



THE NIGHT FLYER

NEWS FROM THE FLORIDA BAT CONSERVANCY



OUR MISSION

To preserve & protect native bat populations within the state of Florida.

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FBC COMPLETES BONNETED BAT STUDY : SURVEYS INDICATE A LOW ABUNDANCE AND LIMITED RANGE

A study conducted by the Florida Bat Conservancy to determine the status of the Florida bonneted bat (*Eumops floridanus*) following the hurricane season of 2004 was completed in October 2007. The final report was submitted in February

The study was funded through a grant from the U.S. Fish & Wildlife Service (USFWS) and included 50 nights of survey in 45 different areas of south Florida.

Survey work was conducted using acoustical monitoring equipment in conjunction with computer software to record the echolocation calls of bats. The computer files were then analyzed and the species of bats foraging in the area identified. This approach of "eavesdropping" on the echolocation calls of bats enables us to determine the species of bats present without disturbing them, or interfering with their normal behaviors. It also enables researchers to determine all species of bats foraging within the area.



Florida bonneted bat (*Eumops floridanus*)
Photo by Ralph Arwood

The survey revealed that the Florida bonneted bat exists within a very small range extending from just south of Punta Gorda to Homestead. The species was not found north of Coral Gables on the east coast of Florida, nor was it found in the interior portions of the state. Only a few calls were recorded in the Coral Gables area, which previously had been considered a stronghold of the species. No calls were recorded in the Everglades region of the range so it is not known if the species is present in this habitat.

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FBC IN THE COMMUNITY

April 19: Earth Day Festival, Naples, 9 am - 3 pm. Visit FBC's bat booth and celebrate Earth Day at the Conservancy of Southwest Florida. Shop for locally-grown and organic foods at the Farmer's Market, and enjoy live entertainment, guest speakers, native plant sales, plus prizes and a kids' carnival. *Conservancy of Southwest Florida, 1450 Merrihue Drive, (239) 262-0304.*

April 26: Arbor Day Festival, Ocala, 10 am - 3 pm.. Visit FBC's bat booth and celebrate Arbor Day at the Discovery Science & Outdoor Center, located in Brick City Park, 1211 SE 22nd Road. The park is located just off Lake Weir Avenue. The festival will include live music, tree planting and care demonstrations, an "Ask the Expert" area, tree scavenger hunt, nature crafts for kids, nature craft vendors, and wood building kits provided by Lowe's. Trees will be given away and others will be available for purchase. There also will be tree-climbing demonstrations with an opportunity to try it yourself.

May 12: Bat Program, West Palm Beach, 7 pm. Join us at the Okeeheelee Nature Center where we will be speaking to the Palm Beach Pack and Paddle Club. The public is welcome! The nature center is located at 7715 Forest Hill Blvd., one mile west of Jog Road.

May 17th: Bat Program and Night Hike, 7 pm. Join us at the Riverwoods Field Station in Lorida for a bat program followed by a night hike at the nearby Pearce Homestead where we will listen for bats along the Kissimmee River. Reservations are required. Call (863) 462-5280 for reservations and information. www.riverwoods.ces.fau.edu

For more information on any program, you may also call FBC: 727-710-2287

FBC AWARDS RESEARCH GRANT TO FLORIDA GULF COAST UNIVERSITY STUDENT

Allyson Webb, a graduate student at Florida Gulf Coast University, is the first recipient of a student grant from the Florida Bat Conservancy. Allyson will be studying bats and their diet in the mangroves of southwest Florida. Although we know that bats are foraging for insects over mangrove areas, little research has been done to determine the types of insects on which they are feeding.

Allyson will be working at five sites along the Black Water River in Collier-Seminole State Park and the Ten Thousand Islands National Wildlife Refuge. She will be looking at insect availability by capturing insects with funnel light traps at different heights in the mangroves. To determine what the bats are eating, she will collect fecal pellets by capturing bats and putting them in holding cages just long enough to collect a sample, then releasing them. The pellets will then be analyzed back at the Florida Gulf Coast University laboratory to determine the types of insects the bats are eating.



