

OUR MISSION TO END BAT EXTINCTIONS WORLDWIDE



Strategic Plan 2020 – 2025



**Bats lead us to the
best opportunities to
protect nature anywhere
in the world.**

MIKE DAULTON,
EXECUTIVE DIRECTOR

WE ARE ON A MISSION.

Bats are vital to our world's ecosystems and economy, but hundreds of species are currently under threat. We're working worldwide to conserve caves, restore critical habitats in danger, and ensure the survival of these extraordinary mammals. Your investment can help us make a global impact by bringing our ambitious plan to life. The clock is ticking. Together we can create change.

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BCI

CORE VALUES AND PRINCIPLES

To accomplish lasting conservation victories, we dedicate ourselves to the highest standards. We are:

Dedicated to end extinctions.

We have a moral duty to prevent the extinction of the world's most vulnerable wildlife, and focus on the rarest and most vulnerable bats and their habitats.

Science-based.

Effective conservation requires science at every stage: establishing criteria for prioritizing targets, selecting conservation strategies, executing field work, interpreting results, and assessing impact.

Results-focused.

We prioritize work where it will have the most meaningful impact for bats and their habitats, delivering tangible, measurable, and biological conservation outcomes.

Passionate.

We bring passion and dedication to our mission, and inspire people to take action to protect bats around the world.

Innovative.

Our team uses cutting-edge tools, technology, and training to redefine what is possible in global conservation. We lead with action, experimenting with innovative conservation strategies to prove their effectiveness, and deploy them at scale.

Collaborative.

We believe collaboration is fundamental to effective conservation. We work side by side with our partners to ensure lasting conservation successes.

Inclusive.

We seek to include people of all backgrounds in bat conservation. We are respectful visitors to the countries where we work — seeking to learn, understand, and honor the historical, cultural, political, and economic context of our projects.

Committed.

We strive for operational efficiency and manage our budgets with verifiable financial strength. Our diverse income streams — gifts, memberships, grants, and contracts — ensure we are positioned to accomplish our mission over time.

Steadfast.

We aim to provide a return to our donors on their investment in the form of world-class, effective conservation, and we keep them informed on how their investments help us accomplish meaningful results for bats and their habitats.

EXECUTIVE SUMMARY

Bats have been on Earth for more than 60 million years. With over 1,400 species, they are the second largest order of mammals, and are widely dispersed across six continents. Globally, bats provide vital ecosystem services in the form of insect pest consumption, plant pollination, and seed dispersal, making them essential to the health of global ecosystems. Today, bats are under unprecedented threat from widespread habitat destruction, hunting, accelerated climate change, invasive species, and other stresses. Without concerted international action, their populations will continue to fall, driving many species to extinction.

Working together, we have the power to end bat extinctions worldwide. With the help of partner organizations, we will work to conserve bats at a global scale, prevent further extinctions, protect critical habitat for bats, and ensure lasting survival of the world's bats. This five year strategic plan provides a clear path toward these goals.

Embracing the adaptive management approach of the Open Standards for the Practice of Conservation (OS), we built a portfolio of four comprehensive missions with explicit and measurable goals to protect critically endangered bat species and habitats. The work is focused on high-priority conservation targets, and prioritized based on rigorous science and shared data. Utilizing the systematic OS framework for planning, implementing, and monitoring, we have clearly defined strategies for success and confidence that our projects will result in significant improvements in outcomes for bats.

In this strategic plan, we have outlined what we believe to be some of the highest-impact conservation efforts happening anywhere in the world. Bats are vital to our world's ecosystems and global economy. They deserve nothing less than our full efforts and attention. Together, we can protect these extraordinary mammals.



MISSION ONE

Implement Endangered Species Interventions

MISSION TWO

Protect and Restore Landscapes

MISSION THREE

Conduct High-Priority Research and Develop Scalable Solutions

MISSION FOUR

Inspire Through Experience

THE CONSERVATION PORTFOLIO

There are four missions in this portfolio, set to unfold over the next five years. Each mission includes between two and four operations with specific objectives. We focused on high-priority conservation targets, tangible impacts, and achievable goals.



We as a species need to protect wildlife and realize that we share this planet with creatures.

WINIFRED FRICK, PH.D.,
CHIEF SCIENTIST



FLORIDA BONNETED BAT — EUMOPS FLORIDANUS

MISSION ONE

IMPLEMENT ENDANGERED SPECIES INTERVENTIONS

Nearly 200 bat species in over 60 countries around the world are considered threatened (Critically Endangered, Endangered, or Vulnerable) by the International Union for the Conservation of Nature (IUCN). Together, we can stabilize these populations and prevent extinctions. We've outlined four operations that will have significant impacts for several highly endangered bat species.

