Annual Newsletter



Conservation 20/20 in 2020

Another milestone year for Lee County's conservation areas

Preserving more land and coastal shoreline

Volunteers making a difference

A reddish egret, the most rare heron in North America, feeds on a needlefish at San Carlos Bay - Bunche Beach Preserve

www.Conservation2020.org

Conservation in action

A closer look into the preservation and management of Lee County's conservation areas



Improved habitat from land restoration efforts has resulted in several active American bald eagle nests at Conservation 20/20 preserves.

Part of Lee County's Parks & Recreation Department, Conservation 20/20 is dedicated to the land management and public use of the county's 49 Conservation 20/20 preserves and additional conservation areas. This annual newsletter is a look back at Conservation 20/20's accomplishments during the previous year.

Land acquisition highlights

Several critical wetland, upland and coastal properties were successfully acquired by Lee County in 2019. Conservation 20/20 is also celebrating the milestone of reaching 30,000 acres acquired through the program since it was established in 1996. The parcel that pushed the county past 30,000 acres was acquired within the Corkscrew Regional Ecosystem Watershed (CREW), an expansive area of interconnected wetlands and environmentally valuable land spanning both Lee and Collier counties. A <u>series of special events</u> are planned in March to celebrate this milestone.

Land management highlights

Land management plans for four preserves were updated and approved by Lee County's Board of Commissioners in 2019. These plans are updated every 10 years. Conservation 20/20 staff write and implement land management plans to:

- Support and enhance natural plant communities
- Protect critical wildlife habitat
- Provide groundwater and aquifer recharge
- Protect drinking water supply
- Provide nature-based recreation opportunities for Lee County residents and visitors

Land acquisitions in 2019

Date acquired April 30	Location Lehigh Acres	Acres 625
July 8	Buttonwood Preserve	92
August 29	Buttonwood Preserve	43
October 11	Carver Preserve	181
October 15	Alva Scrub Preserve	20
October 31	Mound Key	10
November 13	Yucca Pens Preserve	157
November 13	CREW	40
December 17	Sanibel	68

TOTAL ACRES ACQUIRED: 1,236

Land management plans updated

Date approved	Preserve
February 19	Deep Lagoon Preserve
April 2	Yucca Pens Preserve
April 16	Bob Janes Preserve
June 4	Olga Shores Preserve

Conservation in action

Prescribed fire at Conservation 20/20 preserves



Conservation 20/20 staff before a prescribed burn at Gator Hole Preserve. Staff are trained and certified by the Florida Forest Service to conduct burns.

Prescribed burns conducted

Month January	Location Yucca Pens Preserve	Acres burned	
	Bob Janes Preserve	104	
February	Buckingham Trails Preserve	40	
March	Hickey Creek Mitigation Park	20	
	Orange River Preserve	24	
April	Hickey Creek Mitigation Park	21	
	Yucca Pens Preserve	32	
	Telegraph Creek Preserve	766	
November	Bob Janes Preserve	1,066	
TOTAL ACRES BURNED: 2,103			

Fire is a natural process for most plant communities in Florida. Before land was developed, fires were common in natural areas. These fires were caused naturally by lightning strikes and extreme heat. Fires would burn until flames reached wetland areas or rainfall occurred.

Today, due to the development of large areas of land, fires caused by lightning and heat are not as common. As a result, many plant and wildlife species are losing habitat due to a lack of regular fire. Prescribed fire is now used as a management practice to maintain plant communities and wildlife populations. It is also among the least expensive methods to manage land.

Fire reduces the density of vegetation, recycles nutrients in the soil, and enhances habitat for wildlife by encouraging new growth.

Conservation 20/20 staff burned 2,103 acres during 2019. This included the largest burn ever conducted at a Conservation 20/20 preserve — 1,066 acres in an aerial burn at Bob Janes Preserve.

Our native environment

Controlling the spread of non-native and invasive species



Volunteers from Gartner, a technology company in Fort Myers, trimmed vegetation and hand-pulled invasive plants at Wild Turkey Strand Preserve.

Protecting native plant communities

Every land parcel that has been acquired in Lee County through the Conservation 20/20 program, as well as adjacent lands, has been affected to some degree by non-native and invasive species that threaten the health of native plant communities and wildlife populations.

Methods to control invasive plants include mowing, cutting, hand-pulling, herbicide application, cattle grazing and prescribed fire. Both Conservation 20/20 staff and contractors are assigned to treatment projects to remove non-native and invasive plant species.

During 2019, treatment to control and minimize the spread of non-native invasive plants occurred at a majority of Conservation 20/20 preserves. These efforts were additionally supported with funding awarded by the Florida Fish and Wildlife Conservation Commission (FWC), totaling \$57,280. This funding was awarded through applications submitted by Conservation 20/20 staff.

