

Each year the Patuxent Research Refuge hosts a week-long GeoCamp to immerse fifth-grade students in environmental education. The 2005 theme was insects, with a specific focus on pollinators. Billy B. led students in a song describing the importance of pollinators in their everyday lives.

# GeoCamp Is Here Again!

Golf courses participate in a program to help young students become “Habitat Heroes.”

BY JENNIFER HILL

**G**eoCamp 2005 (July 11-15) has come and gone for another year. The purpose of this week-long camp is to immerse rising fifth-grade students from two District of Columbia schools (Thomas Nevel and Smothers Elementary) into various environments and guide them in becoming “Habitat Heroes.” GeoCamp is conducted in partnership with National Geographic, and the goal is to incorporate history, culture, and geography into the week via environmental education. Every year’s session proves to be a new and exciting experience.



This year’s theme was INSECTS! — focusing specifically on pollinators. Students were exposed to the world of honey bees, where they tasted honey, saw products bees help produce for humans, and listened to a song by Billy B. entitled “Bee Barf” — describing

just what honey is. The students then discovered the importance of pollinators in their everyday lives.

As Habitat Heroes, students participate in an action project to aid wildlife conservation. This year students built bee boxes for solitary nesting bees in an effort to conserve pollinators. Several local golf courses received the bee boxes to provide habitat for pollinators.

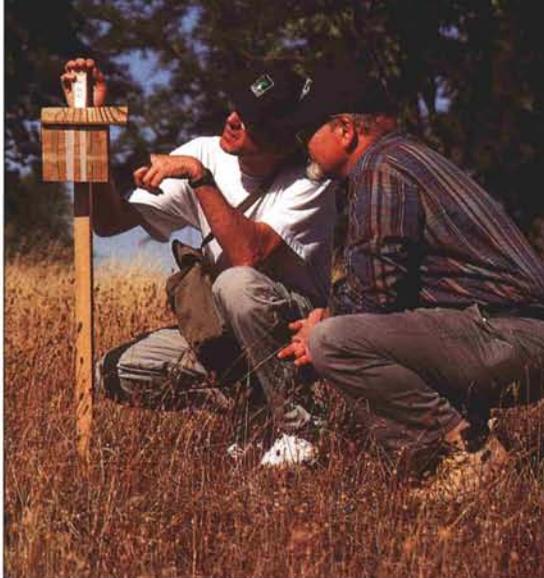
## WHY BEE BOXES? WHY GOLF COURSES?

Golf courses can be relatively good places to see wildlife; however, they are

often divided into “chunks” of habitat not suitable for many wildlife species. Often, you find beautiful landscaping and blooming flowers on a golf course, but you will not find fallen trees or patches of ground that are suitable for bees and other pollinators to nest in. By distributing bee boxes to neighboring golf courses, it is our hope that the bee boxes will help establish more nesting space for pollinators and raise awareness about their important function. With the boxes up, bees have both flowers for food and suitable habitat for nesting, egg laying, and protection.

Golf courses were selected for bee box distribution because the schools participating in the camp are very close to Langston Golf Course. By distributing bee boxes to Langston, the students learned a little about the history of the D.C. area and how Langston was historically an all-African-American golf course. Other nearby golf courses tie in geography (as did several other activities on bees/pollinators) and habitat enhancement. Our hope is that the students will be able to take a field trip to the golf course, learn a bit more history, observe a bee box made by a student, and observe other wildlife utilizing patches of habitat on the golf course.

Bats also play a role in pollination and are another example of an animal that may have suitable feeding areas, but not proper resting/protection areas, on the golf course. Bees pollinate flowers that we love to see, but, more importantly, they pollinate much of the food we eat, and bats eat many mosquitoes. The ponds or areas of water on a golf course draw insects and provide drinking water for bats. Flowers, pole-lights, and open fields attract insects, but snags (standing dead trees) are needed to provide resting habitat and protection for bats. To remedy this, a bat box can be placed on the side of a building, lamp, or telephone pole. Bees and bats are species that tend to have a negative “rap.” Our hope is that by establishing suitable areas for them, the general



Golf course out-of-play areas can provide excellent habitat for pollinators when combined with nesting sites and foraging areas. Bee nesting blocks can be made from pieces of water-resistant lumber at least 4" by 4" and 8" long. In one side of the block, drill holes between 1/2" and 3/8" in diameter, at approximately 3/4" centers. The holes need to be closed at one end.

public will learn about their significance in our daily lives.

A valid question about establishing bee boxes on the golf course is the possibility of bees stinging people. The bees housed in these boxes are non-aggressive, and several species do not even have the capability to sting.

### GOLF COURSE'S ROLE IN THE ENVIRONMENT

Today, more golf courses are working toward habitat restoration for wildlife and plants. In creating more wildlife-friendly habitat on golf courses, biodiversity of plant and animal species will be aided. Langston Golf Course in Northeast D.C. accepted a few bee boxes and will coordinate student field trips. Opportunities such as these are key in reinforcing concepts taught during the camp, as well as providing a sense of accomplishment for the students in seeing their bee boxes mounted at a golf course.

In addition to discovering habitats in the environment during GeoCamp, students celebrated what they learned through music. Environmental singer and songwriter Billy B. (of “Bee Barf” fame) performed a one-hour concert in honor of GeoCamp and spent the afternoon singing about INSECTS!

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Society in partnership with the U.S. Fish and Wildlife Service, D.C. Geographic Alliance, and Friends of Patuxent. We thank all of these groups, as well as the volunteers and staff who helped make this event a success. We want to also thank USGS Patuxent Wildlife Research Center researcher Sam Droege, who provided advice and supplies to help with student education; Kimberly Erusha and Darin Bevard from the United States Golf Association; and Lloyd Luna, Bart Smith, Carolyn Grant, Jill Stevenson, and Joe Brotherton from the Bowie-Upper Marlboro Beekeepers Association, who provided beekeeping demonstrations. We also would like to thank the following participating golf courses that supported the Habitat Heroes of GeoCamp 2005: Baltimore Country Club, Timonium, Md.; Baltimore Country Revenue Authority, Towson, Md.; Chevy Chase Club, Chevy Chase, Md.; Enterprise Golf Course, Bowie, Md.; Langston Golf Course, Washington, D.C.; Red Gate Golf Course, Rockville, Md.; Talbot Country Club, Easton, Md.; Queenstown Harbor, Queenstown, Md.

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