



## SCIENCE OUTREACH

### Focus on Pollinators

In collaboration with partners in the North American Pollinator Protection Campaign, a photo exhibit was assembled and displayed at the U.S. Botanic Garden to educate students about the importance of pollinators to our environment. The exhibit has been requested by other museums throughout the U.S.

### Educating through Film

In association with the Smithsonian National Museum of Natural History, *Alien Insects: Praying Mantis* was shown at the National Museum of Natural History. The film, produced by Discovery Channel, offered students and educators the opportunity to understand the role insects, specifically praying mantis, have on our environment. The event also offered students the chance to have their questions answered by an entomologist.

## AWARDS

**Education Initiatives:** Grants given for educational programs to enhance the ability of K-12 educators to help youth develop an interest in insect science.

**Scholarships & Fellowships:** Financial support to assist students in continuing their education in entomology and related disciplines.

**Student Recognition Awards:** Recognition of students who make outstanding contributions to the field of entomology.

*Every scholarship is someone's ticket to a better future. This is what the scholarship has given me. ...*

Christina Coleman, Auburn University  
(BioQuip Scholarship winner)

## ALLIANCE FOR EXCELLENCE IN EDUCATION

### Put a smile on a child's face.... *Excite Youth About Insect Science*

By participating in the *Alliance for Excellence in Education*, you will ensure the sustainability of entomology and its importance as a science to society through the education of our youth by enabling the Foundation to rapidly respond to changing educational needs of young people, strengthening educational programs and services, maximizing student success in the entomological sciences, expanding educational programs to youth and educators, and guaranteeing an interest and understanding of the importance of insects to our society.

Individuals who become a benefactor through the *Alliance for Excellence in Education* are entitled to the following benefits based on their level of giving:

### PLATINUM \$30,000

(\$3,000 annually for 10 years)

- A platinum lapel pin containing a diamond signifying your participation as a platinum benefactor.
- Recognition in various publications including the Annual Report, on-line materials, and promotional materials.
- Receive four tickets to the Foundation's Dinner and Dance, an ideal opportunity to meet students and visit with friends.
- Invitation to a Partner Reception, an opportunity to visit with colleagues and friends.
- Receive a distinguished plaque showing your commitment to youth education.

### GOLD \$20,000

(\$2,000 annually for 10 years)

- A gold lapel pin with a ruby signifying your participation as a gold benefactor.
- Visibility in many different areas including published documents, on-line and additional promotional materials.
- Receive two tickets to the Foundation's Dinner and Dance, an ideal opportunity to meet students and visit with friends.
- Receive a distinguished plaque showing your dedication to youth education.
- Invitation to a Partner Reception, a great opportunity to visit with friends.

### SILVER \$10,000

(\$1,000 annually for 10 years)

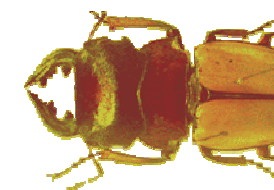
- A silver lapel pin with a lapis signifying your participation as a silver benefactor.
- Acknowledgement in various publications including the Annual Report, on-line materials, and additional promotional materials.
- Invitation to a breakfast with your silver colleagues and the Chairman of the Foundation.
- Receive a distinguished plaque showing your dedication to youth education.
- Invitation to a Partner Reception, a great opportunity to visit with friends.

*Maintaining the health of the earth's biosphere is one of the great challenges facing our and future generations. Meeting this challenge will require a scientifically literate public aware of the natural processes that sustain us. Insects, by virtue of their abundance, diversity, beauty, and behavior capture the imagination of young people. Through its educational programs, the Foundation builds on the fascination that insects hold for young people to spark and sustain the kind of interest in science and nature that will be necessary to meet this formidable challenge. ... Dr. George Kennedy (co-founder and funding partner of the Foundation)*



## Entomological Foundation

## Exciting Youth About Science Through Insects ..... to Build a Future for Entomology



## Your Invitation to Become a Benefactor



## WHO WILL BE THE FUTURE OF ENTOMOLOGY?

### ***THE CHALLENGE:***

Entomology as an undergraduate major is disappearing rapidly at nearly all Universities. Prospective entomologists often first learn about entomology as undergraduate students. If young people don't learn about the wonder and importance of insects and the potential for a career in the field of entomology at an early age, our undergraduate and graduate student population will dwindle and our discipline will be at risk.