FWC funding (received during Fiscal Year 2018-2019)

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Preserve	Amoun
Bob Janes Preserve	\$41,880
Daniels Preserve at Spanish Creek	\$15,400

Early detection and response for exotic species

The Florida Exotic Pest Plant Council lists more than 150 Category I and Category II invasive exotic plants affecting South Florida's native plant communities. One of these is melaleuca (*Melaleuca quinquenervia*), a Category I. Over the years when Conservation 20/20 preserves are acquired, established monocultures of melaleuca are logged and removed. To keep all preserves at a "maintenance-level," Conservation 20/20 staff regularly inspect these areas to treat invasive plants as quickly as possible to prevent the plants from spreading into more areas. Follow-up treatments are often necessary to address seedlings, since the seed source is still in the soil.



Our native environment

Controlling the spread of invasive and non-native species



Feral hog trapping continues

The feral hog is a non-native invasive species whose population is especially abundant in Lee County. This poses a major concern for our natural environment and native wildlife.

The feral hog has a very high reproductive capability and their foraging behavior is very destructive to natural habitat. Feral hogs will eat nearly anything, which significantly decreases available food sources for other wildlife. They will also eat ground-nesting bird and reptile eggs. Consequently, control methods such as trapping and removal must be implemented to minimize feral hog populations.

Hogs are trapped year-round, but some preserves are trapped only in the dry season due to wet conditions during the rainy season.

Hog trapping and removal

Location	Hogs removed
Alva Scrub Preserve	10
Bob Janes Preserve	58
Buckingham Trails Preserve	53
Charlotte Harbor Buffer Preserve	8
Daniels Preserve at Spanish Creek	5
Pine Island Flatwoods Preserve	11
Prairie Pines Preserve	5
Six Mile Cypress Slough North	119
Smokehouse Bay Preserve	22
Telegraph Creek Preserve	92
Yucca Pens Preserve	88

TOTAL HOGS REMOVED: 471

Controlling invasive fish in our waters

Southwest Florida waterways are home to several non-native freshwater fish species, which have a negative impact on the health and populations of our region's native fish communities. Conservation 20/20 partnered with the Southwest Florida Cooperative Invasive Species Management Area (CISMA) in May 2019 to organize an Invasive Fish Roundup competition. Through the event, 2,012 pounds of non-native fish were removed from our waterways by participants.





Enjoying the great outdoors

Recreation and amenities at Conservation 20/20 preserves



Conservation 20/20 coordinator Roxanne Taylor leads a guided hike off the boardwalk at Six Mile Cypress Slough Preserve.

Adventures abound at your Conservation 20/20 preserves

Conservation 20/20 preserves provide a variety of recreation opportunities and amenities for the public to enjoy. These include marked hiking trails, equestrian trails for horseback riding, kayak launches, fishing areas, primitive bicycling trails, sheltered picnic pavilions and more. Additionally, although some preserves do not have a marked trail system, many of these locations still provide several miles of hiking opportunities along seasonally maintained fire lines. Paved or gravel parking areas are available at most preserves while others offer grass parking.

Only a handful of the 49 total Conservation 20/20 preserves do not provide public access. This can be due to the isolated location or small size of a preserve, large-scale mitigation projects, or existing recreation opportunities on adjacent lands.

Recreation amenities at-a-glance

Preserves with public access	36
Primary use preserves	8
Limited use preserves	24
Preserves with marked trail systems	21
Total miles marked hiking trails	90
Total miles equestrian trails	53
Preserves with fishing opportunities	19



Primitive bicycling trails open at two Conservation 20/20 preserves

In 2019, primitive bicycling opened as a new recreation use at Caloosahatchee Creeks Preserve and Alva Scrub Preserve.

At Caloosahatchee Creeks Preserve, bicyclists can now enjoy the East River Loop Trail, a 2.5-mile grass trail which includes water crossings and scenic views along the northern bank of the Caloosahatchee River.

At Alva Scrub Preserve, a nearly 5 mile at-grade primitive bicycling trail was opened, along with a new 2.8-mile hiking and equestrian trail.

Making a **difference**

Volunteers continue to make a big impact

Conservation 20/20 offers volunteer opportunities for Lee County residents and visitors to assist with conservation efforts in our community. Individuals and groups completed projects including trash removal, assisting with non-native and invasive plant species management, and leading guided nature hikes for the public.



2,000+ Volunteer hours logged

Employees from Hertz volunteered in April to collect trash and trim overgrown vegetation along the fence line boundary at Koreshan Preserve in Estero.

