



WHITE OAK
CONSERVATION

2016 ANNUAL REPORT



www.whiteoakwildlife.org

Saving endangered wildlife and habitats through sustainable conservation breeding, education, and responsible land stewardship.

Letter from the Executive Director

Four years ago, when the Walter family was introduced to White Oak, they saw in it the passion and dedication for conservation of the previous owner, Howard Gilman, reflected in the animal programs, the White Oak team and the facilities. Their interest in conservation is the perfect match for the important work White Oak is accomplishing. We are honored to work with them as stewards of the largest conservation facility of its kind in North America.

During the past four years, we have expanded our rhino, okapi, large carnivore, antelope, and bird programs. White Oak now has over 400 individual animals on-site representing 34 species. We have increased our conservation land areas from 6,000 acres to 13,000 acres in our efforts to provide safe haven for some of the Earth's rarest species and preserve wildlife habitat in Florida and Georgia.

Conservation is about engaging people toward conservation action and education is another new endeavor for us. We believe it is important to expose young people to conservation here at home, and help them understand their role in caring for the environment as a global citizen. White Oak is the perfect 'classroom' to teach the next generation about saving wildlife and wild places. It is their influence on the future that will save the species that call White Oak home.

The 2016 Annual Report is a snapshot of White Oak's progress and accomplishments. Ensuring there are safe spaces for wild animals to live and thrive requires commitment that spans generations. We invite you to see for yourself how White Oak is making an impact on conservation, both today and for the future.

Steve Shurter

President, Executive Director
White Oak Conservation Foundation



How do We Save a Sparrow?

We pay close attention.

Even the little ones count.

People know White Oak best for our rhino and cheetah conservation, but when a little bird like the Florida grasshopper sparrow is in trouble, we asked if we could help and got involved. **Working with partners, we implemented a plan to help save the Florida grasshopper sparrow**, including rearing and caring for birds at White Oak for eventual release (pages 5-6).



We solve problems.

We watch out for big birds too.

The whooping crane is the largest crane in North America and a conservation icon. The national recovery team restoring the wild whooping crane population asked White Oak to help improve behaviors of birds slated for release to the wild. Our remote site, natural wetlands vegetation and privacy are the perfect prescription for crane parents to raise healthy chicks for release. **In 2016, White Oak received two whooping cranes to help them bond and prepare them for release, our first step toward a larger role with the Whooping Crane Recovery Program** (page 4).

We get people involved.

Often times conservation issues are about people, not just animals.

The current poaching crisis for rhino horn and elephant ivory is caused by uninformed people. Our education program helps students and guests to understand the wonders, complexities and diversity of the natural world, and **engages to help seek solutions to real time problems facing animals like rhinos and elephants** (pages 10, 13-14).

White Oak's 2016 Annual Report is a showcase of our expanding wildlife, conservation education and natural resource programs, highlighting the incredible effort of the team to save endangered species. **We hope you will consider becoming involved with conservation efforts, with us at White Oak and beyond.**



Conservation Accomplishments



TOTAL
species

34



NEW
species

2



BIRTHS
in 2016

126





Carnivores

The Carnivore Team had a busy year in 2016. As part of our ongoing participation in the Association of Zoos & Aquariums Cheetah Species Survival Plan (SSP) to ensure genetic diversity, White Oak received and sent out cheetahs for breeding according to SSP recommendations. **In October, a male cub was born at White Oak** and was hand-raised due to lack of maternal care (a common occurrence when litters are no greater than one or two cubs). Two months later, another hand-raised cub joined him from Fossil Rim Wildlife Center in Glen Rose, Texas. The two of them are now inseparable.

