

# Project Butterfly Wings

## Supporting School-Age Accreditation and Quality Programming


This project is designed for older school-age youth who often need more challenging programs to retain their interest. Long term projects support accreditation efforts.

## 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!

 Guest Speakers: Butterfly expert, teacher, naturalist, someone with a butterfly garden, nursery person, Field Trips: Butterfly garden, botanical garden, nature center, garden club meeting, county extension office, zoo, native plant nursery.

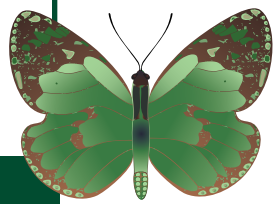
## Opportunities for Youth Leadership and Development and Cross-age Teaching

At least seven of the activities in *Project Butterfly Wings* are designed to be done as a group and provide occasions for leadership development. Youth will learn a lot from participating in this project and the information gained will be good to share with others. See **Group Activity G, Leader Guide, page 66** for suggestions on public speaking and other presentations.

## Summary

Through butterfly exploration this curriculum fosters interest, understanding and long term involvement in science through authentic experiential learning and joint research with scientists. The project promotes the survival of butterflies and the expansion of their habitat through service-learning and ecological understanding.

## Providing Quality Middle School and Teen Programming



This project is an example of quality School-Age and Middle School programming. It is designed to be a long term program with age appropriate hands-on learning activities in the arts and sciences. Youth have opportunities for decision making and active participation throughout.



# THE Army 4-H EXPRESS GUIDE TO

## Project Butterfly Wings

Butterflies are both beautiful and fascinating; they are an introduction to the natural world and an invitation to the realm of insects. Welcome to *Project Butterfly Wings, Winning Investigative Network for Great Science.*



# Project Butterfly Wings



## Project Goals

In *Project Butterfly Wings* youth learn about butterflies, their role in the environment, and our connection with them by participating in investigations of butterfly biodiversity, distribution and other relevant topics. Youth also participate in citizen science through long-term butterfly monitoring and online reporting.

## Four Fun Activities

- 1** A skill-a-thon is a series of mini-learning stations where youth demonstrate their knowledge or skills. Instructions for creating two stations can be found in **Create a Skill-a-thon, Leader Guide, pages 27-28**. Two stations are just the right size for a first skill-a-thon.
- 2** Scientists really do want to know the butterfly species people see. The instructions in **Be a Citizen Scientist, Leader Guide, page 35** help youth learn how to participate in this very valuable activity and provide a community service at the same time.
- 3** Butterflies provide inspiration for many forms of communication. Have youth read **What's the Connection?, Youth Guide, pages 29-30** and then choose a way to communicate - song, dance, mime, drawing or one of the other suggestions in the activity. How many different ways will they choose?
- 4** There are special skills required to successfully study butterflies. Practice butterfly watching using the instructions in the **Youth Guide, pages 65-68**. The instructions caution that because butterflies move quickly, it takes patience to collect data needed.



## Experiential Learning

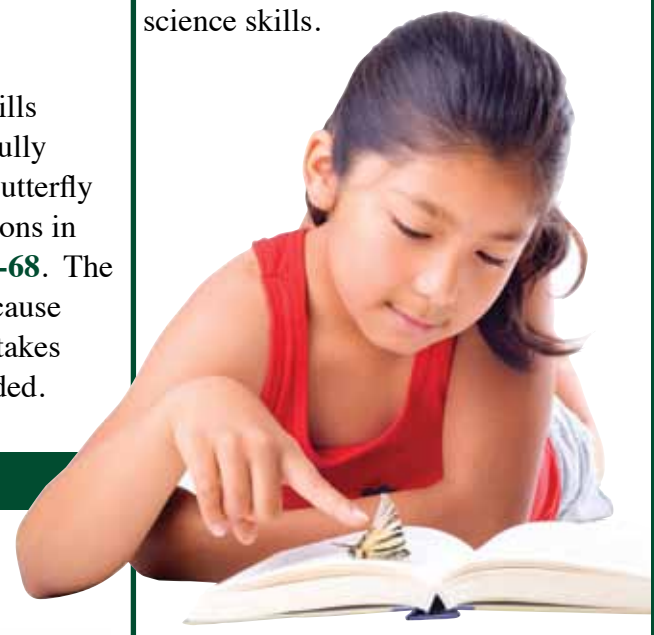
Experiential Learning engages children and youth while they learn, share, and grow through their 4-H experiences. With an adult as the coach, the first step is "doing" or exploring. Next, youth share what they did and discuss the experience with their peers. After they've identified the skills and knowledge gained, help them determine how to apply these to other situations in their lives. Questions might include: How do you identify butterfly families? How can these families help you learn about the families of other insects? How does the skill of comparing help you make choices in your daily activities?