A local Cub Scouts troop volunteered to clean up trash the day after Fourth of July at San Carlos Bay - Bunche Beach Preserve.



A volunteer with Keep Lee County Beautiful assists with a native planting at Yellow Fever Creek Preserve in Cape Coral.



We are always looking for volunteers!

E-mail <u>VolunteerServices@leegov.com</u> to learn about volunteer opportunities.

Applying classroom learning in the field

Hailey Goff, an environmental studies student at Florida Gulf Coast University, volunteered with Conservation 20/20 during summer 2019. Hailey spent time with land management staff to learn the responsibilities for resource management in natural areas. She also learned how to identify and treat a variety of exotic and non-native plant species.

Hailey logged 130 volunteer hours during her summer experience with Conservation 20/20.

Here is a note from Hailey, reflecting on her summer experience:

"I learned so much about conservation and all the things that are important to be successful with land management. I love wildlife and want to help protect their habitat. This internship inspired me to continue with my career path and keep learning more."



Hailey on the trail at Hickey Creek Mitigation Park.



IMPACT students trimmed overgrown vegetation on the fence line at Galt Preserve.



Service-learning opportunities

Sixteen students from the University of Georgia traveled to Lee County in March 2019 to volunteer with Conservation 20/20 during their spring break. The students are part of a service-learning organization on their campus called IMPACT.

The students volunteered for five full days, totaling 540 hours of service. Projects included native plantings, hand-pulling invasive plants, trail maintenance, and trash collection and removal.

The locations where the students volunteered included Prairie Pines Preserve, Galt Preserve, Six Mile Cypress Slough Preserve North, Pine Island Flatwoods Preserve, Matanzas Pass Preserve, and Imperial River Preserve.

A new IMPACT group from the University of Georgia will return in March 2020 to volunteer again with Conservation 20/20.

IMPACT students participated in a native planting of pine trees in the bayside restoration area at Pine Island Flatwoods Preserve.

Education outreach

Engaging the community to become a part of conservation



Conservation 20/20 supervisor Karyn Allman (center) leads a native planting project with Keep Lee County Beautiful volunteers at Yellow Fever Creek Preserve in Cape Coral.

Event highlights

Date March 15 & 16	Event Southwest Florida Birding Seminar	Attendance 90
April 30	Career Day at Three Oaks Elementary	30
May 8	Presentation to Rotary of East Lee County	20
May 11	World Migratory Bird Day bird count at Six Mile Cypress Slough Preserve North	29
June 1	National Trails Day hike at Pop Ash Creek Preserve	20
September 28	National Public Lands Day native planting project at Yellow Fever Creek Preserve and trash removal at Powell Creek Preserve	25
October 14	FGCU Wildlife Club presentation	15
October 15	Presentation to Shell Point Community	25
November 8	Buckingham Army Air Field military history walk at Wild Turkey Strand Preserve	35
November 14	Hiking at Conservation 20/20 preserves presentation to SWFL Audubon chapter	20
December 3	Presentation to Greater Pine Island Civic Association	25

Conservation 20/20 staff and volunteers hosted several educational events in 2019 for the public to become more familiar with preserves and the program's management goals. Events attracted both year-round and seasonal residents, as well as visitors to Lee County.

Additionally, staff made presentations to residential communities adjacent to preserves and represented the program at several nature festivals in the area.

30

Guided nature hikes hosted

434 people

Combined attendance for all guided nature hikes



Plant spotlight

Florida butterfly orchid



Flowers or butterflies fluttering in the wind? From a distance, the flowers of this orchid species can look like tiny butterflies.

Photo taken by Conservation 20/20 coordinator Jason Boeckman

During the spring and summer rainy season, conditions are usually excellent to find many of Florida's native wild orchid species in bloom.

One of these is the Florida butterfly orchid (*Encyclia tampensis*), which can be found in upland forests and wetlands from central to south Florida. As one of the most common epiphytic orchids, meaning its roots attach to the branches of trees, this species is able to thrive in both shaded swamps and forests exposed to plenty sunlight.

The butterfly orchid flowers during late spring and summer, typically peaking in July, although its flowers can remain in bloom into August. It displays anywhere up to 45 individual flowers, each of which are about 1.5 inches across and produce a yellow-green and or dull orange color. The "lip" of the orchid is white or dull yellow and is usually streaked with a pink splotch down the center.

The orchid gets its name from the appearance of its flowers blowing in the wind on a breezy day, resembling small butterflies in motion.

Several Conservation 20/20 preserves in Lee County include critical upland and wetland habitat to support the population of this orchid species.