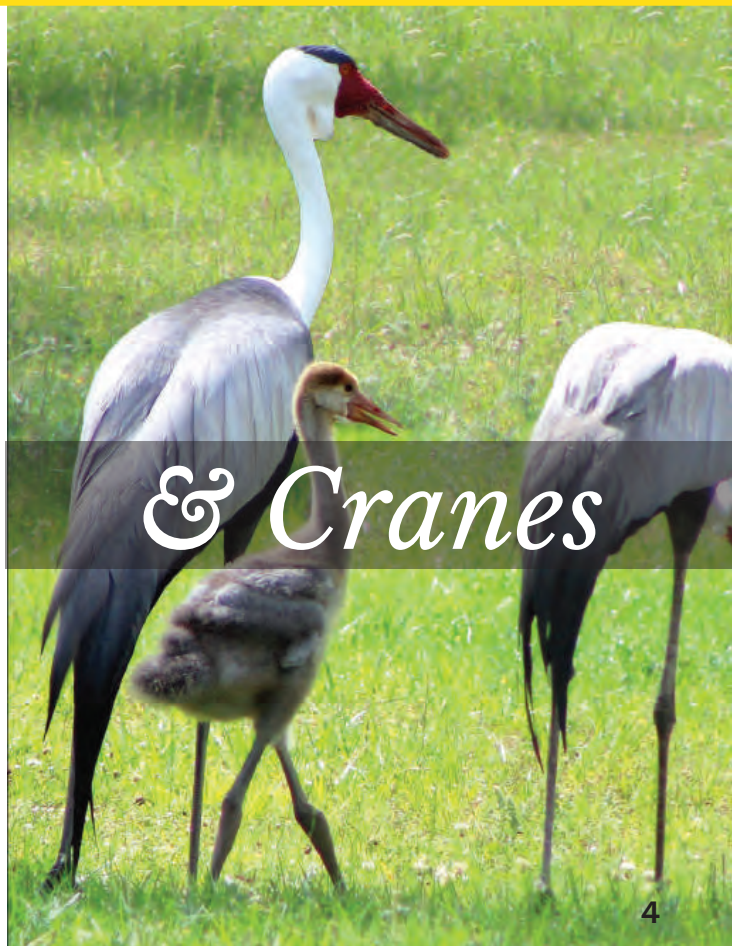
White Oak continued its successful maned wolf breeding program in 2016. In December, three pups were born to a first-time mother. All are doing well.

The carnivore team participated in cheetah and maned wolf SSP planning meetings as well as attended various professional-oriented functions throughout the year. They all say the year went by fast - just like a cheetah!

White Oak has a long history of working in crane conservation.

Cranes prefer wet habitats so they thrive very well here. White Oak participates in species recovery programs for Mississippi sandhill and whooping cranes and works with the SSP for wattled cranes from Africa.

Among many of our achievements with cranes in 2016, **one of the most significant was the first wattled crane chick hatched through artificial insemination here at White Oak.** We began working to establish assisted reproductive techniques in this species in 2012 in conjunction with the Conservation Centers for Species Survival. We produced two chicks from artificial insemination in 2016, both of which were parent-reared by our two pairs. **This is a huge breakthrough and population boost to the Wattled Crane SSP.** We will continue to produce chicks from genetically valuable birds in an effort to make the wattled crane SSP population more sustainable.



& Cranes

Savings Species... One Ounce at a Time

The **Florida grasshopper sparrow**, named for its call, is so rare that few people have ever seen or heard of this tiny bird - which weighs about one ounce as an adult. In 2015, White Oak and our partners at Tall Timbers Research Station and the United States Fish and Wildlife Service embarked on a journey to save the Florida grasshopper sparrow from the brink of extinction.



