

**Butterfly Education in 2005, What's Next?**  
Reporting Session Summary  
16 September 2005

**Introduction**

The Butterfly Conservation Initiative (BFCI) works towards the conservation of North American butterflies and the habitats that sustain them, focusing on recovery, research, and education. To help direct BFCI members and partners in their conservation activities, BFCI developed a strategic plan that identifies specific objectives for each of our three focus areas. We are making outstanding progress in each of these areas.

**Recovery**

This year, we saw increased involvement in certified habitat programs, habitat assessments, and searches. Ten of our members have National Wildlife Federation (NWF)-certified Backyard Habitat on-grounds, while two of our members have wildlife habitat that had been certified through state programs. Monarch Watch unveiled its Monarch Waystation program, a plan to develop monarch habitats throughout the butterfly's migration corridors, and many of our members expressed interest in becoming certified. We have also seen a number of members involved in habitat assessments. The Toledo Zoo monitors habitat for the purplish copper, Mitchell's satyr, and the swamp metalmark, while the Detroit Zoo is helping assess potential game preserve land as future habitat for the Karner blue butterfly. The Oregon Zoo is supporting habitat assessments and searches for the Island marble butterfly, a butterfly not seen



Photo: Ian Adams/*the Wilds*

for 90 years. Searches by BFCI partner the Xerces Society helped discover a few small populations of the Island marble butterfly, as well as the third-largest known population of the Taylor's checkerspot and a few small populations of the Mardon skipper, both of which are federally listed as candidate species under the Endangered Species Act.

The creation of ten acres of butterfly habitat was completed in December 2004 at *the Wilds* in southeastern Ohio. A two-year grant from the George Gund Foundation had supported the development of this habitat and five other Ohio zoos and aquariums (all BFCI members) were also integral to making sure this project and its associated education and outreach efforts were a success.

**Research**

One of the exciting collaborative research projects that began this year was the Florida Butterfly Monitoring Network, a project initiated by the McGuire Center for Lepidoptera and Biodiversity and Disney's Animal Kingdom that received funding from AZA's Conservation Endowment Fund (CEF). The Network has gotten a second year of funding from a state wildlife agency and now includes participation by the Central Florida Zoo, Brevard Zoo, Miami Metrozoo/Zoological Society of Florida, and the Lowry Park Zoo.



Both the number of facilities doing captive rearing and the number of species involved continue to grow. Roger Williams Park Zoo, after years of growing the Karner blue butterfly's host plant, began rearing Karner larvae through the pupation stage this year. The pupae were then returned to New Hampshire where the emerging butterflies were used for breeding and then released. The Toledo Zoo has gone from solely raising the Karner blue butterfly to now also rearing the endangered Mitchell's satyr, the purplish copper, and the swamp metalmark. The Oregon Zoo, Oregon Coast Aquarium, and Woodland Park Zoo

continue to rear the threatened Oregon silverspot in captivity, and the Oregon Zoo has also begun rearing the Puget blue to learn about differences between captive and wild-raised butterflies. The Oregon Zoo is also partnering with the Washington Department of Fish and Wildlife to raise the Taylor's checkerspot and Mardon skipper.

This summer, the Xerces Society completed an updated and expanded version of the species profiles and needs assessments and we expect this to be of use to many. This new version, the Red List of Pollinator Insects, includes the conservation needs and priorities of vulnerable species throughout the US and federally listed species in Canada and can be accessed from the Xerces Society's Web site ([www.xerces.org](http://www.xerces.org)).

## Education

Against the backdrop of new and expanding recovery and research endeavors, BFCI dedicated 2005 towards advancing its education goals and objectives. Over the course of the "Year of Education," a number of educational resources were developed and/or made available to our members and partners and this meeting highlighted these achievements.