Be sure to pack your camera

Conservation 20/20 preserves are great places to enjoy a hike and see wildflowers in bloom. At anytime during the year, there is always some species of wildflower in bloom or plant producing a colorful fruit. These plants and flowers make for wonderful photographs, so be sure to bring a camera along with you!

As a reminder, no plants are permitted to be collected from any preserve.

Wildlife spotlight Florida scrub-jay

There is a species of bird in Florida that holds the distinction of living nowhere else in the world. This bird is the Florida scrub-jay.

The scrub-jay is a member of the crow family. Its preferred habitat is oak scrub, which has significantly disappeared in Florida during the last half century due to land development and the suppression of fire in historically fire-dependent plant communities. As a result, the Florida scrub-jay is now listed as a federally endangered species.

Not to be confused with the more common and widespread blue jay, scrub-jays are typically observed hopping around on the ground or low in trees as they feed on insects and acorns. It is not unusual to see scrub-jays bury large numbers of acorns beneath the surface of sandy soil to feed on later or during periods when this food source may be scarce.

The adult scrub-jay has a blue head, wings and tail, with a mostly gray belly. Juvenile scrub-jays do not have blue heads and their feathers are far more dullcolored than adult birds.

Florida scrub-jays are especially cooperative and social creatures. The birds form family groups, which consist of a single breeding pair and around six or so non-breeding birds. The non-breeding birds generally are the young from previous years who stick around to help with subsequent broods.

Florida scrub-jays are not migratory and it is rare for them to relocate farther than a few miles from where they are born. As their habitat continues to become increasingly fragmented from development and disturbed with invasive plants from a lack of regular fire, scrub-jay populations have become more isolated. Today, the estimated total population of the Florida scrub-jay is somewhere between 7,000 to 11,000.

A number of Conservation 20/20 preserves in Lee County include critical upland and scrub habitat to support Florida scrub-jays.



Florida scrub-jay populations exist both inland and in scrub areas along the coasts, although their numbers are much stronger inland.

Photo taken by Conservation 20/20 coordinator Jason Boeckman

Conservation 20/20 Celebration

Celebrating 30,000 acres protected for wildlife, water quality and recreation

Conservation 20/20 is a land acquisition and stewardship program to protect natural areas in Lee County. Established more than 20 years ago, the Lee Board of County Commissioners recently voted to purchase more land through this program, reaching a milestone of more than 30,000 acres protected. Lee County residents and visitors are invited to celebrate this milestone with events planned in March to highlight Conservation 20/20.

Ribbon-cutting Ceremony

Tuesday, March 10, 10 AM Prairie Pines Preserve 18400 N. Tamiami Trail, North Fort Myers

Members of the public are invited to join the Lee Board of County Commissioners to celebrate the Conservation 2D/2D program at one of Lee County's largest Conservation 2D/2D preserves. Free guided walks will also be offered following the ceremony. Reservations for the guided walks are requested in advance by calling (239) 204-1125.

Guided Nature Hikes

Saturday, March 21, 9-10:30 AM Wild Turkey Strand Preserve 11901 Rod & Gun Club Rd., Fort Myers



Wednesday, March 25, 9-10:30 AM Pine Island Flatwoods Preserve 6351 Stringfellow Rd., St. James City

Join a Conservation 20/20 guide to explore these Lee County preserves. Guides will identify and discuss Florida native plants and wildlife. Suggested items to bring include water, hat, sunglasses, sunscreen, binoculars and a camera. Please wear closed-toe shoes. Program is free. Reservations are requested in advance by calling (239) 204-1125.

Full Moon Walk

Monday, March 9, 7:30-9 PM Six Mile Cypress Slough Preserve 17751 Penzance Blvd., Fort Myers



Join a guide for a free boardwalk tour after sunset to experience the Slough in the light of the full moon. Listen for owls and other nocturnal creatures. Wear comfortable walking shoes. Flashlights and flash cameras are not permitted. For ages 6 and older. Reservations are required in advance by calling (239) 204-1125.

Library Presentations

"Conservation 20/20 in 2020: A Present and Future Vision for Land Conservation in Lee County"

Wednesday, March 4, 6:30-7:30 PM Lakes Regional Library

Tuesday, March 10, 6:30-7:30 PM South County Regional Library

Tuesday, March 17, 1-2 PM North Fort Myers Public Library



Thursday, March 26, 1-2 PM Fort Myers Regional Library

A Conservation 20/20 representative will discuss how the program has grown over the years with the acquisition of new land and what visitors can expect when they visit preserves.