The Florida grasshopper sparrow: Big plans for a tiny bird



White Oak manages its grasshopper sparrow breeding population in the most naturalistic way possible - even in the way we mimic weather events that would naturally occur in their home ranges. Since the sparrows select open habitat consisting of recently burned native grassland, the enclosures at White Oak are located in an open field of native grasses, and White Oak team members perform a prescribed burn in and around the enclosures annually. **The management techniques employed at White Oak preserve and nourish natural behaviors in the captive birds - behaviors that are important when the birds are reintroduced in the future.**

There were five pairs of Eastern grasshopper sparrow at White Oak going into the 2016 season, and those pairs hatched out 35 chicks! This was a huge success showing that grasshopper sparrows can breed in captivity and that captive breeding is a viable recovery option for the Florida grasshopper sparrow. With the chicks hatched at White Oak in 2016, we also began establishing reintroduction techniques. **White Oak and its partners reintroduced 15 captive-bred Eastern grasshopper sparrows into a population in Georgia.** Radio telemetry backpacks were affixed to the sparrows and multiple techniques were used to determine the most successful protocols for reintroduction. The released birds behaved just like their wild-hatched counterparts and convinced the recovery team that reintroduced, captive-bred birds from White Oak could survive in the wild.

In August of 2016, White Oak received three wild-caught family groups of Florida grasshopper sparrows. The protocols established for managing Eastern grasshopper sparrows will be applied to what we hope will be a successful breeding program for this highly endangered species.



“The Florida grasshopper sparrow is perhaps the most endangered bird in the continental United States.” - Dr. Paul Gray, Audubon Florida



White Oak has a long and successful history in **ungulate conservation**. Ungulates are animals with hooves, such as rhinos, antelope, deer, pigs, and zebras - and these animals play a vital role in ecosystem balance worldwide. Extinction threatens the vast majority of ungulates, but White Oak is collaborating with organizations around the globe to ensure the survival of these important species.

*Horns & Hooves:
Ungulate Conservation at White Oak*



2016 Ungulate Updates



2016 proved to be a very busy year for the Ungulate Team at White Oak! White Oak has been expanding our conservation efforts for rhinos, one of our flagship species. Last year, three rhino calves were born here - two white rhinos and one Indian rhino - both great successes for these species at risk of extinction due to catastrophic poaching rates. In June, one white rhino gave birth to her sixth calf at White Oak while another became a first-time mother in November. The Indian rhino calf is her mother's seventh. Three of her seven have been born at White Oak. Along with our ever-growing rhino families, we greatly expanded their enclosures. **White Oak created a natural 43-acre habitat for the Indian rhinos and Père David's deer, which is now extinct in the wild.** The Père David's deer is a fantastic example of a species saved from the brink of extinction by human-managed care programs collaborating around the world. Today, this semi-aquatic deer numbers in the thousands due to these efforts. The rhinos and the deer can be seen cooling off in their large ponds in their habitat on warm days.

Early in 2016, White Oak acquired an okapi from the Chester Zoo in England. **This young male represents new genetics to the U.S. population of okapi - something which has not occurred since 1991.** Since his arrival, he has been introduced to several females for breeding and there are calves due to be born in 2017! White Oak partners with institutions all over the world, just as we did with Chester Zoo, to maintain high levels of genetic diversity of all of the species we strive to conserve. By the end of the year, White Oak saw 90 ungulate babies born in 2016! These include Grevy's zebras, Somali wild ass, dama gazelles and bongo. It was a very (re)productive year for us!

Conservation science at home...

With our partners in research, the South-East Zoo Alliance for Reproduction & Conservation, White Oak worked on these exciting research projects in 2016!



Seasonal changes in reproductive hormones and aggressive behavior in captive blue-billed curassows—Schumann, A., Brewer, C. This study measured changes in testosterone in blue-billed curassows at the time of aggressive behaviors in males and egg-laying in females to understand reproductive seasonality. SEZARC assisted with project design, sample and data analysis, and data presentation, and trained the investigators in enzyme immunoassay techniques.

Relatedness and genetic diversity in southern white rhinoceros—Metrione, L. This study assesses genetic relatedness among white rhinos to better inform breeding recommendations and maintain a healthy, sustainable population.