OPERATION 01/04

Protect two critically endangered bats in Jamaica

OPERATION 02/04

Protect the last known maternity roost for the Fijian free-tailed bat

OPERATION 03/04

Recover remaining Hill's horseshoe bat populations in Central Africa

OPERATION 04/04

Conserve America's rarest bat and its globally imperiled ecosystem

Protect two critically endangered bats in Jamaica



JAMAICA 18.1096° N, 77.2975° W

OBJECTIVES

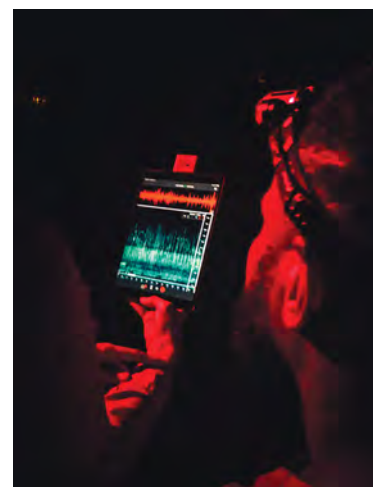
- Transfer cave and property of Stony Hill Cave to Jamaica's National Environment and Planning Agency (NEPA)
- Create cave management plans for Stony Hill and St. Clair Cave
- Train NEPA on acoustic surveying to identify patterns of habitat use
- Establish annual habitat and assessments, on-going population monitoring

PROJECT DETAILS

Habitat degradation and roost disturbance have reduced roost habitat availability to a single remaining cave for the critically endangered **Jamaican flower bat (*Phyllonycteris aphylla*)** and the **Jamaican greater funnel-eared bat (*Natalus jamaicensis*)**.

Working with the Jamaican government, we will establish enforceable conservation action plans for bats of concern and protect the last known roosts across the island. Capacity building is

essential to the success of this project. To support that effort, we will provide technical expertise and training to identify critical habitats for threatened bats and habitat protection, and develop restoration plans enforceable under current legislation.



Protect the last known maternity roost of the Fijian free-tailed bat

OBJECTIVES

- Purchase and transfer Nakanacagi Cave to the National Trust of Fiji
- Develop and implement Cave management plan for Nakanacagi Cave, including 3D mapping, microclimate monitoring, and visitor management
- Develop and implement species action plans with Fijian government via the Fijian Bat Conservation Initiative

PROJECT DETAILS

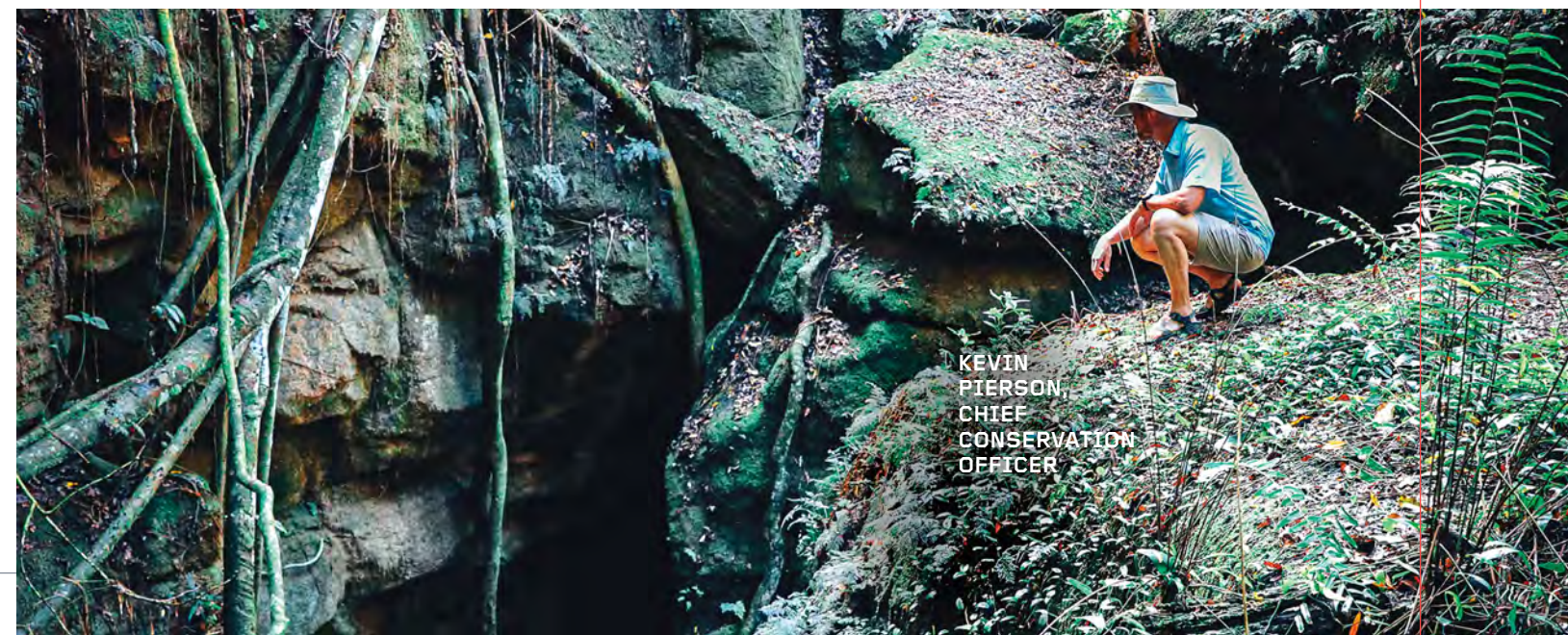
Lack of adequate protection for bats, cave disturbance (tourism, hunting, persecution), and habitat degradation and destruction (e.g., logging, mining, agricultural intensification, and urbanization) have led to steep declines in Fiji's bats. We will protect the last known maternity roost for the **Fijian free-tailed bat (*Chaerephon bregullae*)** and implement long-term conservation plans on the Fijian islands.