### ***THE SOLUTION:***

***EXCITE YOUTH ABOUT INSECT SCIENCE!***  
...  
***to BUILD a FUTURE for ENTOMOLOGY***

Excerpt from an article published in the Deseret Morning News, 11/15/04:

*Too few scientists may be available in the future to meet the world's needs, according to Dr. Paul Borth, president of the Entomological Foundation. Excellence in discovery and innovation in science derives from an abundant and knowledgeable workforce... but problems lie ahead." "According to the National Science Board (NSB), over the next 20 years the increase in baby boomer retirements from the science workforce will occur at the same time the rate of growth in science occupations will be three times the growth rate of all other occupations."... "The NSB report indicates that the number of students earning a degree in science peaked in 1998, then declined. "The conclusion, not enough graduate students to fill the void"... "Have you asked yourself, who will continue your work?"*

## ***THE ENTOMOLOGICAL FOUNDATION IS ADDRESSING THIS CHALLENGE:***

The Entomological Foundation is a national 501(c)(3) nonprofit youth-serving organization established in 1991 to serve the educational enterprise by leveraging science-community resources to educate youth in applying insect science for achieving a healthy environment.

Educational experiences guide young people toward a life-long appreciation for the biological and ecological diversity of insects and a commitment to environmentally acceptable means of insect control. Skills emphasize developing a scientific knowledge base, knowing how to find and evaluate information, understanding issues and maintaining balanced views of these issues. Hands-on collaborative learning experiences enhances the learning process and encourages community-based youth action initiatives.

The Foundation excites youth and educators about insect science through a broad range of programs. Educational curricula for youth are assessed through a review process that involves experts having a variety of perspectives on entomology, environmental, and ecological education. Curricula are being developed and made available to help youth enhance their science skills and knowledge. Science outreach activities encourage and excite youth and adults about the wonders of insect science. Educational mini-grants are awarded to initiate learning experiences nationwide. The scholarship, fellowship, recognition and research awards programs encourage excellence and recognize achievement and outstanding potential.

*I support the Foundation as a donor because of the opportunities it provides youth. There is nothing more exciting than "insects" and providing educational opportunities for youth promotes our profession and science. Donations to the Foundation creates entomological sustainability and a future for a profession I love. ... Dr. Sharron Quisenberry*



## ASSESSMENTS

The Foundation is working in partnership with organizations that have a stake in ecological, entomological, and environmental education, to provide teachers and students with access to a diversity of educational resources that will increase their knowledge of the role insects play in our environment. The new partnerships created through this program will increase the capacity of teachers and volunteer youth leaders to incorporate entomological programming into current formal and informal science-based educational programs. Resource materials will be made freely available through a virtual library. The goals of this program are to:

- Determine and prioritize critical education issues and topics to be addressed through youth education.
- Establish youth learning goals and objectives for informal and formal learning environments.
- Identify and communicate effective youth education programs and materials.
- Select and catalogue educational materials, delivery systems, and model programs in an easy to understand virtual library for students and educators.

Current assessment projects focus on:

- ***Educating Young People About Responsible Pest Management*** for grades K-12)
- ***ENTomology DIGtal Library*** (for teaching entomology in grades K through graduate school)

## CURRICULUM

### **Insect Appreciation Digest**

This educational sourcebook helps educators teach students everything they need to know about insects. This resource provides learning experiences on insect orders; insect structure and function; insect biology; and insects in folklore. Requested by teachers, volunteer youth leaders, and parents, this sourcebook is being integrated in science courses in home-schools and classrooms throughout the U.S.

### **Biodiversity Insect Boxes**

This hands-on activities "box" presents opportunities for youth to learn about the diversity of insects while conducting real scientific studies. Activities help to increase awareness and encourage students to become entomologists. Developed through Discover Life in America, the Insect Boxes are distributed to students and educators participating in education programs at the Great Smoky Mountains National Park, the most visited National Park in the U.S.

### **Educating Young People About Responsible Pest Management**

The development of educational materials, under this national program, will be guided by an effort underway to identify strategic investments and curriculum development gaps. Educational tools that provide age-appropriate experiential learning experiences for grades K-12 will be designed to integrate with other available education resources.

*Many of my second graders were afraid of insects until the Foundation's materials arrived. They are now eager to learn more about insects and careers in science. I am sharing these materials with all the teachers in the school, with the hope of reaching 135 students. Thank you. .. Second grade teacher in Ellicott City, Maryland*