Year of Education accomplishments include:

- The new BFCI Web site ([www.butterflyrecovery.org](http://www.butterflyrecovery.org)). This beautiful Web site was designed with the support of funding obtained from donations to a wishing well placed at the Butterfly House. All donations from this well are directed to the BFCI.
- Surveys were done to assess the public's knowledge, opinions, and attitudes about North American butterflies. It is hoped that insights gained from these surveys will assist zoos and aquariums further target their conservation messages.
  - The Toledo Zoo surveyed public attitudes and knowledge about butterflies. A professor at the University of Toledo developed the survey and did the analysis. The fall 2005 publication of their results will include the survey questions used so that other facilities can survey their guests in a similar fashion.
  - The Brookfield Zoo conducted a survey on how exhibits impact how much visitors care about butterflies. Zoo staff talked with visitors before and after they went through the exhibit to understand the visitors' caring and the study will be published in the proceedings from this year's Invertebrates in Captivity Conference.
  - The Brookfield Zoo also coordinated surveys at bug and butterfly festivals in Ohio to identify which messages guests remembered and what they found most interesting at the festivals. That report is available on the BFCI Web site and includes the survey questions used.
- The Xerces Society's Red List of Pollinator Insects ([www.xerces.org](http://www.xerces.org)) will be of particular use to educators interested in framing their butterfly conservation messages around locally vulnerable species.
- The Toledo Zoo developed a Butterfly Festival Manual with funds from the George Gund Foundation. This manual includes checklists to help people plan their events, ideas for getting local organizations to support festivals, and links to activities and other resources.



Activity: Donna Dupske/  
Butterfly House

- BFCI co-hosted the Successful Butterfly Education and Outreach session at AZA's Regional Workshop in Kansas City, MO. The proceedings, including photos and descriptions of educational materials shared can be found on the BFCI Web site (<http://www.butterflyrecovery.org/education/>).

## What's next in 2006?

Education certainly will not be left behind! Given that almost 100% of our members have ongoing butterfly education activities in place, BFCI knows that education is always a key priority. Over the coming year, BFCI plans to work with AZA's Terrestrial Invertebrate Taxon Advisory Group (TITAG) to identify and

develop the butterfly-related information that will be included in their invertebrate-specific educational materials CD. BFCI is also considering the development of a Butterfly Exhibit Manual that could address many of the questions faced during the design and development of exhibits, and possibly identify mentoring institutions of all size that others could turn to for advice. We are currently exploring funding options for this and other new project ideas.

A *Techniques for Butterfly Conservation and Management* course will be offered as part of AZA's Professional Training Program in Gainesville, FL on 24-26 April 2006. This course was developed by BFCI members and partners and will help train people interested in becoming more involved in butterfly conservation. The course will include sections on butterfly natural history, catching and handling butterflies at all stages of their lifecycles, the planning processes necessary to develop management plans, exhibitry, and captive rearing programs. For more information, visit: [www.aza.org/prodev/ButterflyCon/](http://www.aza.org/prodev/ButterflyCon/).



Activity: David Walker/  
Oklahoma City Zoo

BFCI also wishes to promote its citizen-science efforts in the coming year, combining recovery, research, and education and outreach in a dynamic and participatory way through meetings, monitoring networks, and other activities. A couple of meetings have been requested by members, one of which would bring together people involved with butterfly captive rearing programs. People interested in becoming involved with captive rearing in the future would also be invited to participate. While each species poses different challenges, people working with some species may have learned tricks and shortcuts that could help with the rearing of other species. A second meeting would be a follow-up to the Karner blue butterfly recovery planning implementation meeting held in 2002. This meeting would be used to outline progress on recovery and identify gaps that still need to be filled. It would also be used to re-focus attention and interest on the Karner blue butterfly within local government agencies. Both of these meetings are contingent on fundraising success and all BFCI members are encouraged to suggest other meetings that they believe would be of use to them.

BFCI will continue to promote the citizen-scientist networks already established in Illinois, Ohio, and Florida, encouraging member facilities to become involved. The baseline population data gleaned from these networks could become invaluable to land managers making important development and conservation decisions. BFCI is also interested in seeing members in other states start their own networks. People interested in initiating a local network will have access to a number of mentors and experts that can help them get started.

In 2006, BFCI will transition away from AZA as its host facility. While this will result in a few changes in the program, BFCI looks forward to continuing to grow and to share the successes of our members and partners and to help others make a difference in butterfly conservation.