Allyson Webb

Allyson also works as a Resource Manager at Corkscrew Swamp Sanctuary.



Photo: Al Hicks, NY Dept. of Environmental Conservation

"WHITE NOSE SYNDROME" SPREADING IN THE NORTHEAST

By Selena Kiser

As you may have heard, there is a disturbing new disease affecting bats in the northeastern United States. It is called White Nose Syndrome (WNS), and it is spreading at an alarming rate, killing large numbers of bats. WNS was first detected among bats hibernating in caves and mines in New York during the winter of 2006-2007. The bats diagnosed with WNS were found with white patches around their noses, due to the growth of a fungus. Not all the bats affected with WNS exhibit the white fungus, so it may be a secondary infection that occurs as a bat's immune system weakens.

The culprit for the disease has not yet been identified. WNS may be caused by a bacterium, virus, fungus, or other agent. Studies are currently being conducted to find out what the vector is, as well as how it is being spread. During the winter of 2007-2008, WNS spread from New York to hibernacula in Vermont and Massachusetts.

Bats infected with WNS are emaciated and have used most of their fat reserves before the end of winter. With little fat left to get them through hibernation, they typically end up dying as a result of starvation. One of the other symptoms of WNS is that bats are often seen flying around during the daytime in winter, in below freezing temperatures, which may possibly be due to their desperate hunger. Dead bats collected from hibernacula have also shown signs of pneumonia and lung hemorrhages, which could also be secondary infections.

Species of bats affected so far include: Little Brown Myotis, Indiana Myotis, Northern Long-eared Myotis, Small-footed Myotis, and Eastern Pipistrelle. Since these species congregate in large hibernation colonies, WNS has the potential to spread quickly through a large number of bats. The mortality rates are proving to be very high in caves with WNS. Two caves in New York that were known to contain WNS infected bats showed 90 to 97% fewer bats in the winter of 2007-2008 than in 2006-2007. In winter 2006-2007, the number of dead bats in New York was near 11,000; in 2007-2008 the numbers will surely be higher. Of the caves currently documented with WNS, approximately 400,000 to 500,000 bats hibernate within. If 90% of these bats die, that would be a staggering loss.

Many caves in the Northeast have been closed to cavers, until more is known about WNS. This is to prevent any possible spreading of the disease by humans. There have been no reports of humans contracting illnesses from bats with WNS or from caves where WNS has been documented. So, it seems that WNS is not being directly transmitted from humans to bats and vice versa, however it is possible that humans could be contaminating caves by carrying the vector on their clothing, boots or other equipment.

If you are traveling in the Northeast and you happen to see a bat with the aforementioned symptoms, please report it to the U.S. Fish and Wildlife Service.

Find a local office in the Northeast by visiting their website:

www.fws.gov/northeast/offices.html



BAT TRAVELS:
PINELLAS COUNTY MASTER
GARDENERS SPOT BATS IN
COSTA RICA, JAN. 2008



Photo by Donna Zacharczyk

Bat Abode: Trip guides told the travelers that this shelter, seen at Braulio Carrillo National Park, is created by Honduran white bats, who chew along the leaf vein until the sides fold over to create a "tent."



Photo by Elizabeth Morse

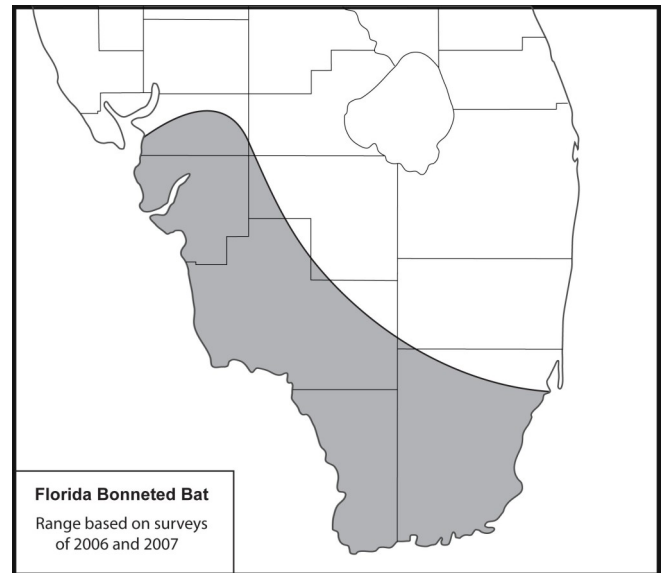
Daytime Defense: Proboscis bats use camouflage by lining up in a way that resembles lichen, going unnoticed by predators at Cano Palma, Tortuguero National Park.

