



## NASBR NEWSLETTER

### IN THIS ISSUE

WELCOME .....	1
MONTEREY 2015	
LOCAL HOST REPORT .....	2
TEACHERS WORKSHOP .....	2
MILLER AWARD .....	3
SPALLANZANI AWARDS .....	3
VILLA AWARD .....	4
STUDENT AWARDS .....	4
KNOXVILLE 2017 .....	8
NEWS	
WNS UPDATE .....	10
ANNOUNCEMENTS	
MEET ROB MIES .....	11
NEW NASBR POLICIES .....	11
CONFERENCES & SCHOLARSHIPS .....	12
NASBR TWEETS .....	13
NASBR FINANCIAL SUMMARY .....	13
INVITE TO HOST NASBR 51 (2021) .....	14
MEET THE BOARD .....	14

### Welcome

Welcome to the third edition of *Lasiurus*, the official newsletter of the North American Society for Bat Research! As I write this, I am sitting in an airport lounge in Mexico City waiting for a flight to Zihuatanejo. It occurs to me that one of the things I love about studying bats is that they can be found essentially all over the world. Even though I'm in Mexico for a friend's wedding, I look forward to listening to bats on the detector I brought along and watching them fly around at night. I think the majority of NASBR members similarly embrace a passion for bats that doesn't turn off when we leave the office or go on vacation, and that is part of what makes us a great society!

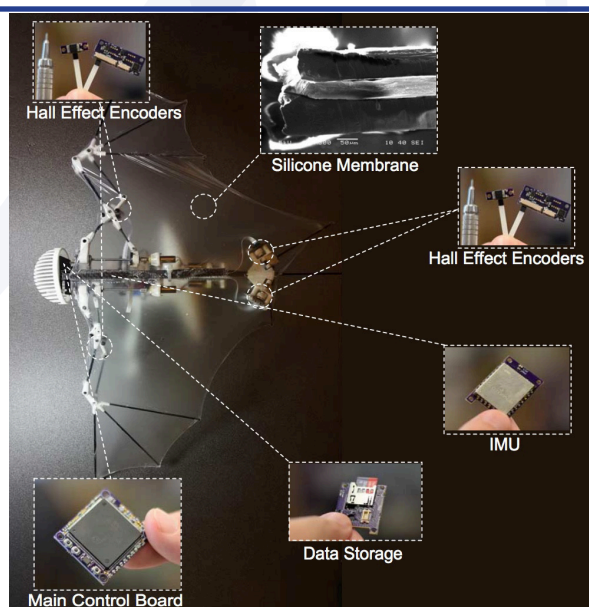
Anyway, back to the newsletter! In this issue, we give an overview of all the great happenings from the 2016 meeting in San Antonio, as well as the planned highlights for the Knoxville conference. Other stories include: 1) an update on the spread of White-Nose Syndrome written by Dr. Winifred Frick, 2) an introduction to our new Teacher's Workshop Coordinator, Rob Mies, and 3) a story by Associate PD Luis Viquez about how NASBR is planning to incorporate social media platforms, such as Twitter, into the conference in coming years. As in the past, please send story ideas, announcements and other contributions to me at [Erin.Gillam@ndsu.edu](mailto:Erin.Gillam@ndsu.edu).

Erin Gillam

Board Member and Editor of *Lasiurus*

### IN FOCUS

In February 2017, a manuscript in *Science Robotics* authored by Dr. Alireza Remezani (U. of Illinois) and colleagues unveiled the creation of the world's first robotic bat. Known as Bat Bot, the unit has wings made of thin silicon-based membranes, as well as more than 40 wing joints. This permits the robot to perform aerial maneuvers, such as straight flight, banking turn, and diving flight. While Bat Bot still has a long way to go until it can achieve the incredible aerodynamic feats that real bats perform every night, the creation of such a robot is a major step forward in bio-inspired robotics. The device can also help biologists better study bat flight, as one can make fine-scale adjustments to the movements of Bat Bot and see how these changes impact resulting flight maneuvers. Also, NASBR's very own Dr. Sharon Schwartz is part of the collaborative team of engineers, computer scientists and biologists that helped to develop Bat Bot!



# SAN ANTONIO 2016

Summer 2017

2

Vol. 3, Issue 1



## LOCAL HOST REPORT

The 2016 Annual Symposium for the North American Society for Bat Research convened in San Antonio, Texas at the Hyatt Regency Riverwalk from Wednesday October 12<sup>th</sup> through Saturday October 15<sup>th</sup>. Field trips were offered on Tuesday evening to Bracken Cave for bat viewing and BBQ, and Wednesday morning for a tour and picnic lunch at Bamberger Ranch Preserve. The NASBR meeting was well attended with a total of 357 participants comprised of 217 regular, 128 students, and 12 exhibitors.

The Local Committee included Local Hosts Mylea Bayless and Rebecca Patterson, in addition to Fran Hutchins and Dianne Odegard with Bat Conservation International. Registration volunteers included the Bracken Cave volunteers. The NASBR 2016 logo was designed by San Antonio Graphic Design Artist, David Chapman.

Big thanks go out to all the conference sponsors including Wildlife Acoustics, Pettersson Elektronik, Titley Scientific, Bat Conservation International, SonoBat, and the Freetail Brewing Company. In addition to the conference sponsors there were several Award Sponsors and Supporters including: Avinet, Inc., Basically Bats, Bat Conservation International, Bat Research News, Lube Bat Conservancy, Organization for Bat Conservation, Speleobooks, Titley Scientific, American Society for Mammalogists, Bat Conservation Trust, University of Chicago Press, Springer, Sinauer Associates, Inc., and thinkBiotech.

