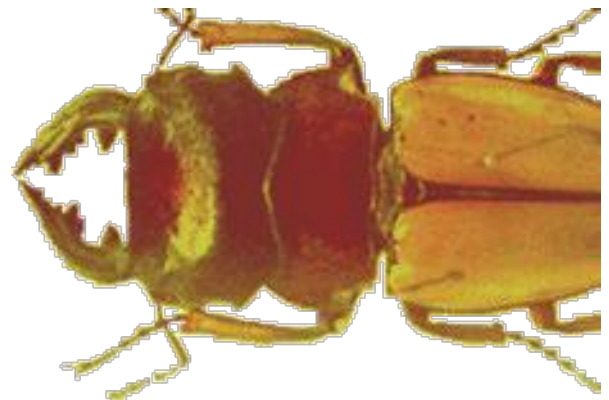




Entomological Foundation

**Exciting Youth About Insect Science
..... to Build a Future for Entomology**



**Your Invitation to
Become a Sponsor**

WHO WILL BE THE FUTURE OF ENTOMOLOGY?

THE PROBLEM:

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. It has been declining ever since." "The conclusion, not enough graduate students to fill the void"... "Have you asked yourself, who will continue your work?" "To make that happen, will require an investment and collaborative partnerships with the private and public sectors.

THE ENTOMOLOGICAL FOUNDATION IS ADDRESSING THIS PROBLEM:

The Entomological Foundation is a national 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. Implementing hands-on collaborative learning experiences enhances the learning process and encourages community-based youth action initiatives.

The Entomological 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. Community 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.



ASSESSMENTS


The Foundation is working in partnership with organizations that have a stake in entomological, ecological, and environmental education, to provide teachers and students with access to a diversity of entomological educational resources that will increase their understanding of the role that 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 in the following areas will be made freely available through a virtual library. The goals of this program are to:

- Establish youth learning goals and objectives for informal and formal educational settings.
- Determine and prioritize critical education issues and topics to be addressed through youth education.
- 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. Many resources will be made available for immediate download through the virtual library.

Current assessment projects focus on:

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



 **Dow AgroSciences** *Corporate funding to the Entomological Foundation is a key component of our company's long-term commitment to insect management. The Foundation plays a critical role in assuring sustained interest in the science of entomology. Through its outreach, encouragement and recognition programs, young people continue to be invigorated about career opportunities in entomology. It is this next generation of entomologists that will assure our continued successes with the products and services we provide.*

..... Dr. Mike Culy, Dow AgroSciences



CURRICULUM

INSECT APPRECIATION DIGEST

Insect Appreciation Digest is an entomology educational sourcebook to help educators teach students everything they need to know about insects. This resource guide provides learning experiences on insect collecting; insect orders; insect structure and function; insect biology; interaction with humans; and insects in folklore. Requested by teachers, volunteer youth leaders, and parents, this sourcebook is being integrated in science courses in classrooms and home-schools throughout the United States.

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 park education programs at the Great Smoky Mountains National Park, which is the most visited National Park in the United States

GUIDELINES FOR MODULES TO TEACH ENTOMOLOGY

This project, implemented by the University of Nebraska at Kearney, and funded by the Entomological Foundation, will identify the basic competencies of an entomologically literate person in grades K-12 and post-secondary levels. The project will result in a process to assist in assessing and developing educational materials for use with young people in formal and informal educational settings.

EDUCATING YOUNG PEOPLE ABOUT RESPONSIBLE PEST MANAGEMENT

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

I have 19 students in my second grade class, many of which were afraid of insects until the Entomological Foundation's materials arrived. The students 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



Community Outreach

FOCUS ON POLLINATORS

In collaboration with partners in the North American Pollinator Protection Campaign, including the Center for Environmental Education and U.S. Fish and Wildlife Service, a photo exhibit was assembled and displayed at the U.S. Botanic Garden to educate young people about the importance of pollinators to our environment. The exhibit has been requested by other museums throughout the United States.

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 participants 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 undergraduate and graduate 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.

- **RESEARCH AWARDS AND GRANTS**

Grants awarded to assist graduate students and professional entomologists continue their research.



Every scholarship is someone's ticket to a better future. This is what the scholarship has given me. I will do all I can to succeed, so I may be able to give someone else, like me, the same chances that I have been given.

.... Christina Coleman, Auburn University (BioQuip Scholarship winner)



FUNDING PARTNERS

Your gift helps fund programs aimed at young people to build awareness and increase their interest and appreciation of the science of entomology and the role of insects in sustaining healthy environments.

Invest In the Future of Entomology

Thanks to our many corporate and foundation partners – without your support this work is not possible.

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Xerces Society**

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