Nakanacagi Cave on the island of Vanua Levu, Fiji, is the only known roosting site for the endangered Fijian free-tailed bat. Protecting this site is crucial for the survival of this species, which is thought to be only 5,000 individuals and decreasing.

Our priority is to collaborate with partners, including the National Trust of Fiji and the Rainforest Trust, to secure it as a protected area — mitigating the major threat of disturbance to this bat.

We will finalize the purchase and acquisition of Nakanacagi Cave on the island of Vanua Levu and identify and protect additional roosts of the Fijian free-tailed bat, if found. Developing a cave management plan for Fiji, including conservation guidelines for a variety of cave types and all cave-roosting bat species, will help mobilize a conservation network of local communities, government agencies, and NGOs for bat conservation.

NAKANACAGI CAVE 16.6268° S, 179.0179° E



KEVIN PIERSON, CHIEF CONSERVATION OFFICER

Recover remaining Hill's horseshoe bat populations in Central Africa



NYUNGWE NATIONAL PARK 2,481' • 5°29'21.51" E

OBJECTIVES

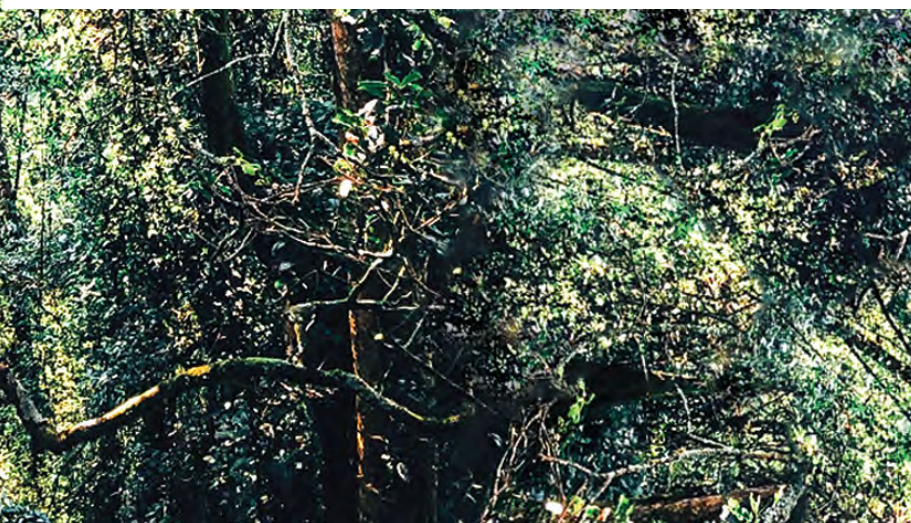
- Determine whether Hill's horseshoe bat is still found in Nyungwe National Park
- Create a conservation management plan and provide implementation assistance to Nyungwe Park Rangers and the Rwanda Development Board

PROJECT DETAILS

The critically endangered Hill's horseshoe bat (*Rhinolophus hilli*) has not been seen since 1981. The scientific and conservation community lacks basic knowledge about the species, such as where it roosts, population status, foraging habitat and behavior, and whether it can persist in degraded forests.

We will determine the status of the critically endangered Hill's horseshoe bat in Rwanda and develop a conservation management plan to protect bats in **Nyungwe National**

Park. Our team will carry out extensive surveys of Nyungwe National Park and produce the first georeferenced database for caves. Morphological and genetic methods will help us verify the presence of Hill's horseshoe bat in the park.



