

Insectaganza of Excitement

Supporting School-Age Accreditation and Quality Programming

Entomology, or the study of insects, is a great way to get science activities into the School-Age program. *4-H Insectaganza of Excitement* guides are full of long-term activities that encourage higher level thinking skills. The activities are easy to understand, with everything needed (materials and supplies) stated at the beginning of the manuals.

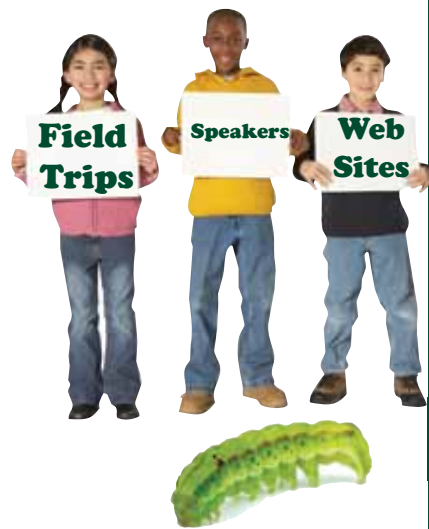


Essential Elements of 4-H Youth Development

Youth involved in 4-H know they are cared about and feel a sense of **BELONGING**; they exercise **INDEPENDENCE** by using decision-making and action to influence people and events; they develop a sense of **MASTERY** by learning skills needed in making positive career and life choices; and they experience **GENEROSITY** by helping others through community service. These elements support the Army Youth Development Components of Belonging, Success, Service and Independence.

Ideas! Ideas! Ideas!

Brainstorming with children, youth and parents is a great way to generate a list of ideas for field trips, speakers, and websites. If you need a few ideas to get started, here are some examples:



- Visit a butterfly house at the local zoo.
- Invite a beekeeper to talk about the honey industry.
- Have an entomologist talk about careers.
- Invite someone from the Department of Natural Resources to talk about insects and the environment.

Opportunities for Youth Leadership and Development and Cross-age Teaching

Learning about insects is a great way for youth to take charge! As they become proficient in a skill they can share it with other youth. Older children and youth can help with a “bug club” or mentor someone who is new to entomology. They can set up insect skillathons or scavenger hunts for younger children or less experienced entomologists.

Providing Quality Middle School and Teen Programming

By putting a unique twist on the *Insectaganza of Excitement* project, such as Freaky Friday or Mad Scientist theme, Middle School and Teen members will enjoy learning about entomology. Choose activities where teens can work together and they are engaged in higher level thinking projects.



Summary

4-H Insectaganza of Excitement offers children and youth a special way to discover the world around them. All the adult leader needs is an interest in entomology and a willingness to share with young people. By talking about what they have learned, 4-H members will extend their entomology skills and develop their ability to think critically about their experiences.

THE Army 4-H EXPRESS GUIDE TO

Insectaganza of Excitement

Insects, the largest group of animals on earth! There are more kinds of insects than all other animal life combined. They live on the earth’s surface, in the soil, in water, and are at home in deserts, rain forests, hot springs, snow fields and dark caves. *Insectaganza of Excitement* helps youth investigate these creepy crawlies.



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Project Goals

4-H *Insectaganza of Excitement* helps youth discover ways to learn about insects, their behavior, and their life history. The series includes three youth guides and a helper's guide.

Four Fun Activities

1 In **Creepy Crawlies, Pit Stop**, pages 10 -11, be a hunter of small game – insects! Some insects are caught with an insect net while others are attracted to lights or traps. Try different baits such as fruit, meat and bread.

3 Scientists design experiments to answer questions. **What's Bugging You?, How Sweet It Is**, pages 18-19, helps youth conduct an experiment to see whether insects like bees prefer drinks with artificial sweeteners or drinks with regular sugar.

2 **What's Bugging You?, Designer Bugs**, pages 10-11, encourages creativity by providing the opportunity to become an insect designer. Considering insect's habitat, how they move and what they will eat will help youth create a one-of-a-kind new insect.

4 Attract butterflies by providing a place for them to feed – a butterfly garden. **Dragon, Houses and Other Flies, Planting for Butterflies**, pages 18-19, gives youth ideas on where and how to attract butterflies and other insects.



Experiential Learning

Experiential Learning engages children and youth while they learn, share, and grow through their 4-H experiences. With an adult as the coach, the first step is “doing” or exploring. Next, youth share what they did and discuss the experience with their peers. After they've identified the skills and knowledge gained, help them determine how to apply these to other situations in their lives. Each activity in *Insectaganza of Excitement* includes questions to generate discussions around the Experiential Learning Model.