**Preconference Events:** Both the Bracken field trip with 85 participants and the Bamberger Preserve tour with 40 participants sold out quickly. Participants on the Bracken trip enjoyed a BBQ dinner followed by a bat talk, and a viewing of the emergence; in addition to the bats, visitors also enjoyed sightings of red-tailed hawks, great horned owls and more. Bamberger Ranch tour participants enjoyed a full tour of the property including sighting a herd of endangered Scimitar-horned Oryx, and touring the "Chiroptorium" which is a man-

made bat cave designed to hold a million Mexican Free-tailed bats. Rebecca Patterson and Fran Hutchins organized and guided the trips with additional help from all our wonderful Bracken Cave Volunteers.

Pat Morton coordinated her final Teacher's Workshop for NASBR 2016. Other educators included Rob Mies, Dianne Odegard, Lee McKenzie, and John Westbrook. Merlin Tuttle gave the keynote address. Topics included the importance of bats in Texas, furthering bat conservation through education, and the agricultural importance of bats.

Pat Morton was honored at the NASBR banquet for her contributions and given a bat photo and plaque as recognition for her many years of service.

- Rebecca Patterson & Mylea Bayless

## TEACHERS WORKSHOP

For more than 20 years, NASBR has hosted a teacher's workshop in association with meetings held in the United States, Canada, Mexico, and Costa Rica. At the 2016 NASBR meeting, a total of 35 educators attended the 5.5 hour workshop and were inspired by a faculty of bat experts. Thank you to Janet Hurley (Texas A&M Extension), Lee Mackenzie (Austin Bat Refuge), Rob Mies (Organization for Bat Conservation), Dianne Odegard (Bat Conservation International), Dr. Merlin Tuttle (Merlin Tuttle's Bat Conservation), and Dr. John Westbrook (USDA) for taking time from the conference to present at the teacher's workshop! Important topics covered included the importance of bats to the natural environment, agriculture, and people; citizen science; computer online tracking of bats emerging from caves; bringing bat curricula into the classroom; and assisting schools in dealing with bats that take up residence on their property.

The annual NASBR Teacher's Workshop depends on sponsors that help fund the operational costs and the purchase of many educational materials about bats that are provided to participants. Sponsors for the San Antonio workshop included: NASBR, Bat Conservation International, Bats Across Texas, Bat Conservation and Management, Bat Survey Solutions, Organization for Bat Conservation, Merlin Tuttle's Bat Conservation, Speleobooks, and online donations from society members.

Running the teacher's workshop also depends on key volunteers who assist with room set-up, registration, distribution of educational materials and awarding certificates of continuing education credit. Thanks to Barbara Ogaard, Dierdre Schultz, Diane Odegard, Lee Mackenzie and Rob Mies for assisting in those many tasks. Finally, many thanks to members of NASBR and the board of directors for enthusiastically supporting the teacher's workshop at the society's annual meetings.

- Pat Morton

## MILLER AWARD

SHARON M. SCHWARTZ

At the 2016 meeting in San Antonio, Texas, Professor Sharon M. Schwartz was recognized for her outstanding contributions to the field of chiropteran biology. Sharon has worked at Brown University since 1990 where her and her students have made major contributions to our understanding of bat flight, as well as other standing questions in biomechanics.

Sharon received a BA from Oberlin College in 1981 and an MS and PhD in Evolutionary Biology from The University of Chicago in 1985 and 1988, respectively. Since 1987, she has been an author on over 60 papers, and has led a group of biologists and engineers who consistently present us with a different perspective about the operations of bats. It is significant that undergraduate students often are co-authors on her published papers and other contributions. She has a great talent for making biomechanics readily accessible to non-specialist audiences. In the field, she works well with others, whether colleagues or students, and establishes a positive, stimulating and supportive environment.

Sharon's record of achievement has been recognized by more than just her colleagues at NASBR. In 2013, she received the Distinguished Alumni Service Award from the University of Chicago and in 2012 she was a featured researcher in the Air Force Office of Scientific Research 60th anniversary video. NASBR was proud to award her the Gerrit S. Miller Jr. Award in 2016.

- Nancy Simmons



## SPALLANZANI AWARD

PIPAT SOISOOK

In 2016, NASBR was excited to award the Spallanzani fellowship to Dr. Pipat Soisook from Thailand. The Spallanzani Fellowship is awarded to exceptional scientists who have made meritorious accomplishments that promote bat research, education, and/or conservation programs in their country.

## 2016 SAN ANTONIO

Dr. Pipat Soisook is a Researcher and Curator of Mammals at the Natural History Museum of the Prince of Songkla University in Thailand. Dr. Soisook's research on the taxonomy and phylogeny of bats has led to significant advances in understanding bat diversity and evolution in Southeast Asia, including descriptions of 10 new bat species. Dr. Soisook has also made major contributions to conservation initiatives in Southeast Asia, such as investigating the threats faced by cave-dwelling bats in Thailand and leading community-based efforts to raise awareness about the economic value of nature. He has also played a key role in capacity-building projects in five Asian countries aimed at training biologists in field and curation techniques. He already has existing collaborations with several NASBR members that study the bats of Southeast Asia.