SEZARC managed the project approval process for research projects in the following additional subjects, enabling White Oak's participation in these important investigations: Cheetah genetic health, nutrition, & reproduction; Florida grasshopper sparrow infectious disease research; Giant eland and Florida panther veterinary management techniques; Rhinoceros nutrition & reproduction.



and veterinary care abroad!

White Oak supports veterinary needs for endangered species as part of our conservation medicine program. In January 2016, Dr. Citino was asked to assist the veterinarians of

the Sumatran Rhino Sanctuary (SRS) in Way Kambas National Park, Sumatra in preparing for a special rhino birth. The SRS vets, Zulfi Arsan and Made Fera, had not experienced a rhino birth before, so Dr. Citino went to impart his knowledge of rhino reproduction, instill some confidence, and to make sure necessary equipment and supplies were on hand. While there, he also participated in the ultrasound of the mother rhino, Ratu, and took part in strategic

From Dr. Scott Citino, White Oak's Senior Veterinarian on his 2016 trip to Indonesia:

planning for the Rhino Sanctuary. Dr. Citino arrived at the SRS on May 5 for the maternity watch for the birth of Ratu's second calf.

Cameras were set up in the maternity enclosure, and keepers were on hand so she could be observed around the clock. Ratu chose to give birth where she could be watched closely. The calf was born at 4:42 am, and in the next hour was able to walk to mom and nurse. Over the next days, the calf was playing, running, and mud-bathing. The rhino calf was given the name Delilah by the President of Indonesia. She is a special rhino calf and represents hope for rhinos in Indonesia and the world.



CONSERVATION *is about people*



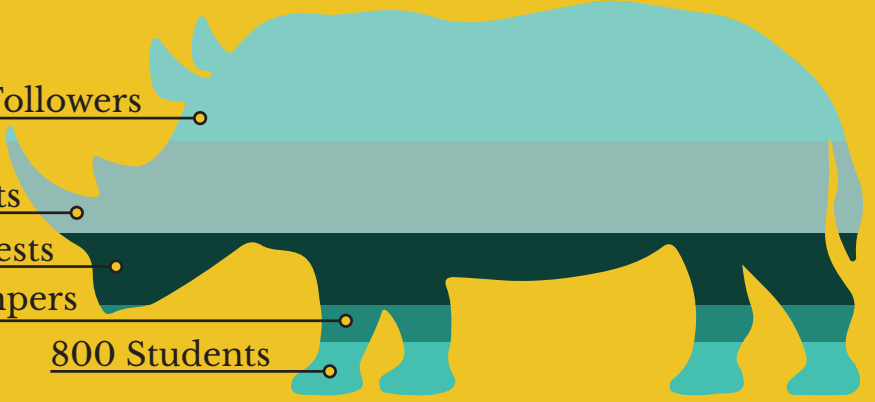
21,870 Social Media Followers

3,820 Tour Guests

506 Event Guests

102 Summer Campers

800 Students

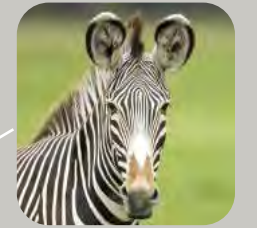
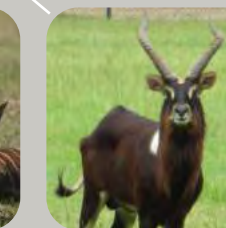
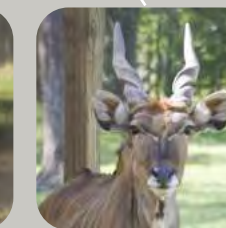
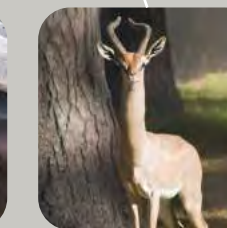
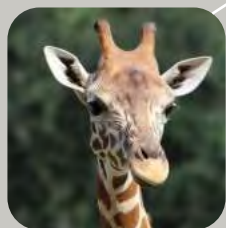