Conserve America's rarest bat and its globally imperiled ecosystem

OBJECTIVES

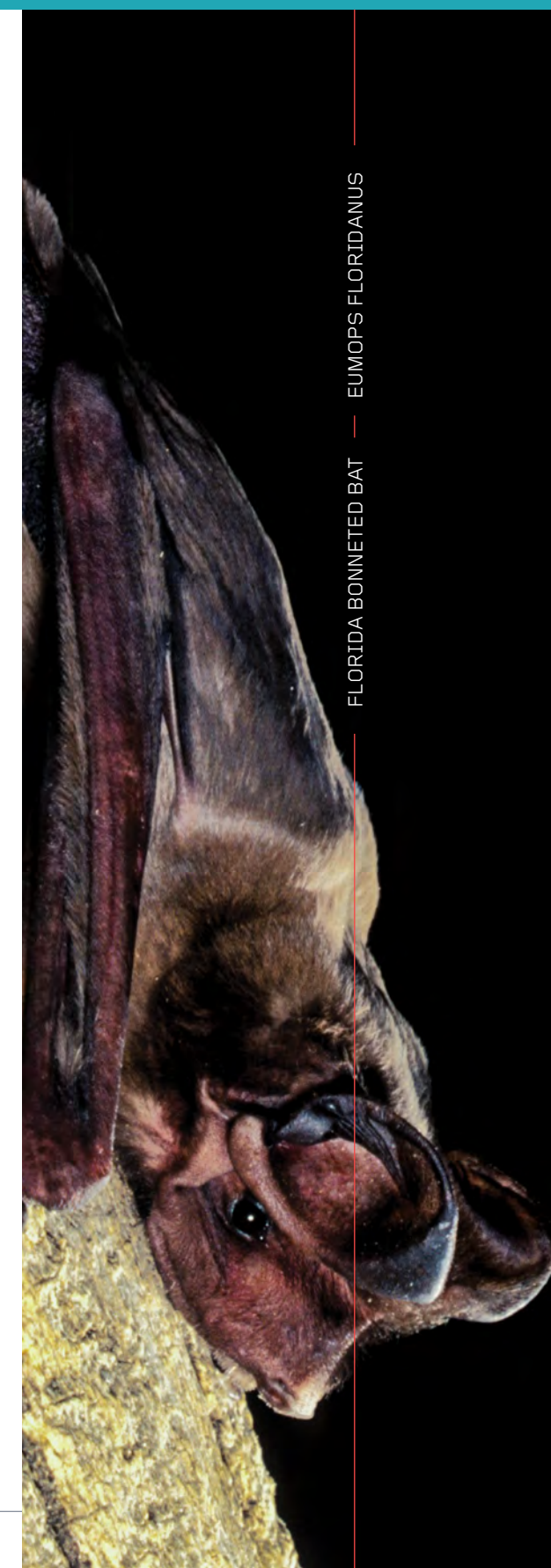
- Establish long-term roosting options for bats in Miami-Dade County without risk of exclusion or disturbance
- Establish joint communication strategies with residents to reduce roost disturbance and increase support for conservation activities
- Create a robust network of Florida bonneted bat citizen scientists to collect acoustic data with limited supervision and only periodic training from paid staff
- Improve understanding of natural history, habitat use, and behavior, providing information to design and implement conservation actions to protect the species

PROJECT DETAILS

The Florida bonneted bat (*Eumops floridanus*) is the rarest bat in the United States. This species has suffered habitat loss due to rapid land development and climate change, which increases the intensity and frequency of storms, reducing natural roost availability. As a consequence, the species' population has been in decline for decades.

Natural roosts are known in only six locations across South Florida. In order to design and implement management strategies for the species, and in collaboration with **Zoo Miami** and **NextEra** (the parent company of Florida Power & Light), we will lead key research to understand species distribution, foraging habits, and diet in the urban environment. We'll also build, monitor, and maintain specially designed artificial roosts for Florida bonneted bats in Miami to increase roost availability.

To increase the roost search effort within greater Miami, we will increase awareness around species conservation to include the community in our efforts and locate new roosts.



FLORIDA BONNETED BAT — EUMOPS FLORIDANUS



Working with partners across the globe we are able to identify and lead critically important conservation projects with clear, achievable actions that prevent the extinction of the world's most threatened bats.

JON FLANDERS, PH.D.,
DIRECTOR, ENDANGERED SPECIES INTERVENTIONS

MISSION TWO

PROTECT AND RESTORE LANDSCAPES

BRACKEN CAVE — 29.6677° N, 98.3302° W

Developing partnerships and collaborations to integrate regional, national, and international efforts is crucial to our conservation mission. Our habitat protection and restoration work focuses on restoring habitat in critical areas, protecting colonies of bats, and abating threats at known roost sites.

OPERATION 01/04

Restore agave forage and protect roosts of pollinating bats in southwestern US and Mexico

OPERATION 02/04

Protect America's most economically valuable bat at Bracken Cave Preserve

OPERATION 03/04

Protect and assess subterranean features for bat roosting habitat

OPERATION 04/04

Implement bat conservation on 258 million acres managed by the US Government

OPERATION 1

Restore agave forage and protect roosts of pollinating bats in southwestern US and Mexico



MEXICO — 25.757° N, -100.173° W

OBJECTIVES

- Protect critical roosting sites across the migratory range of pollinating bats
- Restore foraging habitat surrounding roosts (50 km buffer area)
- Restore foraging habitat along migratory corridors in the borderlands, focusing on increasing densities of flowering agaves in parks and protected areas

PROJECT DETAILS

The status of pollinators in the US-Mexico borderlands has emerged as a critical conservation issue because of their importance to agriculture, biodiversity conservation, and ecosystem function. Three species of nectar-feeding bats serve as primary pollinators for keystone desert plants in Mexico and the southwestern United States. Roost disturbance and habitat loss led to the rapid decline of these bats.

Populations of the **Mexican long-nose bat (*Leptonycteris nivalis*)** decreased by 50% over the last ten years. We will protect known roosts while continuing to grow a range-wide restoration effort to enhance foraging habitat in proximity to critical roost sites.

Our research agenda will expand to identify culturally and environmentally suitable sites for agave restoration operations and provide direction to target specific areas to create resilient nectar corridors for migratory movements.