Dr. Soisook gave an excellent presentation entitled "Information Rich but Conservation Poor: How do we Conserve Bat Diversity in the Global Hotspot of Southeast Asia?". In his talk, Dr. Soisook highlighted that while there have been major strides for bat science in SE Asia, biologists still face many problems, particularly for bat conservation. Such problems include a lack of scientific experts involved in bat conservation and limited commitment by local politicians to develop management strategies that balance the needs of people and nature. Dr. Soisook talked about how local initiatives can be a powerful tool for building effective conservation plans. For many, his talk was particularly inspiring as a call to action for members of the international bat community to become more involved in bat conservation efforts in Southeast Asia, as this will greatly increase the likelihood of success.

Overall, it was a great pleasure to have Dr. Soisook at NASBR 2016. While we certainly hope that the experience of attending NASBR was a great one for him, we definitely know that many people enjoyed interacting with him and his presence enriched our annual conference. We look forward to seeing more great things come from Dr. Soisook in the future!

- Erin Gillam





### DANIELA CARMONA

Summer 2017

4

Vol. 3, Issue 1

Daniela Carmona, a student from Escuela Nacional de Ciencias Biológicas of Instituto Politécnico Nacional, was selected as the recipient of the 2016 Bernardo Villa Award. She presented an outstanding platform talk about the genetic relatedness of the roosting groups of *Ectophylla alba* in Costa Rica. She thrilled us with the mother/pup genetic relationships, describing their spatial aggregation in similar roosting sites. However, the same relationship did not apply to adult males.

Daniela recently finished her undergraduate studies and is currently applying to graduate programs in Biology and Molecular Ecology, with the purpose of continuing her professional preparation with a focus on the study of bats. Daniela says "I would like to extend the scope of my research into the study of population genetics of tropical bats by using molecular tools and geographic analysis, to expand the knowledge about spatial dynamics and the genetic situation of populations in the Neotropics".

Daniela says that receiving the Bernardo Villa Award NASBR 2016 represented one of the most rewarding experiences in her academic training so far. "First, for the recognition of my research project, in which we allocated a great effort. Second, for the unequalled opportunity to share the results of my work with a large number of experts in the field, passionate for the bats study. I got from them positive feedback and suggestions that undoubtedly helped me to expand my professional vision. I also obtained inspiration and enthusiasm to continue with the immense and gratifying work focused on the conservation of bats".

- Jorge Ortega Reyes



## STUDENT AWARDS

### Avinet Award

#### Juliette Rubin

**The Evolution of Wing Shape as an Anti-bat Strategy.** I am exploring the bat-moth arms race, specifically focusing on an anti-bat strategy in a group of earless moths - Saturniidae. Without ears and the accompanying defense of sound production, many of these moths still manage to evade bat predation using derived hindwing morphology that deflects bat attack. I am investigating how hindwing tails and lobing function to thwart bat attack and the phylogenetic path that saturniid lineages took to arrive at their extant forms. It was a great honor to receive the Avinet Award. I plan to use the funds on necessary gear for some of the international field research that I will be conducting in the upcoming year.



## Basically Bats, Wildlife Conservation Society Award

Emma Kunkel

### The Relationship between Core, Fur, and Skin Temperature in Little Brown Bats.

My research focuses on quantifying the relationship between fur, skin, and core temperature in little brown bats. While researchers generally gather body temperature data by attaching temperature-sensitive loggers to bare skin, this can be problematic for multiple reasons. We found that fur temperature can be a reliable proxy for body temperature at most ambient temperatures, suggesting that future studies can attach dataloggers directly to the fur, eliminating the need for shaving while obtaining accurate data. Receiving this award and being able to attend NASBR for the first time was extremely inspiring. It was because of this experience that I have decided I want to continue my studies in wildlife biology and ecology, in the hopes of attending graduate school.



## Bat Conservation International Award

Vanessa Rojas

### Using False-positive Occupancy Models to Estimate Probability of Presence for *Myotis septentrionalis*.

As a part of my dissertation, I am using occupancy models that include both false-negative (not detecting a species that is present) and false-positive (misidentified detection) parameters to study northern long-eared bats in southern Appalachia. Including a false-positive parameter can account for the uncertainties we may encounter when conducting acoustic surveys of *Myotis* bats. The NASBR community has been a constant inspiration, and I am truly honored to have received a presentation award. The award has made me feel appreciated and I hope that my research can play a role in bat conservation.



## Bat Research News Award

Anna Doty

### The Role of Torpor in Bats in a Post-fire Environment.

My Ph.D. research focused on determining the effects of fire and environmental variables on the ecophysiology, ecology, and behavior of insectivorous bats in Australia. At NASBR, I demonstrated how torpor patterns in Gould's long-eared bat (*Nyctophilus gouldi*) changed with time since fire. This study was particularly important in the Australian context, as wildfires are becoming increasingly more severe and frequent. I am grateful I had the opportunity to speak publicly about my interests in ecophysiology and bats to such a welcoming community. The award was used to purchase personal field equipment for a new WNS-related research project in the Ozark Mountains of Arkansas.