(Continued from page 1)

The study also confirmed the species was rare, even within the established range, and estimated the entire population may be less than a few hundred individuals.

On the positive side, there was no indication that the hurricanes of 2004 had a negative impact on the population.

The restricted range and small population make this species particularly vulnerable. The state of Florida currently lists the species as Endangered. The study recommends that the USFWS also list the Florida bonneted bat as federally Endangered. Additional studies were recommended to further assess the abundance of the species in south Florida, to determine the factors that cause the species to be rare so the needed resources can be protected, and to locate existing roost sites so they can be preserved.



FBC EXTENDS SPECIAL THANKS TO THE FOLLOWING FOR THEIR ASSISTANCE IN THE *EUMOPS FLORIDANUS* STUDY:

Name	Affiliation
Ralph Arwood	Inside-Out Photography
Mike Berry	U.S. Fish and Wildlife Service, Ten Thousand Islands NWR
Scott Gonnion	U.S. Fish and Wildlife Service, Ten Thousand Islands NWR
Roger Hammer	Miami-Dade Parks and Recreation Department
Mike Hoke	Broward County Parks and Recreation Division
Pat Howell	Broward County Parks and Recreation Division
Jean McCollom	Okaloacoochee Slough Wildlife Management Area
Chriss Miller	Miami Metro Zoo
Ben Nottingham	U.S. Fish and Wildlife Service, Florida Panther NWR
Mike Owen	Fakahatchee Strand Preserve State Park
Dave and Sylvia Phillips	Florida Bat Conservancy members
Karen Relish	Fakahatchee Strand Preserve State Park volunteer
Gary Schultz	Florida Natural Areas Inventory
Brian Scofield	Babcock Webb Wildlife Management Area
Jim Surdick	Florida Natural Areas Inventory
Sonya Thompson	Miami-Dade Parks and Recreation Department
Susan Trokey	U.S. Fish and Wildlife Service
Allyson Webb	Corkscrew Swamp Sanctuary
Victor Young	Sanibel-Captiva Conservation Foundation

EDUCATION IN ACTION: “BAT BUDDIES”

The Reef Rovers 4-H Club has completed their “Bat Buddies” project! With a grant of \$2,000 from the Sarasota Bay Estuary program, they were able to purchase and/or build eleven bat houses. Ten of these houses have been successfully installed. The other is used for public outreach presentations. Nine of the houses are mounted on 16-foot posts and one is mounted on a dead tree at the Historic Cortez Schoolhouse. Members of the club voted to have the bat houses installed at public locations versus private residences. The Reef Rovers are a youth conservation club made up of students from both Manatee and Sarasota counties, ranging in age from nine to seventeen.

The Reef Rovers club members have also developed a 30-minute presentation for elementary-age students to raise awareness about the ecological value of bats. They have made presentations at schools in both Sarasota and Manatee Counties, and at the Humane Society of Sarasota County summer camps. The club also sponsored live bat presentations by the Florida Bat Conservancy for the students of Ballard Elementary in Bradenton. The school presentations have also been extremely successful in reaching hundreds of elementary level students. The Reef Rovers’ report stated that “the children’s enthusiasm for learning about and helping bats has been one of the most rewarding aspects of the entire project.”