Conservation Summer Camp

White Oak's Conservation Summer Camps are more than a summer camp - they are an adventure in STEM education in our 13,000-acre learning laboratory! In 2016, we hosted our most successful summer camp session yet with 102 campers. White Oak hosted three day camps and five residential camps for week-long sessions for ages 7-15. For one of these weeks, White Oak partnered with Camden County Schools to offer a scholarship week to under-served students in our elementary partner school program. While the campers spent lots of time with our amazing species, they also enjoyed classic camp activities - such as campfires and horseback riding, and our famous Gilman Hall for plenty of fun, balanced with learning how to conserve our world's precious natural resources to benefit people and animals. Each day the students learned about a different continent (even eating food from around the world thanks to our amazing culinary team) and the White Oak species that call these places home. Students left inspired to do what they can to help conserve wildlife and wild places in their own backyard - or across the globe!

"White Oak camp was the best camp ever! It was the best days of my life!" - Grace, age 10





THE SPECIES
of White Oak

Partnering in Learning: White Oak's K-12 Partner School Program has it's Best Year Yet!



The 2015-2016 school year has proven to be yet another successful school session for White Oak's Education Department!

This year more than **800 individual students at 13 partner schools** visited as part of our project-based STEM curriculum. As part of our partnership with our K-12 network for schools, students participate in our Conservation Curriculum, conduct a research project, or engage in a philanthropy initiative.

Our K-12 program is meant to meet teachers 'where they are' so that they can integrate conservation science into any subject area - creating a unique, in-depth learning experience for all of our students.

Highlights from last year's K-12 program:

- **St. Johns Country Day School** enlisted their 12th grade AP Biology class to create and analyze hormone graphs, attempting to predict true pregnancies vs. pseudo-pregnancies in cheetahs. The 6th graders at SJCDS developed scaled enclosures for predators in their math classes and created African folklore in their language arts programs!



- **Camden County 4th graders** collaborated with our partners at Cheetah Conservation Botswana to raise money to sponsor field trips to the bush for children in Maun, Botswana by selling shirts designed by the students. The students raised enough money to sponsor two field trips and they received artwork and a video from the students in Maun! As part of their research, the 4th graders investigated cheetah behavior on trail cameras and learned about the crucial role that predators play in their ecosystems here and in Africa (top).

- **River City Science Academy** 2nd graders integrated White Oak's lesson plans into their art program and sold their work to raise money to donate to predator conservation (left).

- We partnered with **Lutheran Social Services** to participate in the Jacksonville Science Festival with six refugee students from Asia and Africa as part of a mentoring in science program. The students raised awareness about sharing natural resources (right).



EMERGING WILDLIFE CONSERVATION LEADERS

WWW.WILDLIFELEADERS.ORG

EWCL strives to empower the next generation of conservation leaders and secure a brighter future for imperiled wildlife.

THE 3 PILLARS:



SKILLS TRAINING

Leadership and skills training in wide-ranging topics relevant to real-world experience.

CONSERVATION PROJECT

Hands-on comprehensive conservation campaign experience including designing, implementing and evaluating a project in partnership with an established conservation organization



MENTORING & NETWORKING



Mentoring by seasoned conservation professionals, networking opportunities to develop peer support, 'cross-pollination' with diverse conservation sectors.

ACCOMPLISHMENTS:

152

LEADERS
TRAINED

From 28 countries

28

SPECIES
CONSERVED

In 18 countries

EWCL CLASS 6

Graduated in December 2016



Training the Next Generation

The goal of White Oak's professional training program is to provide the training and expertise to allow students to not only pursue their career field of interest, but to do so with the solid groundwork and diversity of experience allowing them to make a stronger and more significant contribution to the field. White Oak currently offers six professional training programs focused on the husbandry and veterinary care skills necessary to care for the animals that call White Oak home. **White Oak hosted 39 interns in 2016.**

Many of our interns go on to careers in the conservation field when they finish at White Oak. The following students from our 2016 programs moved into full-time jobs following their internships.