## Karl F. Koopman Award Virginie Lemieux-Labonté

**Effect of White-nose Syndrome on the Skin Microbiome of Bats in Canada.** My research interest lies in studying the role of the bat microbiome in disease resistance, particularly in the context of white-nose syndrome (WNS). By comparing the microbiome of little brown bats (*Myotis lucifugus*) sampled at sites tested positive and negative for WNS, I was able to determine that this microbiome is mainly structured by geography. More interestingly, it appears that bats collected at WNS-positive sites harbour significantly more antifungal bacteria, supporting the hypothesis of a development of resistance by the skin microbiome. I was more than honoured to win the Karl F. Koopman award for my presentation at NASBR. Winning this award gave me new confidence in my oral skills for future presentations and encourages me to push my research further.



## Luis F. Bacardi Bat Conservation Award May Dixon

**The Use of Habituation-discrimination Tests in Bat Behavioral Ecology.** I study cognition and behavior in bats. In particular, I am interested in how different cognitive abilities are used in animals with disparate life histories. To address this, I study leaf-nosed bats, a remarkably diverse neotropical family. Receiving the Bacardi Award reaffirms to me that my research is interesting and important, and is motivating me to continue exploring the behavioral ecology of these fascinating bats. The award has helped me to return to Panama and design a new experiment here, for which I am very grateful.



## Organization for Bat Conservation Award Elizabeth Rogers

**Phenotypic Flexibility on the Fly: Short-term Variation in Body Composition in *Tadarida brasiliensis*.** My research interests are broadly based in physiological ecology, and the ways that animals respond physiologically to energetically challenging circumstances and environmental changes. I am currently studying flexibility in metabolic fuel use and storage in the Brazilian free-tailed bat (*Tadarida brasiliensis*) during the breeding season. Specifically, I am examining variation in body composition and lipid oxidative capacity throughout the summer to address how this species achieves energy balance during reproduction and associated migratory periods. Receiving this award was very exciting, and has helped me to make substantial progress on this project since the meeting last Fall. I am extremely thankful to have the support of this society as I move forward in my graduate career.



## Speleobooks Award Caitlin Campbell

**Amino Acid Nitrogen Isotopes Reveal the Trophic Position and Dietary Strategies of Bats.** My research applies new methods in stable isotope analysis to the study of bat ecology. At NASBR, I presented evidence that nitrogen isotope analysis of amino acids can determine the trophic position of bats, even when studying bats with very different diets from very different parts of the world. This new technique holds promise for bat research because bats play such important and complex roles as consumers in their respective ecosystems, and because they are so often difficult to study by traditional methods. I am very grateful for the Speleobooks award, which I will put towards further analyses and computational equipment to help complete my master's thesis.



## Titely Scientific Award Alexis Brown

**What Explains the Unique Shape of the Turbinal Bones Hidden inside Horseshoe Bat Noses?** The research I presented at NASBR 2016 involved examining CT scans of the skulls of 30 Rhinolophid species, and determined that the shape and structure of turbinal bones were correlated to echolocation frequency. This study is the first instance of turbinal bones apparently being co-opted for a function other than thermoregulation in mammals; in this case, echolocation. I especially enjoyed working on this research, because it allowed me to expand my knowledge of bat anatomy and morphology (I traditionally work with genomics and parasitology of bats). I plan to use the award money towards my graduate school research: I will be starting my master's in Ecology and Evolution in Fall 2017 at Columbia University.



Francisco de Goya y Lucientes - *A Way of Flying* (1815-1819)



# KNOXVILLE, TN

Summer 2017

8

Vol. 3, Issue 1



The 47th Annual NASBR Meeting will be held in Knoxville, Tennessee, 18-21 October 2017 at the Holiday Inn World's Fair Park. The hotel is located within a few minutes' walk of downtown Knoxville, which is the proud epitome of Southern scruffy-chic culture with an abundance of restaurants, bars, music venues and other attractions. Registration for the 2017 conference will open in May. There will be a pre-conference tour and two preconference workshops. On Tuesday there will be a through-hike to Mt. LeConte, the tallest mountain in the Great Smoky Mountains National Park. On Wednesday, a next-generation DNA sequencing workshop targeting researchers



new to the field will be offered on the University of Tennessee Campus. A workshop and field trip on the biology and roosting habits of small-footed bats will also be offered on Wednesday.

## THE LOCATION

The 46th Annual Symposium on Bat Research will be held at the Holiday Inn Knoxville Downtown, located on the World's Fair site and within walking distance of many attractions, including the Knoxville Museum of Art, historic Market Square, and the University of Tennessee. The hotel room rate for the conference is \$119+tax (single/double/triple/quad). This rate is also available for three days before and after the conference for those arriving early or staying late.

Local attractions include: the Knoxville Zoo, Ijams Nature Center, World's Fair Park, the UT Gardens and the McClung Museum. The average maximum and minimum October temperatures in Knoxville are 71/50F (22/10C).

## GETTING TO KNOXVILLE TN

McGhee Tyson Airport (TYS) is only 16 minutes (13.6 miles) from the conference hotel (\$20 taxi ride).

A free shuttle will be available to transport NASBR attendees from the Knoxville Airport to the Holiday Inn on Wednesday, October 18, from 10:00 am – 5:00 pm. Those arriving at the Knoxville Airport at other times will need to find alternative transportation to the Holiday Inn (e.g. Taxi, Uber). A free shuttle will also be available to transport NASBR attendees to the Knoxville Airport from the Holiday Inn on Sunday, October 22. More information will be available on the NASBR website.