Members of the Reef Rovers 4-H Club with a few of the bat houses constructed in their “Bat Buddies” project, funded by the Sarasota Bay Estuary Program



Reef Rover Madison Chapman giving an educational presentation about bats

The Bat Buddies have received a great deal of media coverage, which has been another way that the project has helped to educate the public about the need for bat conservation. The project was covered in the *Pelican Press*, *Sarasota Herald Tribune*, the *Clover Times* 4-H Newsletter, ABC Channel 7, and the Florida 4-H state newsletter. Additional attention was brought to the project, and to the work of the Sarasota Bay Estuary program, in April 2007 when Sarasota County bestowed the *Youth Environmental Leadership Award* upon two members of the Reef Rovers club (Madison and Raven Chapman) for their work with Bat Buddies and other conservation projects. In addition, the Sarasota County 4-H office awarded them both the 2007 *Citizenship Award*, and Madison Chapman was nominated for the state-wide *Prudential Spirit of Community Award*.

So far, the bat house at Twin Lakes Park has become occupied. The Reef Rovers will continue to monitor the houses to determine bat colonization. In addition, the Bat Buddies educational presentation will continue to be offered at summer camps and schools.

The Reef Rovers have proposed that, with additional funding, the club will:

- ▶ Donate more bat houses to both public and private locations.
- ▶ Film their elementary presentation and offer it as a DVD to teachers to further expand outreach efforts.
- ▶ Design and install plaques for each bat house post to educate the public further.
- ▶ Develop a presentation for older students and/or adults, in order to reach a wider audience.
- ▶ Offer additional presentations by the Florida Bat Conservancy to local schools.

Bat House Recipients

Longwood Park, Sarasota
 Crowley Museum, Manatee County
 Twin Lakes Park, Sarasota
 Pocono Trail, Nokomis
 Curry Creek Preserve, Venice
 Orange Blossom Garden, Sarasota
 Humane Society of Sarasota County
 The Girl Scouts of Gulf Coast Florida
 Pine View School, Osprey
 Cortez Schoolhouse, Bradenton



NORTHWEST FLORIDA ENVIRONMENTAL CONSERVANCY AND THE FBC TEAM UP TO HELP EVICTED BATS

When the Oak Station Shopping Center in Marianna realized that bats were roosting in the walls of their building, they contacted Karl Studenroth of the Northwest Florida Environmental Conservancy (NWFLEC). Karl has worked with bats for many years and was able to convince the shopping center owners of the importance of bats, and

the correct way to exclude them from buildings. The shopping center hired Karl to exclude the bats, which were roosting in several areas of the building. The concern was, as always, where will the bats go. Will they move into another building somewhere and be exterminated by someone unaware of the importance of bats and the laws regarding bats?

Karl was in contact with the Florida Bat Conservancy throughout the exclusion process. He developed a bat information flyer which he distributed to all of the stores. The shopping center owners agreed to the construction of a bat house and the Florida Bat Conservancy agreed to fund the project.

FBC recommended that he contact bat house builder Frank Bibin in Quitman, Georgia. Frank makes excellent bat houses and we were anxious to promote his bat houses in Florida. A five chamber bat house design was chosen which measures 24" wide, 37" high, and 7" deep. Construction and painting of the bat house took about three weeks.

When the bat house was ready, Karl drove to Quitman to pick it up. Arrangements were made with Florida Public Utilities to install the bat house. A spot was chosen on the edge of a retention pond which is located behind a fence. Karl would like to thank Joe Retherford for making the arrangements with Florida Public Utilities and Rhondon Gray and Kevin Harris of Florida Public Utilities for installing the bat house!

SPECIAL THANKS TO ALL FBC VOLUNTEERS!

FBC volunteers do amazing things to support the organization and protect Florida's bats. In calendar year 2007, volunteers gave over 6,600 hours supporting the mission and goals of the FBC. More details will be provided in the Annual Report, to be published with the Summer edition of *The Night Flyer*.

Very special thanks go out to:

- ▶ George Fenner, for building sixteen bat houses.
- ▶ Dr. Peter Helmer and Dr. Janine Cianciolo, for veterinary services.
- ▶ Calvin Kimball, for building bat houses and a new flight cage.

Calvin also built a bat banjo! He hand carved the neck and attached it to a National Tenor Guitar metal body. He carved the peg head in the shape of a bat, and then carved bats from mother-of-pearl and inlayed them on the neck of the banjo. For the final touches, Calvin painted bats in flight on the front and back. We're not sure what possessed Calvin to build the bat banjo, but it sure looks and sounds great!



