, 6500 Corporate Dr, Johnston IA 50131; <http://www.aea11.k12.ia.us/>; 800-632-2720.

Birds, Beasts, Bugs & Us: Activities for environmental education, 4H 808B

Building bird nests, taking a long 10 yard hike, adopting a tree, capturing spiders and webs, and freeing imagination by watching the stars are just a few example of the dozens of activities designed to help students understand and appreciate their environment.

Check Your Library or order online at <https://www.extension.iastate.edu/store/>.

The following booklets were designed to give teacher background information on Iowa's Natural Resources. Every school and public library have been sent a set. If you need copies, contact ISU Extension Education Distribution Center (EDC).

Iowa Environmental Issues Series

- IAN 101 Iowa Habitat Loss and Disappearing Wildlife
- IAN 102 Iowa Air Pollution
- IAN 103 Iowa Water Pollution
- IAN 104 Agriculture Practices and the Environment
- IAN 105 People, Communities, and Their Iowa Environment
- IAN 106 Energy In Iowa
- IAN 107 Iowa Waste Management

Iowa's Biological Communities

- IAN 201 Iowa's Biological Communities
- IAN 202 Iowa Woodlands
- IAN 203 Iowa Prairies
- IAN 204 Iowa Wetlands
- IAN 205 Iowa Waterways

Iowa Plant Series

- IAN 301 Iowa's Spring Wildflowers
- IAN 302 Iowa's Summer and Fall Wildflowers
- IAN 303 Benefits and Dangers of Iowa Plants
- IAN 304 Iowa's Trees
- IAN 305 Seeds, Nuts and Fruits of Iowa Plants
- IAN 306 Iowa's Mushrooms and Nonflowering Plants
- IAN 307 Iowa's Shrubs and Trees

Iowa Wildlife and People Series

- IAN 401 Iowa Wildlife Management
- IAN 402 Keeping Iowa Wildlife Wild
- IAN 403 Misconceptions about Iowa Wildlife
- IAN 404 State Symbols of Iowa
- IAN 405 Iowa Food Webs and Other Interrelationships
- IAN 406 Natural Cycles in Iowa
- IAN 407 Iowa Biodiversity
- IAN 408 Adapting to Iowa

Iowa Natural Heritage Series

- IAN 501 Changing Land-Use and Values
- IAN 502 Iowa Important Conservationists
- IAN 503 Iowa's Environmental Laws
- IAN 504 Conservation Careers

Iowa Wildlife Series

- IAN 601 Iowa Mammals
- IAN 602 Iowa Winter Birds
- IAN 603 Iowa Nesting Birds
- IAN 604 Iowa Reptiles and Amphibians
- IAN 605 Iowa Fish
- IAN 606 Iowa Insects and Other Invertebrates

Iowa Physical Environment Science Series

- IAN 701 Iowa Weather
- IAN 702 Iowa Geology & Fossils
- IAN 703 Iowa Soils

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