## SPALLANZANI CURLING IS BACK

This is one of the events that raises funds for the Spallanzani Award that sponsors researchers from developing countries to attend the NASBR meeting. We will play at a curling rink in Knoxville on Wednesday afternoon.

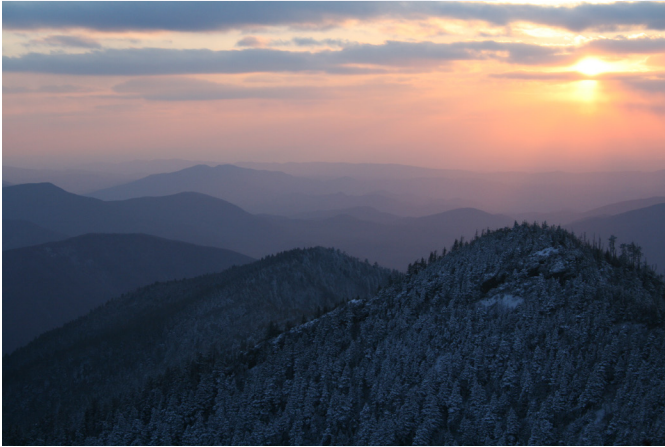




**Great Smoky Mountains Hike to Mount LeConte**

Tuesday October 17, 8:00 am to 5:00 pm

Hike to Mount LeConte in the Great Smoky Mountains National Park via the Alum Cave Trail. This is one of the most popular hikes offering stunning panoramic views of the Park, as well as the opportunity to view interesting geologic features. To reach the summit of Mount LeConte, we will climb 2763 feet and hike 5.5 miles (11-mile round trip) from the Alum Cave Trailhead.

**Next Generation DNA Sequencing Workshop**

Wednesday October 18, 9:00 am to 5:00 pm

The University of Tennessee Genomics Core will host a workshop on Next Generation DNA sequencing. This workshop will target researchers new to the field of genomics, focusing on molecular dietary studies with DNA metabarcoding, although researchers interested in other Next Gen topics could benefit as well. Participants will be guided through a typical amplicon workflow on an Illumina MiSeq platform via a combination of interactive lectures and hands-on experiences.

**Eastern Small-footed Bat Workshop**

Wednesday October 18, 10:00 am to 3:00 pm

Dr. Paul Moosman will lead a workshop on surveying for day-roosting eastern small-footed bats. Participants will visit either natural rock outcrops or rip-rap covered TVA dams near Knoxville to learn about survey techniques. They will be given a short on-site tutorial on how to spot suitable crevices and will then canvas the area to locate bats. If bats are present, Dr. Moosman will demonstrate techniques for extracting them from rock crevices.



VISIT [WWW.NASBR.ORG](http://WWW.NASBR.ORG) TO REGISTER

**IMPORTANT DATES**

Aug. 21  
Sep. 16  
Sep. 18  
Sep. 18  
Sep. 20  
Oct. 10

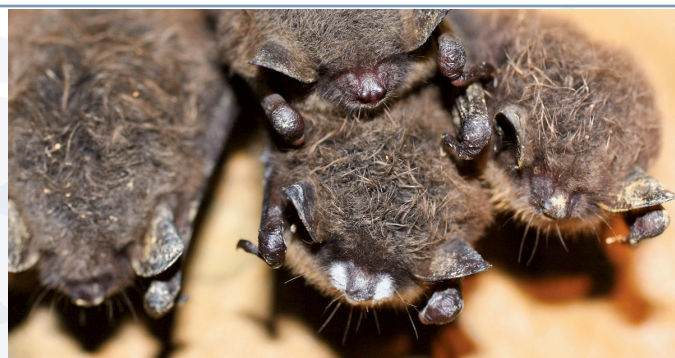
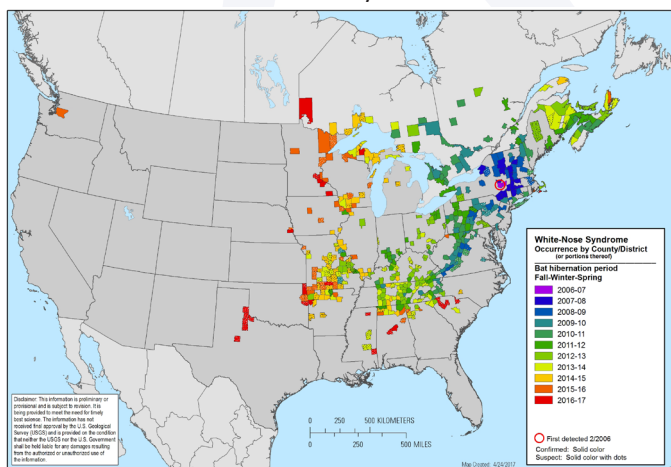
**Early Registration Deadline & Abstracts due**  
Last day to get conference rates at the hotel  
Last day to order t-shirts  
Program and Abstracts available online  
Last day to sign up for Tours & Curling  
Last day to order banquet tickets

## WHITE-NOSE SYNDROME - A DECADE LATER

It is hard to imagine that ten years have passed since the first unsettling accounts of mass die-offs of hibernating bats in up-state New York by Al Hicks of the New York Department of Environmental Conservation. Over the past decade, the disease White-nose Syndrome (WNS) caused by the fungal pathogen *Pseudogymnoascus destructans* (Pd) has caused one of the largest wildlife disease crises in North America. The disease is estimated to have killed millions of hibernating bats and has been confirmed in seven species in North America.