Project Activity Guides and Target Age Groups

Creepy Crawlies - Level 1 for ages 8-10 explores where to look for insects, how to identify and classify them and finally how to make an insect collection.

What's Bugging You? - Level 2 teaches ages 11-13 how to identify insects to order, complete a collection table, plan a collection trip, rear mealworms, explore insect legs and collect insects with an extractor.

Dragons, Houses, and Other Flies - Level 3 designed for ages 14-18 teaches how to keep an insect journal, determine the effect of food on mealworm larvae production, test ant food preferences, conduct honey bee learning experiments, organize an insect club, use an insect key, plan a butterfly garden, and record insect observations.

Entomology Group Helper's Guide provides ideas to support the three youth guides as well as extra activities children and youth will find fun and educational.

Life Skills

“Skills that help an individual to be successful in living a productive and satisfying life” are identified as Life Skills (Hendricks, 1996). The skills that can be developed in this project include communication, leading, learning, critical thinking, planning, keeping records, and building self-esteem. Only one life skill is targeted for each activity but in each one youth will have the opportunity to practice several skills.

Related 4-H Projects

There are many 4-H projects that are related to *4-H Insectaganza of Excitement*. *Environment Science* can go hand-in-hand with entomology exploring questions like: What happens if there is an abundance of water? What kinds of insects are attracted to water? What if waste is not disposed of properly? How can waste attract bugs? What is the outcome of bees that are losing their sense of direction? *Fantastic Foods* can study what happens when food is not disposed of properly, or countries that eat insects. **Entomology Group Helper's Guide**, page 35, provides a list of project meeting ideas related to other project topics.

Community Service/Service Learning Opportunities

There are many opportunities for community service with *Insectaganza of Excitement*. One activity, **Entomology Group Helpers Guide, Malaria or 'Bad Air'**, pages 10-11, focuses on how mosquitoes spread malaria. After learning about how rapidly insect carried diseases can spread, children and youth may want to provide mosquito netting for children in Africa to help prevent the spread of disease. Check out the UNICEF Malaria Net Project or Roll Back Malaria <http://www.rollbackmalaria.org/>.

Many states have community service projects related to insects like the Michigan Emerald Ash Borer Eradication Project where children and youth can get involved to wipe out the emerald ash borer or the effort to eradicate Purple Loosestrife. Want to know more? Contact the local Cooperative Extension Office to see what the project group can do.

Linking to the Army's Four Service Areas and Baseline Programming

Sports, Fitness and Health Options

One of the great things about *4-H Insectaganza of Excitement* is that youth can be outdoors and moving about to see insects in their natural habitat. Use **Creepy Crawlies, Insect Olympics**, pages 32-33, as a guide to create a fitness event based on insect movements.

Arts, Recreation and Leisure Activities

Collecting and displaying insects certainly is a part of this Service Area. **What's Bugging You?, Sights and Sounds**, page 7, is a good way to connect this project to art as it explores how cultures throughout the centuries have used insects as an art form.

Life Skills, Citizenship, and Leadership Opportunities

The **Helper's Guide** provides a list of all the life skills that can be learned through this project. **What's Bugging You?, Ready, Set GOal!**, page 3, helps youth set leadership goals and provides suggestions for strengthening leadership skills.

Academic Support, Mentoring, and Intervention Services

Learning about insects is fun, exciting and a great way to learn more about the scientific method used in school. **Dragons, Houses and Other Flies, Using the Scientific Method**, page 6-7, helps youth use this method of discovery to learn about insects.

Character Connection

Character counts all the time. This project allows for important discussions about being Respectful of the environment, including insects, and being Responsible for promoting and practicing the humane treatment of animals.

Additional character resources can be found at: www.4-hmilitarypartnerships.org.

Integrating Technology

Use technology to create an insect using a free-hand drawing program or use the Internet to find pictures that can help children and youth identify and order their insects. Children and youth who wish to photograph insects instead of collecting them can use technology to download and categorize their photos.

Here are a few websites with additional information about 4-H entomology. Try a Google search for a state by searching for 4-H entomology (state name).

- <http://www.utextension.utk.edu/4h/projects/entomology.htm> (Tennessee)
- http://entnemdept.ufl.edu/bug_club/ (Florida)
- <http://4h.uwex.edu/onlinpro/entomology.cfm> (Wisconsin)
- <http://mo4h.missouri.edu/projects/projects2.htm#Entomology> (Missouri)
- <http://insects.tamu.edu/youth/4h/index.html> (Texas)