Calvin Kimball and his Bat Banjo

WELCOME NEW MEMBERS...

Bat Patron: Gwen Burzycki, Gary DePalma, DePalma's Nuisance Wildlife Specialists

Bat Supporter: Dianna Sue Bryant

Bat Friends: Judith V. Atkinson, Edward A. Beatty, John Churchwell, Amara Cocilovo, John Topicz, Maria Valentine

Regular: Robert C. Bolton, Jean Huffman

... AND THANKS TO RENEWING MEMBERS!

Bat Conservationist: Friends of Bats

Bat Patrons: Mark Patterson, De Ann Winton

Bat Supporters: Barbara Glaff, Joan Kohl, Dave and Sylvia Phillips, Bob and Mary Rude, Todd and Ellen Snow, Jean Stuart

Bat Friends: Nancy Arnold, Lee Cayer, T J Coburn, Shawna Everidge, Harvey Goldstein, Steve Klett, Steve Mathis, Ann Rebois, Karen Relish, Cheryl Sandberg, Anica V'in, Gertrude Zekowski, Gail Zippilli

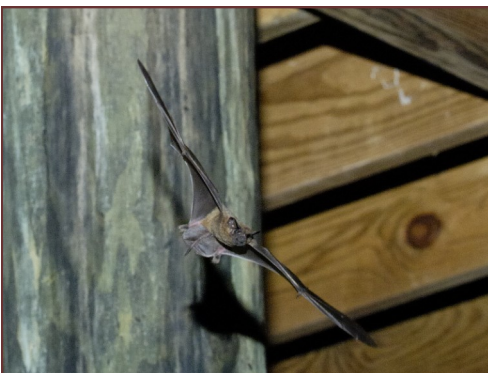
Regular: Sandy Dussault, Mary Gaber, Archie Lusk, John Mangold, Russell Owens, Denise Schaefer, Dusty Showers, Ellen Van Dyke



Brazilian free-tail bats on their way to a safe, new home, thanks to the FBC and member support! These were rescued after being displaced during a condo renovation project.

Photo by Lorraine Margeson

REGULATION TO PROVIDE UPGRADED PROTECTION FOR BATS



Brazilian free-tailed bat emerging from a roost.
Photo by Ralph Arwood

Bats are protected under Florida's general wildlife laws, which basically state one cannot disturb, harass, collect, buy, sell, or destroy Florida Wildlife. However, nuisance wildlife laws, which clarify what a property owner can do when wildlife impacts their property, have been silent regarding bats.

As a result there has been a great deal of confusion and controversy regarding what can, and cannot, be done when bats are found in buildings or other manmade structures. Over the past several years, the Florida Bat Conservancy has been pressing for revisions to the nuisance wildlife regulations to specifically address bats. FBC is pleased to announce that in February 2008, the Florida Fish and Wildlife Conservation Commission (FWC) approved the much needed changes. The revised regulation, which will be effective July 1, 2008, clarifies that it is illegal to kill bats, even when they are in buildings.

The guidelines specify that bats can be excluded from buildings using one-way exclusion devices, provided such devices are used only from August 15 through April 15 and are left in place for at least four consecutive nights when temperatures are above 50° F. This provides the much needed protection for bats during the maternity season (April 16 - August 14) while the mothers are giving birth to, and raising their young.

Specifically incorporating bats in the nuisance wildlife regulation is a major achievement for bat conservation in Florida. Our thanks to the FWC staff and Commissioners and to all of our members and friends who have helped support the change.



HELPING FLORIDA'S BATS

Florida Bat Conservancy

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NEWS FROM THE FLORIDA BAT CONSERVANCY



Join us and help protect these fascinating, beneficial mammals!

Please consider helping Florida's bats by becoming a member. We are a non-profit 501(c) (3) organization working hard to protect bats by means of public education, conservation projects, rescue, rehabilitation, and research.

☐ *New*

☐ Regular \$15 ☐ Bat Friend \$30 ☐ Bat Supporter \$50

☐ *Renewing*

☐ Bat Patron \$100 ☐ Bat Conservationist \$250 or more

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