With each passing winter, Pd has spread steadily across North America. New detections at hibernacula get reported each winter as biologists go underground to survey hibernating bat populations. Over the past decade, surveillance for the disease has evolved from relying on visual inspections of bats with white fungal growth on noses or wings of bats to using swab surveys to detect the presence of the DNA of the fungus with quantitative PCR methods. Swab surveys allow earlier detection of presence of the fungus on bats prior to fungal growth advancing to the stage of being visible to human observers. Increased and improved surveillance has allowed early detection of the fungus by researchers and state biologists documenting when the fungus first arrives at a site and before disease establishes.

The disease is now found confirmed in 30 states and five Canadian provinces. In addition, early detection of Pd has been detected in three states at the leading edge of the spread frontier. Last spring, there was a surprising detection of a little brown myotis that died from WNS in western Washington state, 1300 miles from the nearest detection and the first long-distance jump since the fungus arrived in North America. For biologists that follow the WNS saga, late winter and early spring has become the season to expect depressing news as reports or new detections from the winter survey efforts roll in.



This winter was no exception to seasonal bad news. In the same week in March, news hit of the disease being confirmed in Nebraska, mass mortality observed in Minnesota, and the first detections of Pd in Texas. The detection in Texas added not only geographic spread to the southern frontier, but was the first discovery of Pd on the cave myotis and the first detection of the fungus on western populations of Townsend's big-eared bats – two bat species with distributions extending further into the west. Pd was also detected on tri-colored bats in Texas.

Texas is the most eastern edge of the distribution for the cave myotis, with the species being found throughout southwestern USA and into Mexico. The discovery of the fungus in Texas raises concerns about the spread of Pd into the southwestern areas where bat diversity peaks in the United States.

Although Pd continues to spread each year and WNS increases its threat to North American species as it expands across the continent, understanding of this disease has also progressed rapidly over the past decade. Research has advanced knowledge about the transmission dynamics, disease progression, hibernation physiology, eco-immunology, population impacts, and potential treatment efficacy over the past decade. Research on WNS – from the fundamentals of disease to applied aspects of disease management - remains critical to opening new pathways for conservation discoveries.

- Winifred Frick  
 photo: Michael Schirmacher/BCI  
 map: whitenosesyndrome.org



## MEET THE NEW TEACHER'S WORKSHOP COORDINATOR - ROB MIES

In 2017, NASBR's Teacher's Workshop will have a new Coordinator - Rob Mies, co-founder and Executive Director of the Organization for Bat Conservation. "I am honored to take over as the coordinator of the NASBR Teacher Workshop starting in 2017. My predecessor is leaving very big shoes to fill. Pat Morton was instrumental in starting and managing teacher workshops that have engaged with hundreds of teachers across North America. I hope to live up to her standard of commitment and professionalism."

Rob is highly qualified to take on the role of Teacher's Workshop Coordinator. He has been involved in educating the public about bats for more than 25 years. He is well known to the public through his many TV appearances on shows such as Late Night with Conan O'Brien, The Tonight Show, and many others. Rob has also interacted with countless children and adults through his work with the Organization for Bat Conservation, which strives to educate people about bats and inspire them to become more actively involved in conservation. Rob's dedication to conservation is highlighted by the fact that he received the US Forest Service Wings Across the Americas Bat Conservation Award in 2013 and 2016! Rob is also the Chairman of the Michigan Bat Working Group, President of the Midwest Bat Working Group, and Coordinator of the North American Bat Conservation Alliance.



Rob has been involved with the NASBR Teacher's Workshop for several years. "The NASBR Teacher Workshop is an amazing opportunity for local teachers to engage with bat scientists on a personal level. This interaction between NASBR members and the local teachers helps to facilitate bat conservation efforts throughout the community in which our association visits. Please contact me if you are interested in sharing your energy, talent and time to foster future generations of bat conservationists... it will mean so much!"

# ANNOUNCEMENTS

## NEW NASBR POLICIES

### **An Update on NASBR's Insurance by Al Kurta**

NASBR has continued to grow and mature as a society since the first meeting in 1970. Our annual symposium now boasts 400+ attendees at an annual cost of more than \$100,000. To protect the Society from a catastrophic failure or cancellation of a meeting, the Board of Directors is striving to maintain a reserve fund equal to the cost of the annual symposium. In January 2017, the Board provided further protection for NASBR and its volunteers by obtaining, for the first time, general liability insurance and directors & officers insurance. Our policies are obtained through the Nonprofit Insurance Alliance Group ([insurancefor nonprofits.org](http://insurancefor nonprofits.org)), which has received a rating of Excellent from A.M. Best.

### **Communications & Social Media Comment Policy (enacted by the NASBR BOD on November 9, 2016)**

NASBR is committed to ensuring that all online conversations are civil. In all our forums, we monitor comments either before they are published or shortly thereafter.

We never discriminate against any views, but we reserve the right to delete any of the following:

- violent, obscene, profane, hateful, or racist comments,
- comments that threaten or defame any person, group or organization,
- comments that suggest or encourage illegal activity,
- commercial advertisements,
- several off-topic posts by a single user,
- repetitive posts copied and pasted by multiple users, and
- personal information such as e-mail addresses, telephone numbers, or mailing addresses.