To address the bi-national landscape scale of the operation, we will develop diverse partnerships. These will help us expand the capacity to grow and plant locally adapted and sourced agave plants in the form of seed and nursery material in areas of highest impact for bat conservation.

OPERATION 2

Protect America's most economically valuable bat at Bracken Cave Preserve

OBJECTIVES

- Ensure Mexican free-tailed bat population at Bracken Cave is protected and healthy

PROJECT DETAILS

In 1992, we purchased **Bracken Cave** and the surrounding 4.7 acres of land to protect the largest single species colony of bats in North America. Nearly 25 years later, through a series of additional land purchases, that small initial acreage has grown by more than 300% into our 1,458-acre Bracken Cave Preserve.

Together, we co-manage 3,462 contiguous acres of rugged Texas Hill Country with The Nature Conservancy

(TNC). This protected wild space is 20 miles north of San Antonio and less than ten miles from Interstate 35, amid one of the most rapidly urbanizing highway corridors in the United States. We have secured a meaningful buffer between the bats and the nearby growing human population, and developed a preserve that will serve as a home to the plants and animals that are native to the Texas Hill Country.

BRACKEN CAVE — 29.6877° N, 98.3302° W



Protect and assess subterranean features for bat roosting habitat



WYANDOTTE CAVE — 38.2284° N, 86.2974° W



OBJECTIVES

- Implement habitat recommendations at 2,500 sites

PROJECT DETAILS

The estimated 500,000 abandoned mines throughout the United States present many potent dangers to human health and the environment. State and federal government agencies have increased the pace of reclamation and closure of these potential hazards. Many of these abandoned mines have become important habitat for bats as they seek refuge from encroachment by human development.

Our subterranean team works closely with federal, state, and private land managers to identify and evaluate abandoned mine lands as potential bat roosting sites. On average, team members spend two weeks

of each month in the field working with agencies including the **US Bureau of Land Management (BLM), US Department of Defense, US Forest Service, and state mining and minerals offices** conducting biological surveys and mapping underground areas.

Since 2008 we have surveyed over 5,000 mine features and 400 natural caves as part of our efforts to identify and protect abandoned mines as bat habitat. We will survey and protect an additional 2,500 underground habitats in the next five years — 25% of which we expect to become home to bats of conservation concern.

Implement bat conservation on 258 million acres managed by the US government

OBJECTIVES

- Create comprehensive spatial datasets on bat distribution, habitat quality, and priority areas for protection and enhancement on public lands
- Implement best management practices addressing bat conservation on 100% of priority sites