## Project Activity Guides and Target Age Groups

*Project Butterfly Wings, Youth Guide* is designed for youth grades 4-8 or ages 9-13. Activities are arranged sequentially to build youth's knowledge and skills. The **Youth Guide** is designed for an individual to progress at their own pace.

The **Leader Guide** contains supplemental information to assist youth with their project and engaging group activities that are adaptable to 4-H groups, after-school programs, clubs, camps and other group settings using experiential learning and science skills.



## Life Skills

"Skills that help an individual to be successful in living a productive and satisfying life" are identified as Life Skills (Hendricks, 1996). Life skills in this project include self-confidence, decision making, critical thinking, goal setting, planning and organizing, communication, learning to learn, wise use of resources, personal ethics and character, perseverance and positive relationship skills with others.

# Project Butterfly Wings

## Related 4-H Projects

Science, Engineering and Technology (SET) in the context of 4-H includes *Robotics, Power of Wind, Exploring Your Environment, Entomology-Insectaganza of Excitement* and many more subjects. Go to the following website [www.4hmall.org/curriculum](http://www.4hmall.org/curriculum) to read about these curriculum choices and how to order the materials. Activities from *Project Butterfly Wings* can also be a part of the *After-School Agriculture* project and *Outdoor Adventures*.

## Integrating Technology

A list of Internet resources like the North American Butterfly Association (NABA) [www.naba.org](http://www.naba.org) can be found on **page 77** in the **Leader Guide**.

The website for citizen science is <http://www.flmnh.ufl.edu/wings/>. More information about using the website is in the **Leader Guide, page 8**.

## Character Connection

Character Counts everywhere...all the time. Remember to be respectful of others and the environment while enjoying and counting butterflies. Exercising the Pillar of Citizenship means to keep the environment clean - don't litter or leave anything behind that could be harmful to humans or animals. Citizen science helps youth become involved in an important environmental project and helps to strengthen their commitment to giving back to the community.

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

**Sports, Fitness and Health Options**  
Put on hiking shoes and hit the trails. Not only is hiking a great Sports, Fitness and Health Option activity it will also give youth an opportunity to observe the world of butterflies. **Step Into the World of Butterflies, Youth Guide, pages 13-20**, provides suggestions on where to find butterflies and how to document observations.

**Arts, Recreation and Leisure Activities**  
Butterflies are beautiful and are used in a variety of ways in our culture. **The Symbol of the Butterfly, Leader Guide, pages 42-52**, encourages youth to search for ways butterflies are used in advertising or influence art.

**Life Skills, Citizenship, and Leadership Opportunities**  
Citizen Science is an organization that tracks butterflies. Learning about their work and scientific efforts to track, count, and protect butterflies is a way to move this Service Area to action. **Be a Citizen Scientist, Youth Guide, pages 69-76**, will help youth get started with this effort.

**Academic Support, Mentoring, and Intervention Services**  
*Project Butterfly Wings* is filled with skills that will be useful in Academic Support, Mentoring and Intervention Services. Start by learning to journal in **Explore Your World, Youth Guide, pages 7-12**.



## Service Learning Opportunities

Citizen Science provides a community service opportunity for youth to collect and enter data to help scientists count butterflies in selected locations. Follow the instructions at the website for citizen science <http://www.flmnh.ufl.edu/wings/>. Another service learning activity is planting a monarch butterfly way station to promote the survival of monarchs. See **Leader Guide, page 35** for more information.