Santa Fe interns: Brian Hackett and Josh Price are now wildlife staff at White Oak, Ashley Gill is a keeper at Brevard Zoo.

Wildlife interns: Rebecca McLachlan is a keeper at Fossil Rim, Colin Polk is a keeper at Zoo Miami, and Hayley Schuetz is a wildlife staff member at White Oak.

"The experience that I gained was unparalleled ...I was able to witness and participate in many tasks and procedures that not only greatly enhanced my professional resume, but helped me grow as a conservationist and animal caretaker. It was a bonus that I thoroughly enjoyed myself as well!"

- White Oak Intern, 2016

Veterinary Technician intern Brenda Cordova (bottom left) is now the veterinary technician for Fossil Rim Wildlife Center.



Wildlife Intern Undrea Ferebee (right) holds a crane chick for Veterinary Resident Marjorie Bercier.

White Oak supports diverse conservation initiatives such as the ARK of Nassau seed propagation program whose participants visited us for a garden and wildlife tour.



During an event at a local nursery, Sous Chef Coleman Langshaw teaches families how buying local organic food has positive impacts on the environment.



White Oak in the Community

More than 25 local nonprofits benefited from the donation of time and services from White Oak Conservation in 2016. We look for unique ways to contribute to the local community, helping deserving nonprofits to improve their programs and raise funds.



White Oak Conservation helped to launch the newly formed St. Marys Riverkeeper in 2016. White Oak CEO Steve Shurter is a founding member of the Board of Directors, and in November White Oak hosted and sponsored the inaugural St. Marys Riverkeeper “Big Splash” fundraiser.