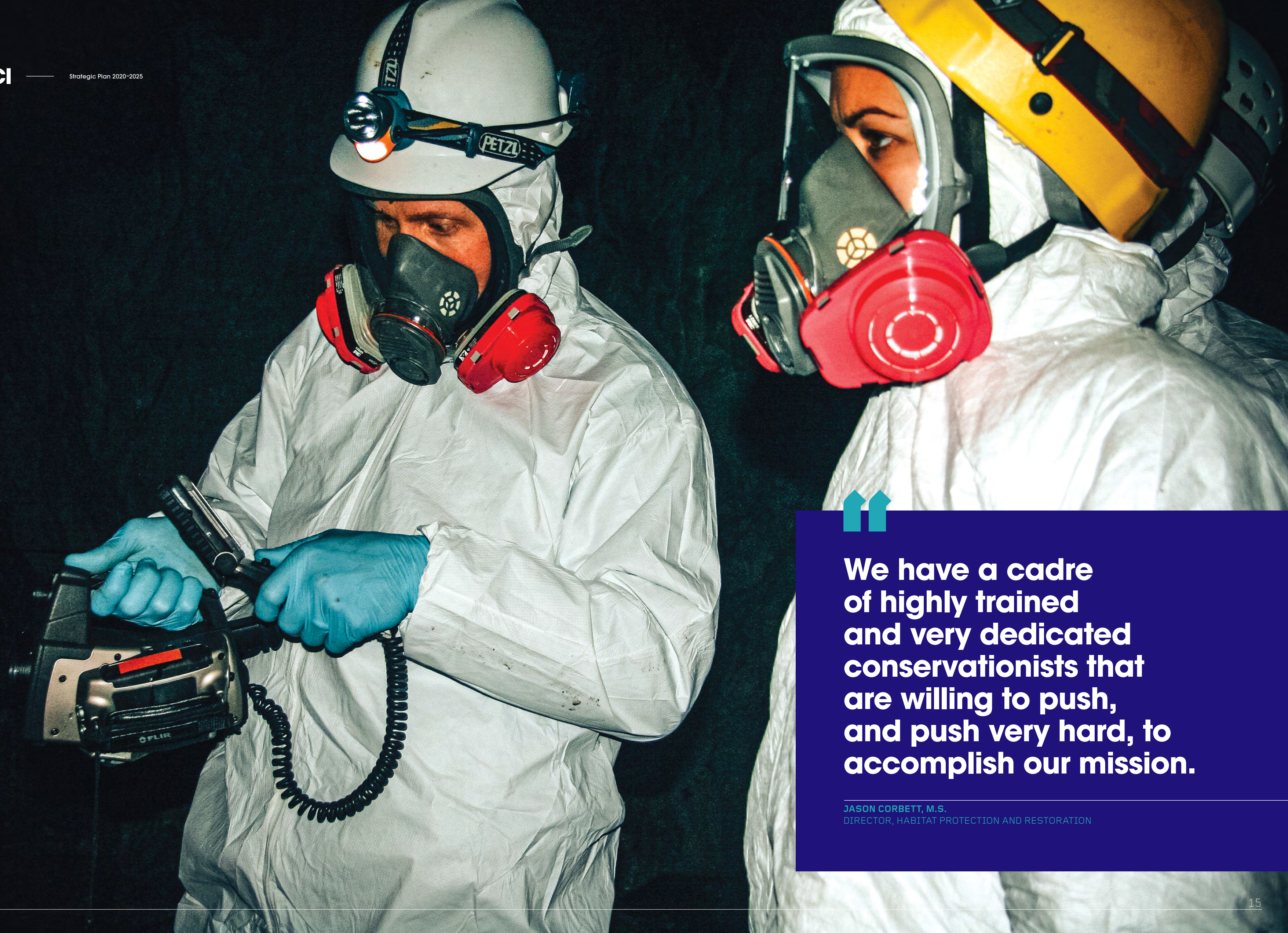
PROJECT DETAILS

We work in partnership with federal public land agencies such as the BLM to inform management decisions and actions that lessen impacts to bats from energy development, climate change, recreation, and

forest management. Our team will coordinate with federal public land agencies and implement protection strategies at priority sites.



PALLID BAT — ANTROZOUS PALLIDUS



We have a cadre of highly trained and very dedicated conservationists that are willing to push, and push very hard, to accomplish our mission.

JASON CORBETT, M.S.
DIRECTOR, HABITAT PROTECTION AND RESTORATION

MISSION THREE

CONDUCT HIGH-PRIORITY RESEARCH AND DEVELOP SCALABLE SOLUTIONS

JAMAICA — 18.1096° N, 77.2975° W

Developing solutions to emerging and serious threats to bats requires innovative research and global-capacity building. We conduct high-priority research to accelerate finding solutions to protect bats from the impacts of White-nose Syndrome (WNS) and fatalities from wind energy facilities. We focus on improving the state of knowledge on bat populations to inform conservation actions and invest in tools and partnerships that aid broad-scale efforts to inform conservation decisions. We build global capacity by investing in the next and now generations of bat conservation leaders by supporting outstanding student scholars in bat conservation and research around the world.