Egregious or repeated violations of the comment policy may result in deletion of your comment, removal from the group, or the reporting of your account to third-party site administrators.

# ANNOUNCEMENTS

Summer 2017

12

Vol. 3, Issue 1

## UPCOMING CONFERENCES

### **14th European Bat Research Symposium**

August 1-5, 2017  
Donostia, Basque Country  
<http://ebrs2017.eus>

### **26th International Bioacoustics Congress**

October 8-13, 2017  
Haridwar, India  
<http://www.ibac.info>

### **II Congreso Latino Americano y del Caribe de Murciélagos (Second Congress of Latin American and Caribbean Bats)**

November 20-23, 2017  
El Salvador  
<http://www.relcomlatinoamerica.net>

### **Joint Meeting of the Southeastern Bat Diversity Network, Midwest Bat Working Group, and Northeast Bat Working Group**

March 26-30, 2018  
Roanoke, VA  
<http://www.nebwg.org/meetings.html>

### **48th North American Symposium on Bat Research**

October 24-27, 2018  
Puerto Vallarta, Jalisco, Mexico  
<http://www.nasbr.org>

## SCHOLARSHIPS / GRANTS

### **Bat Conservation International Scholarship**

This scholarship of up to \$3,000 funds research aimed at bat conservation.  
<http://www.batcon.org/our-work/initiatives/award-grants-scholarships>

### **Bat Conservation and Management**

Small Grant Program  
Up to \$5,000 in products and software to encourage important but under-supported conservation and/or research projects  
<http://www.batmanagement.com/GrantProgram/grantprogram.html>

### **Holohil Grant Program**

Scientific Product Grant  
Offers Holohil transmitters at a reduced (or no) cost to research projects.  
<http://www.holohil.com/grant-program>

### **Southeastern Bat Diversity Network Student Travel Award**

Up to \$500 to attend NASBR  
<http://www.wildlifeacoustics.com/grant>

### **Western Bat Working Group: Bob Berry Fund**

This scholarship provides various technology to assist in research (transmitters, detectors, etc.).  
<http://wbwg.org/>

### **Western Bat Working Group: Dixie Pierson Memorial Fund**

This scholarship consists of two \$500 awards every other year to defray travel costs to the WBWG meeting.  
<http://wbwg.org/>

### **Wildlife Acoustics**

Scientific Product Grant  
Up to \$5,000 in products (some exclusions apply) each quarter  
Quarterly deadlines (Feb 15, May 15, Aug 15, Nov 15)  
<http://www.wildlifeacoustics.com/grant>

### **American Society of Mammalogists Grants in Aid of Research**

ASM provides various funding opportunities available to members.  
<http://www.mammalsociety.org/grants>

### **AMNH Theodore Roosevelt Memorial Grants**

Seed research grants are available for field-based research, as well as to use the AMNH collections.  
<http://www.amnh.org/our-research/richard-gilder-graduate-school/academics-and-research/fellowship-and-grant-opportunities/research-grants-and-student-exchange-fellowships>

### **The Animal Behavior Society Research Grants**

Several grants including Meeting Related Awards, Student Related Awards, Developing Nations Research Grants, Travel Awards, and Career Awards.  
<http://www.animalbehaviorsociety.org/web/awards.php>

### **The Society of Systematic Biology**

Graduate Student Research Awards assist students in the initiation (first two years) of their systematics projects and in the collection of preliminary data.  
<http://www.systbio.org/graduate-student-research-awards.html>

### **EPA Star and GRO Fellowships**

Support for fellowships and professional development opportunities that will help ensure that environmental solutions are based on quality training and sound science.  
Information here.  
<https://www.epa.gov/research-fellowships>

### **Sigma Xi Grants in Aid of Research**

Grants of up to \$1,000 to students from all areas of the sciences and engineering. Designated funds from the National Academy of Sciences allow for grants of up to \$2,500 for vision related research.  
<https://www.sigmaxi.org/programs/grants-in-aid>



## NASBR TWEETS!

Last year the program directors in coordination with the NASBR BoD launched a new strategy to communicate with the membership: Twitter. This social network allows one to communicate with a wider audience in an instantaneous manner. In San Antonio, we started using Twitter to communicate the start of oral sessions, the beginning of the student social and some other NASBR activities such as plenaries and poster sessions. The great advantage of using Twitter is that we can communicate about changes in the program and send announcements and reminders without interrupting the course of the meeting. So, the best way to never miss the location of the breakfast or the Women in Science meeting is to sign up for twitter and get daily reminders about the activities happening in NASBR that day in your mobile device or computer.

Last year, we accumulated 125 followers on the official NASBR Twitter account (@NA\_bats). This means that roughly 1/3 of the meeting was following on Twitter. We were also using the #NASBR label in our social media posts and we ask the members to use it as well on theirs.

You may ask “Why do we need both you may ask? Are you trying to confuse us?” Yes we need both and no, we are not trying to confuse anyone. The NASBR official account (@NA\_bats) is the official outlet from the Society. Any official communication from the PDs or the Board will go out from this account. Think of it as the official communication channel of the meeting. However, we know that the membership is always sharing nice pictures of everyone in the meeting, talking about their upcoming presentations or just showing off a picture of their Free-tail beer to cause envy among others who could not make it to the meeting. #NASBR is the label to tag any tweet related to the conference. So, if you log into Twitter and search for the hashtag (#NASBR) you will find a lot of info, pictures and great memories from past meetings. How can you use this?