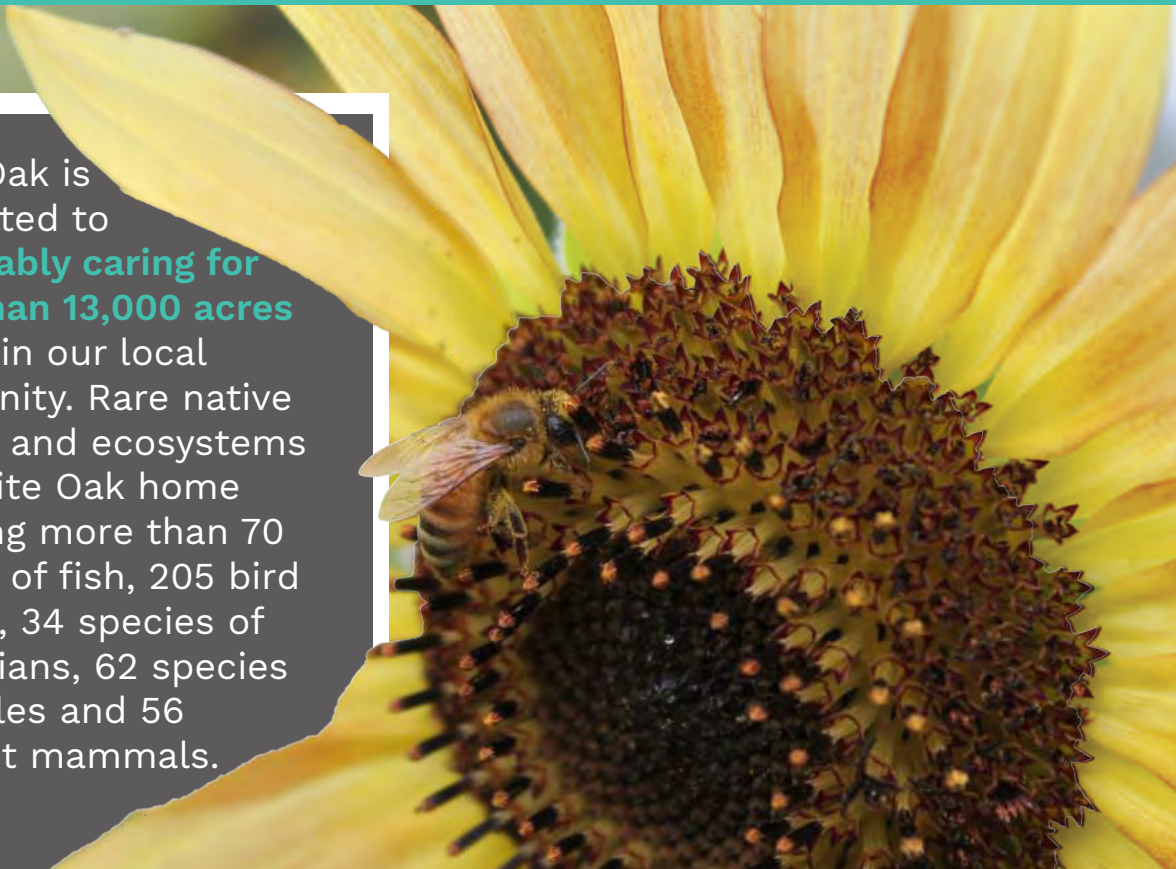


Senior Wildlife Specialists Clarice Brewer (left) and Sophia Schumann, along with Dr. Linda Penfold from SEZARC (middle), gave presentations for the “Women in Science” program at the Museum of Science & History in nearby Jacksonville, Florida.



Stewardship & Sustainability: Protecting White Oak's Resources

White Oak is committed to **sustainably caring for more than 13,000 acres** of land in our local community. Rare native species and ecosystems call White Oak home including more than 70 species of fish, 205 bird species, 34 species of amphibians, 62 species of reptiles and 56 different mammals.



Land Stewardship

at White Oak Conservation

White Oak is the largest conservation center of its kind in North America.

LAND CONSERVATION

By the end of 2016, White Oak grew from 6,800 acres to over 13,000 acres of diverse habitats across southeastern Georgia and northeastern Florida. Over 400 native species, some of which are threatened or endangered, occur naturally in their protected ecosystems at White Oak.

Gopher tortoises, redheaded woodpeckers and Sherman's fox squirrels are some of the species conserved here.

LONGLEAF PINE RESTORATION

White Oak is committed to not only conserving land, but to practicing good land stewardship. As part of our land conservation plan, White Oak conducts prescribed burns which are essential for ecosystem health in southern forests where these fires historically occurred naturally. **In 2016, more than 160 acres of upland pine grassland ecosystems were safely burned - restoring these places to their natural plant diversity.** Additionally, 50 acres of long leaf pine habitat was established this year, restoring a rare



ecosystem once abundant in Florida. **Now, White Oak is proud to conserve more than 450 acres of longleaf pine habitat.**

WATER CONSERVATION

White Oak is a keystone property found within the St. Marys River watershed with 13 miles of riverfront and 6,000 acres of protected wetlands. Our dedication to water conservation is evident in our new 'green practices', our new K-12 STEM summer camp conservation curriculum, and our community partnerships.

In March, White Oak was honored to host the annual celebration of the St. Marys River Cleanup event, thanking hundreds of volunteers for their service and commitment to our local natural resources.

Thousands of pounds of garbage were collected in one day at designated cleanup sites along the river in Florida and Georgia.

Hurricane Matthew Makes a Visit



The southeastern United States is no stranger to hurricanes and tropical storms, and the state of Florida has been affected by more storms than any other US state. On October 1, 2016, Hurricane Matthew made its way from Haiti to the southeastern coast where it left a trail of destruction over the next 36 hours.

