# SECTION 16 – ENVIRONMENTAL EDUCATION

## Project Records are required for Youth Building entries.

A General Project Record or Cloverbud Project Record, plus an Exhibit Tag, must accompany each exhibit entered in the Youth Building. Copies of the General Project Record, Cloverbud Project Record, and Exhibit Tag can be obtained by contacting Cornell Cooperative Extension or by picking up copies at the Hamden office.

#### **GENERAL GUIDELINES**

All exhibits in the Environmental Education section must include, in addition to the completed Exhibitor Entry Card and Project Record, a Project Story (essay) on a separate sheet of paper, detailing: why you found your project interesting, its relevance to natural resources and or environmental education, information and lessons you learned, and how the project might be used to help others learn about or appreciate the natural world.

The length and detail of the essay should be appropriate for the exhibitor's age and level of familiarity with the project area. Critical, reflective thought is encouraged. Some projects directly relate to environmental education (Example: they can be used to teach others about important environmental phenomena), other projects relate indirectly to environmental education by helping the exhibitor, through production of the exhibit to learn for himself or herself a meaningful lesson about the environment. These lessons can then change the way the exhibitor views and interacts with the natural world. Whether through direct or indirect connection to environmental education, the exhibitor must explain in his or her essay how the project helped him or her to think and act differently to the natural world and or communicate differently with the others about the natural world.

For example, if the exhibit is a bluebird box, the essay may include an explanation of: why you chose the project, what made it interesting, what about the box makes it a good home for bluebirds, observations or plans you have to learn about the bluebird behavior, why should people use bluebird boxes, how this project relates to the environment or natural resources, and what you learned while doing the project. You might also include how the project will be used to help others learn about or appreciate bluebirds and the habitat in which they live. If the project story does not accompany the exhibit, the exhibit will not receive a maximum grade.

Exhibits showing processes, products, skill development, and relevance to environmental or natural resource issues are strongly encouraged. Overly simplistic or non-interpretive exhibits will receive less recognition.

Exhibits will be evaluated on the basis of their content, quality of expression and presentation. Creativity is encouraged as is display of materials showing observational skills (Example: journals or sketchbooks). Age, experience and standards listed in appropriate 4-H publications will be included in the judging criteria.

4-H publications are available through the Cornell Cooperative Extension's Department of Natural Resources by calling 607-254-6556 or visiting their website at cce-nat-res@cornell.edu.

## **ENVIRONMENTAL EDUCATION CLASS NUMBERS**

#### 2201 Nature Trails

Example: Display of 4-H constructed nature trail or observation made along another nature trail.

#### 2202 Geology

Simple collections must include the specimen's names, dates of collection, specific sites of collection (distance and direction of nearest town, county, state or province) and collector's name for fifteen specimens. Inclusion of field journals is strongly encouraged, and identification criteria must be completely and clearly defined. Exhibits showing evolutionary histories, adaptations of fossil organisms, vertical or horizontal studies of strata, or similar studies are encouraged.

### 2203 Field Identification Projects

Please Note: Wildflowers are evaluated in Horticulture, Section 21; Fungi in Vegetable, Section 15; and Insects in Entomology, Section 16.

Collections of preserved specimens, photographs or sketches properly labeled and showing identification criteria may be displayed for any habitat in New York. Consult your local Department of Environmental Conservation for guidelines and permission in collecting specimens from the wild. Consult *Field Guides Made Easy* for additional activities and ideas.

#### 2204 County or Self-Initiated Projects that Relate to Environmental Education

Examples include but are not limited to interpretation of aerial photographs; vegetation maps, plant adaptations; demonstrations of ecological principles, or computer models like GIS. Transfer of display ideas and concepts from other project areas is encouraged.

### FISHERIES & AQUATIC RESOURCE CLASS NUMBERS

### 2206 Fisheries and Aquatic Resources

Exhibits may be displays or records of any Fisheries and Aquatic Resources. Related activities include but are limited to fishing techniques, aquatic sampling methods, aquatic insect ecology, habitat improvement of fisheries management and biology.

### 2207 Water Monitoring

Project ideas may be found in Water Worlds, Water Wise, and Pond and Stream Safari.

County or self-initiated projects related to fish or fishing, including mariculture, aquaculture, commercial fisheries, sport fisheries or related equipment, skills or observations.

#### 2208 Forestry

Displays and presentations may be based upon, but are not limited to, the following projects:

Know Your Trees, Timber Management for Small Woodlands, Wildlife and Timber from Private Lands, A Landowners Guide to Planning, Woods of New York Trees, Dead or Alive, Know Your Trees Diseases, Maple Syrup Production for the Beginner, and other forestry exhibits based upon natural, regional, county or self-initiated projects.

### **ENVIRONMENTAL EDUCATION CLASS NUMBERS**

### 2210 Shooting Sports

Any exhibit or record based upon content of the New York State Shooting Sports programs or any of the New York State Department of Environmental Conservation certification programs.

### 2211 Other Outdoor Recreation

Exhibits based upon related outdoor recreation activities (Example: orienteering, cross country skiing, snowshoeing, wilderness camping, or outdoor cookery.

# WILDLIFE CLASS NUMBERS

### 2215 Bird Study

Consult *Bluebirds of New York, Birds of Prey, Introduction to Bird Study,* or any other bird materials for exhibit ideas. Bluebird houses will be judged using the criteria from *Bluebirds of New York*.

Please Note: If a birdhouse is completed as a Wood Science Project, it should be entered in the Science, Technology and Engineering section.

#### 2216 Habitat Improvement

Consult Wildlife Habitat Enhancement, Enhancement of Wildlife on Private Land, or Managing Small Woodlots for Wildlife for exhibit ideas.

### 2217 Trapping Furbearers

Exhibits based upon the New York State Department of Environmental Conservation Trapper Training Program are acceptable, as are displays of equipment, pelt preparation, and discussions of the role of trapping in wildlife management.

## 2218 Other Wildlife Projects

Exhibits based upon New York's wildlife resources, *Environmental Awareness: Wildlife, Managing Small Woodlots for Wildlife, Wildlife Discovery, New York's Wildlife Resources* (fact sheets), and *Wildlife in Today's Landscapes*. County projects or self-initiated projects are acceptable.

### REUSE and RECYCLING CLASS NUMBERS

### 2220 Exhibits Based on Recycling or Composting Projects in the Home or Community

### 2221 Clothing, Crafts and Other Items Created Using Post-Consumer Waste Materials

It is particularly important that detailed essays accompany exhibits in this class. The essays should explain why particular materials were chosen and how the exhibit relates to environmental education. Many materials can be reused, why is this exhibit particularly useful (Example: in terms of serving a functional purpose) or beneficial (Example: making use of resources that would otherwise harm the environment)? The exhibitor must reflect, in his or her essay, on how the project has led his or her thinking about use of natural resources to evolve and or how the project can be used to help others understand the importance of re-purposing post-consumer materials. Creativity is highly encouraged in this class. Consult *Composting: Wastes to Resources, Wastewise, Woodsy's Resource Goldmine, Recycling in Your School Makes Good Sense*, or *Recycling: Mining Resources from Trash or Composting in the Classroom* for exhibit ideas.

#### 2222 Environmental Education Open Class

This class is an option for exhibits deemed by the County to be worthwhile, but which fall outside the categories described above. The decision to bring such exhibits is left to the discretion of the Extension Educator. This class is also expected to follow the project essay requirement listed at the beginning of this section.