OPERATION

01/04

Develop and implement strategies to help bats survive WNS

OPERATION

02/04

Significantly reduce the annual bat fatalities from wind energy facilities

OPERATION

03/04

Grow global capacity for bat conservation through student research scholarships

OPERATION

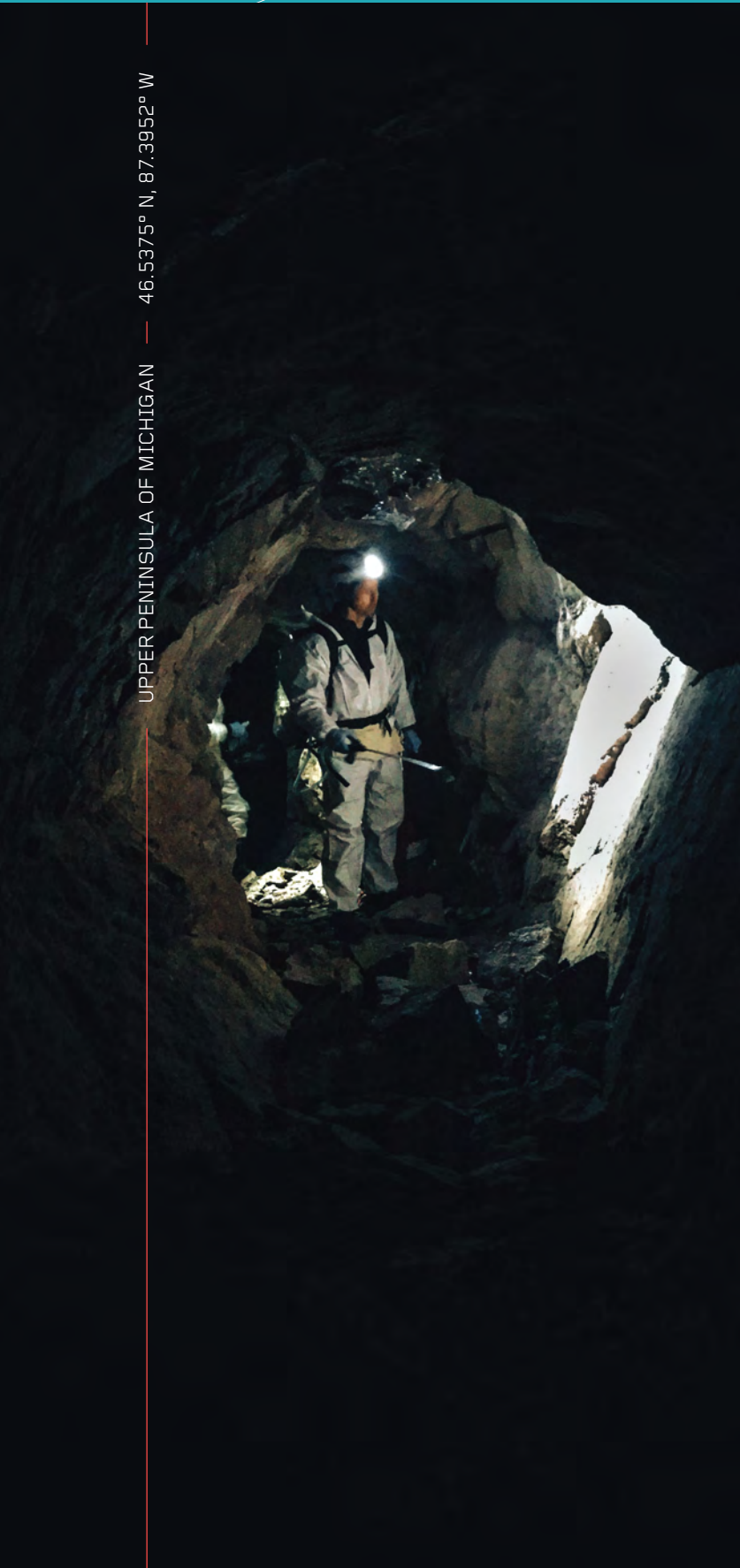
04/04

Leverage acoustic data to improve bat conservation across North America

OPERATION 1

Develop and implement strategies to help bats survive White-nose Syndrome

UPPER PENINSULA OF MICHIGAN — 46.5375° N, 87.3952° W



OBJECTIVES

- Accelerate research to test methods and actions to promote survival of bats
- Lead research and monitoring to inform prioritizing conservation actions for bats

PROJECT DETAILS

The devastating White-nose Syndrome (WNS) causes high mortality during hibernation and threatens several bat species with global or regional extinction. The disease is confirmed in 12 species and is now widespread across North America. We will test innovative conservation strategies and research solutions aimed at improving survival of

bats and slowing the spread of the pathogen at scale. We will target research on solutions that can be applied at scale either through species intervention (treatment) or habitat protection and restoration. Research will be communicated through scientific and management channels to inform decision-making.

OPERATION 2

Significantly reduce annual bat fatalities from wind energy facilities

OBJECTIVES

- Accelerate research to address gaps in relevant bat ecology and behavior
- Develop technologies and industry methods to reduce the fatality of bats
- Improve pre-construction monitoring to better assess bat activity levels and use at proposed wind turbine sites
- Improve post-construction fatality searches to better determine estimates of fatality, compare fatality estimates among facilities, and determine patterns of fatality in relation to weather and habitat variables

PROJECT DETAILS

Hundreds of thousands of bats are killed each year by wind turbines around the globe. Bat fatalities from collisions with wind energy turbines are now one of the leading causes of observed mortality of bats globally. Over 500,000 bats are estimated to be killed annually across Canada and the United States. Current fatality rates from wind turbines are high enough to cause rapid declines in populations and increase risk of extinction for some migratory species.

We will continue our efforts to conduct high-impact research to develop solutions to prevent mortality of bats at wind energy facilities. We focus our research on scalable solutions and work to develop both technological solutions as well as address the major gaps in knowledge about bat behavior to identify effective solutions. We work with partners and experts from government agencies, private industry, academic institutions, and non-governmental organizations to accelerate solutions to this global challenge.

LOCUST RIDGE WIND FARM — 40.8435° N, 76.2018° W



Grow global capacity for bat conservation through student research scholarships



NEPAL 27.7267° N, 85.3219° E

VARSHA RAI,
TRIBHUVAN
UNIVERSITY,
NEPAL

OBJECTIVES

- Increase scientific knowledge on data deficient and threatened bats
- Increase research efforts (number of scientific publications) in Africa, Asia, and Latin America
- Increase evidence for conservation interventions

PROJECT DETAILS

Lack of knowledge on conservation status or ways to address known threats impedes effective conservation action. We will build scientific knowledge and researcher capacity in underrepresented regions through scholarships for student researchers.

These students will address priorities such as conservation assessment of data deficient or threatened bats, and testing a conservation intervention to address specific threats.

Leverage acoustic data to improve bat conservation across North America

OBJECTIVES

- Increase quality and quantity of data contributed to North American Bat Monitoring Program (NABat)
- Increase accuracy of population status and trend reporting for North American bat species
- Increase status and trend reports published on North American bat species available to decision makers
- Change regulatory status of bat species based on population status

PROJECT DETAILS

Bats in North America face three major threats: White-nose Syndrome (WNS), mortality from wind energy facilities, and habitat loss and degradation. Lack of information on population status and trends impedes regulatory protection and hinders targeting conservation actions for species and populations that need it most. Having population data is the first step in taking conservation action.