As Matthew began to pose a threat to Florida and White Oak, the team went into action to prepare for the storm. The storm grew closer, and White Oak was evacuated - except for the Emergency Response Team that stayed behind to monitor the wildlife and infrastructure. The storm continued to move up the coast, eventually moving east and further out to sea. As soon as the storm passed, the Team began clearing the way for staff to return and begin post-hurricane clean-up.

Even though Hurricane Matthew caused significant damage along the coastline, places further inland like White Oak were spared the brunt of the storm. High winds took down trees, power lines, and fences, but the animals fared well. Clean-up was in full swing just days later, and we were back to hosting guests within a few days. The efforts of all the staff (and a few animals like these gazelles) were keys to our quick recovery.

#TeamWhiteOak



Sustainability

In support of our conservation mission, in 2016 White Oak formally launched our Sustainability Program. Our goals with the program are to reduce our use of natural resources while engaging guests and the community on how their everyday choices can have a positive impact on the environment.

Our organic garden has become a true highlight of our Sustainability Program. Using only organic farming methods, we are harvesting fruit, vegetables, herbs, citrus, and flowers for use by our culinary and hospitality teams. Our garden also helps us to manage another waste stream – animal manure! We use compost made from the manure collected from our wildlife collection as fertilizer.



Other sustainability highlights for 2016 include:

- Installing LED lights.
- Increasing recycling receptacles in guest and staff areas, and finding outlets for hard-to-recycle items.
- Replacing expired HVAC systems with energy efficient models.
- Exceeding Best Management Practices on our golf course, based on a study completed by the University of Florida.

White Oak's sustainability efforts were recognized by Nassau County's Chamber of Commerce, who named us the **2016 Green Business of the Year**. (left)





The Conference Center at White Oak

"White Oak is an amazing place, and the team could not have been nicer.
A perfect venue for our board retreat."

- **Cristián Samper, Wildlife Conservation Society**

In 2016, White Oak's conference center hosted 61 conferences for our conservation partners.

The Conference Center at White Oak was also the venue for many more corporate and private events - all of which supported the amazing work done at White Oak last year. White Oak's conference facilities provide a serene space allowing guests to focus on the important work they do, while supporting the important work we do.

Guests at White Oak can be found discussing cheetah conservation, like Dr. Laurie Marker (right) of Cheetah Conservation Fund, working on reinvigorating their business team through a retreat, or hosting a momentous family event. No matter what the occasion, events at White Oak are first-class, productive, and support important work in the world of conservation.





Conferences & Meetings

“We envision White Oak as a gathering point to inspire ideas and collaborations among individuals and organizations interested not only in conservation but issues such as environmental sustainability, land stewardship, arts and education.”

-Mark Walter, owner, White Oak Conservation

White Oak is a place of inspiration for your group to hold meetings at an exclusive, private venue. To make your conference, workshop or meeting more productive and enjoyable the conference center includes: the famous Gilman Hall with bar and lounge with billiard tables and other games, a bowling alley, a full gym, and a business center.

As an overnight guest at White Oak, you are at home in one-of-a-kind accommodations with unique furnishings. Extraordinary artifacts and artwork adorn the meeting spaces, and lodges, showcasing the history of the property.



“So it's hard for me to say much more - other than sincere thanks to you and your staff for the wonderful hospitality. The CMP community came away from the retreat energized and excited - and while hopefully the program we organized had some bearing on this, it was certainly enhanced by the magic of White Oak.”

- Nick Salafsky, Foundations of Success, Conservation Measures Partnership





Plans to protect air and water, wilderness and wildlife, are in fact plans to protect man.

- Stuart L. Udall



WHITE OAK
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Connect With Us

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- pg 10: students on trolley, Karen Trower
- pg 16: sunflower, Graceann Sparkman
- pg 19: salad, Nate Deremer
- pg 20: bar, Steve Leimberg
- pg 21: room interior, Barry Rabinowitz
- pg 21: bowling alley, Nate Deremer

All other photos taken by the
White Oak team.



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