## ANNOUNCEMENTS

Let's say for example that you go out for dinner and you had a wonderful time in a local brewery. Then you go into your account and share a picture of the place and a cheerful message inviting people to come along or just recommending the place and end the message by adding the #NASBR Label. Now anyone that logs in and searches for #NASBR label will be able to see your recommendation about that great place even if you are not “following” each other. For more on Twitter lingo and how twitter works visit [Mom, This is How Twitter Works](#).

For this year, the goal is to have 50% of the meeting attendees using Twitter. As we did last year some of the PDs (Riley and Luis) will be happy to help you install the app on your phone or tablet.

Do note, NASBR has a no-pictures-of-presentations policy. That means no taking pictures of presentations, even if the presenter asked you to take a picture. Why? Because it causes distractions to the people around you and is disrespectful of the intellectual property of the presenter. We also understand that is also important to create a buzz about your research in order to draw attention to a particular subject. So, if you (and of course, your coauthors) are O.K. with people tweeting about your results (Still no Pics!) please include in the corner of your slides your Twitter handle and the Twitter logo as a way of letting people know that it is fine to tweet away about your research.

In the near future, we want to take it to a new level. To be able to offer the opportunity to live-Tweet your talk. This means that if you want it; we will provide a system in which automatic tweets with key points from your presentation can be sent out from the @NA\_bats account at the same time you are talking or presenting your poster. This would expand the reach of our society and will hopefully start a bigger conversation about bats and bat research.

- Luis Viquez



## NASBR 2017 FINANCIAL SUMMARY

	2012	2013	2014	2015	Current*
<b>General Fund</b>	\$73,574	\$72,824	\$89,163	\$77,842	\$110,083
<b>Spallanzani Fund</b>	\$9,106	\$5,503	\$9,524	\$9,490	\$11,953
<b>Teacher's workshop</b>	\$5,619	\$5,660	\$6,389	\$6,636	\$5,374
<b>Koopman Fund</b>	\$12,682	\$12,182	\$12,238	\$12,431	\$12,676
<b>Bernardo Villa Fund</b>	\$9,087	\$7,995	\$6,820	\$5,718	\$4,743
<b>Student Awards</b>				\$1,000	
<b>Total</b>	\$110,067	\$98,661	\$124,134	\$113,217	\$144,829

\*as of 4/5/2017, does not include conference hotel deposits

## BOARD OF DIRECTORS

Rick Adams	University of Northern Colorado <i>Policy &amp; Public Relations</i>
Mylea Bayless	Bat Conservation International <i>2016 Co-host</i>
Frank Bonaccorso	U.S. Geological Survey <i>Associate Program Director</i>
Riley Bernard	University of Tennessee <i>Associate Program Director</i>
Leanne Burns	Clemson University <i>Student Representative</i>
Paul Cryan	USGS Fort Collins Science Center <i>Policy &amp; Public Relations</i>
Erin Gillam	North Dakota State University <i>Secretary, Spallanzani Chair</i>
Allen Kurta	Eastern Michigan University <i>Chair of the Board</i>
Gary Kwiecinski	University of Scranton <i>Program Director</i>
Kristen Lear	University of Georgia <i>Student Representative</i>
Burton Lim	Royal Ontario Museum <i>Finance</i>
Gary McCracken	University of Tennessee <i>2017 Co-host</i>
Shahroukh Mistry	Butte College <i>Associate Program Director</i>
Rebecca Patterson	Bat Conservation International <i>2016 Co-host</i>
DeeAnn Reeder	Bucknell University <i>Treasurer</i>
Jorge Ortega	Instituto Politécnico Nacional <i>Student Awards</i>
Maria Sagot	SUNY Oswego <i>Nominations, Sponsorships</i>
Bill Schutt	Long Island University & AMNH <i>Sponsorships, Policy &amp; Public Relations</i>
Luis Viquez	Instituto de Ecología, UNAM, México <i>Associate Program Director</i>
Emma Willcox	University of Tennessee <i>2017 Co-host</i>
Heather York	Buena Vista University <i>Education &amp; Outreach</i>

## INVITATION TO HOST THE 51ST NASBR

### 2021 NASBR Meeting (East Region)

The North American Society for Bat Research invites bids for hosting the 2021 annual meeting of the society. Eligible states, provinces, and territories are those east of Manitoba in Canada, US states east of the Mississippi (see map below). Intention to bid should be communicated to one of the Program Chairs (Gary Kwiecinski via Gary.Kwiecinski@Scranton.edu or Frank Bonaccorso via bonafrank@yahoo.com) as soon as possible. Program chairs will provide detailed advice on bid preparation. Bids must be submitted by June 1, 2018 to the Chair of the NASBR Board of Directors, Al Kurta (via akurta@emich.edu). Support for locating suitable venues and obtaining hotel bids is available - contact Shahroukh Mistry (mistrysh@butte.edu). Additional information can be found on the website. The NASBR Board of Directors will evaluate bids and successful bids meeting the basic criteria of the society will be placed before the members of the society at the NASBR business meeting in Puerto Vallarta for a vote of member preference.



Lasiurus Editor  
Design  
Student Award Photos

Erin Gillam  
Shahroukh Mistry  
Micaela Jemison

[www.nasbr.org](http://www.nasbr.org)

NASBR is a registered 501(c)3 non-profit organization