We serve as a partner and contributor to the NABat through data collection and analysis and cultivating stakeholder support. Our team provides leadership and collaborates on research involving data collection,

processing, and the use of analytic tools to provide robust data to the program.

Current activities include improving acoustic processing workflows that enable scaling sustainable models for data contributions; collecting field data on acoustic monitoring, colony counts, and surveillance for WNS to increase geographic coverage and scope; and creating data science tools that enable partner support via the NABat data portal.



CORONADO NATIONAL MEMORIAL 31.3459° N, 110.2538° W



Bats are a critical component of our ecosystem, deeply rooted in culture and tradition, and one of the most fascinating taxa in existence.

KEVIN PIERSON,
CHIEF CONSERVATION OFFICER



HAMMER-HEADED FRUIT BAT — HYPSIGNATHUS MONSTROSUS

MISSION FOUR

INSPIRE THROUGH EXPERIENCE

Many of our members and supporters became connected to bats, bat conservation, and our organization because of personal experiences in nature, and in particular, personal experiences observing and appreciating bats. We commit to making a powerful impact through every aspect of our nature experiences — including the wildlife, settings, and people you encounter with us.

OPERATION

01/02

Enhance Bracken Cave Preserve

OPERATION

02/02

Launch a nationwide bat walks program

Enhance Bracken Cave Preserve



BRACKEN CAVE 29.6877° N, 98.3302° W

OBJECTIVES

- Enhance Bracken Cave Preserve to improve accessibility, visitor capacity, and durability
- Strengthen programming through improved morning and evening bat-flight viewing opportunities, and additional initiatives with schools, underserved communities, and corporations

PROJECT DETAILS

Bracken Cave Preserve is the largest bat colony in the world — home to over 15 million Mexican free-tailed bats (*Tadarida brasiliensis*). Their nightly emergence is a jaw-dropping, life-changing experience — one that can become a bucket-list item for nature lovers worldwide that inspires people to support bat conservation. In 2014, working with The Nature Conservancy, the Texas Parks and Wildlife Department, the City of San Antonio, Bexar County, and many regional donors, we acquired 1,500 acres of land threatened by development. Last year, we welcomed over 5,000 visitors and volunteers, but we need to improve the preserve's infrastructure to continue showcasing this incredible wildlife destination.

This operation will incorporate woodland restoration and preservation, ADA-accessible trail development, and improved

roadways. Additionally, green architecture will be incorporated wherever possible. All of these measures will be in harmony with the natural resources within the preserve.

We are committed to catalyzing the experience of Bracken bat flights to teach the public about the ecological and economic value of bats — sustainably increasing access for visitors and protecting a magnificent colony of Mexican free-tailed bats.

With planned enhancements, we believe we can realize our vision of making Bracken Cave Preserve a worldwide destination that inspires people to value bats and support bat conservation.

Launch a nationwide bat walks program

OBJECTIVES

- Develop a network of trained volunteers who will provide interactive bat encounters by providing nature walks where participants can listen to ultrasonic calls of bats
- Develop tools with zoos and nature center partners using best practices, knowledge, and technology

PROJECT DETAILS

In the past few years, bat detectors, which plug in to a smart phone and are app-enabled, have become cost competitive with a pair of binoculars. We commit to sparking a nationwide movement toward a new kind of nature experience, at sunset instead of sunrise, by taking advantage of emerging bat detector technology and launching a nationwide bat walks program.

In 2019, we began the pilot phase of a bat walks program. Through this initiative, **we will develop a network of trained volunteers who will provide interactive and in-person bat encounters.** Based on existing

bat walks programs in Europe and New York's Central Park, our program will offer highly effective, experiential ways to relay to participants the importance of bats and the many threats to their survival during intermittent stops along a walking route. Through physical participation, people will retain the information they learn through shared experience and then have an opportunity to teach others.

In the pilot phase, we will partner with zoos and nature center partners to access a trained network of volunteers and an existing community of nature lovers predisposed to seek out wildlife experiences. These expert partners will

provide the opportunity to jointly develop materials using best practices, knowledge, and technology.

Our pilot program will begin in Texas, where we're headquartered, and which is home to 32 species of bats — more than any other state in America. Bats can be found across the entire state, including in metropolitan areas and at many popular tourist destinations. In Florida, our bat walks pilot will be targeted to support our Florida bonneted bat conservation work, through a combination of community outreach and surveillance. In 2019 and 2020, initial trainings will occur in Houston, San Antonio, Dallas,

and Miami. **Our first official partner in this effort is the Houston Zoo, who will assist in developing this program in a novel way.** They are a leader in effective community engagement and developing conservation messages that resonate, which will be instrumental in piloting a nationwide program.



ARMED WITH
THE TANGIBLE
GOALS OF THIS
STRATEGIC
PLAN, WE
WILL FORGE
AHEAD IN
OUR MISSION
TO END BAT
EXTINCTIONS
WORLDWIDE.

Through these focused conservation efforts, we will protect endangered species and habitats, develop scalable solutions for the future, and build awareness and support for bat conservation by fostering inspiring experiences with these incredible animals. The future needs all of us, and we will not back down.

STAND UP
AND
JOIN US
TODAY.





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