"The Water Connection: Exploring the Partnership Between Lee County Natural Resources and Conservation 20/20"

Thursday, March 5, 2-3 PM North Fort Myers Public Library



Tuesday, March 10, 2-3 PM Bonita Springs Public Library

Learn how Lee County's Department of Natural Resources partners with Conservation 20/20 to enhance the health of natural lands and water bodies in Lee County.

For library addresses, visit www.leegov.com/library

Calusa Blueway Kayaking Tours

Friday, March 20, 9 AM-Noon San Carlos Bay - Bunche Beach Preserve 18201 John Morris Rd., Fort Myers

Join a Conservation 20/20 guide for a tour through the mangroves of this beach preserve. Cost is \$40 for the kayak rental; free for participants who bring their own kayak. Reservations are required by calling (239) 204-1125.

Prescribed Fire Hiking Tour

Monday, March 16, 9-11 AM Hickey Creek Mitigation Park 17980 Palm Beach Blvd., Alva



Join a Conservation 20/20 guide for a free tour of a natural area following a prescribed burn. Learn about the benefits of prescribed fire for improving wildlife habitat and increasing plant diversity. Please wear closed-toe shoes. Reservations are required in advance by calling (239) 204-1125.

For complete details, call (239) 533-7400 or visit www.leegov.com/2020celebration

Tuesday, March 24, 10 AM-3 PM Caloosahatchee Regional Park 119130 North River Rd., Alva



Join a guide for a 7-mile paddling adventure along the Caloosahatchee River and Hickey Creek. Cost is \$40 for the kayak rental; free for participants who bring their own kayak. Reservations are required by calling (239) 204-1125.

Share photos of the fun on social media using **#conservation2020**



2020 Southwest Florida BIOLING

Saturday, March 14

9 am to 5 pm Florida Gulf Coast University

Join bird experts to explore the science and value of birds in Southwest Florida and beyond.

Speakers and topics include:

The Behavior and Ecology of Woodpeckers in Southwest Florida

Dr. Jerry Jackson, wildlife biologist and professor emeritus, Florida Gulf Coast University, and host of the WGCU radio series "With the Wild Things"

Beach-nesting Birds of Southwest Florida

Audrey Albrecht, Coastal Wildlife Manager and shorebird biologist, Sanibel-Captiva Conservation Foundation

From the Flyways to the Front Page: Highlights from a Career Reporting about Birds and their Environment Chad Gillis, environmental journalist

Birding Adventures Around the World José Padilla, world-traveling birder

A Sea and Shorebird Steward's Journey Jean Hall, Audubon Western Everglades Shorebird Monitoring steward and wildlife photographer

CROW Tales: Soaring to New Heights in Avian and Wildlife Medicine Robin Bast, staff veterinarian, CROW

Hotspots for Birding in Southwest Florida Charlie Ewell, Lee County Bird Patrol

REGISTER ONLINE:

2020birdingseminar.eventbrite.com

Event sponsored by: UF/IFAS Lee County Extension Conservation 20/20

2020 Southwest Florida Birding Seminar

Field trips schedule Friday, March 13

Field Trip 1 Six Mile Cypress Slough Preserve North Location: Fort Myers, FL 33905 Duration: 8-10 am

Maximum group size: 25 people

Join a Conservation 20/20 staff representative for a sunrise bird-watching tour at one of Lee County's newest preserves to open to the public. Located directly north of Six Mile Cypress Slough Preserve, this 1,200-acre preserve provides a crucial hydrological link to improve water flow into the Slough and serves as a highly viable area for wildlife and birds. Possible sightings include American bald eagle, red-shouldered hawk, limpkin, warblers and woodpeckers. Participants will park their vehicles along the paved power line easement on the south side of the preserve (not in the main parking area on the north side). Detailed instructions will be delivered separately to those who register.

Field Trip 2 🦫 San Carlos Bay - Bunche Beach Preserve

Location: 18201 John Morris Road, Fort Myers, FL 33931 Duration: 8-10 am

Join a Lee County Bird Patrol guide to explore this natural beach and learn about shorebirds, wading birds, and their habitat. This Conservation 20/20 preserve is one of the best locations in Lee County to view shorebirds and sharpen your identification skills. Beaches are critical resting and nesting areas for both resident and migratory shorebirds. Possible sightings include reddish egret, roseate spoonbill, White pelican and American avocet.

Field Trip 3 🦫 Daniels Preserve at Spanish Creek

Location: 21471 North River Road, Alva, FL 33920 Duration: 3-5 pm

Join a Lee County Bird Patrol guide to explore this birding hotspot in northeast Lee County. Possible sightings include birds of prey, warblers, and woodpeckers. Due to limited parking onsite at the preserve, participants will meet at nearby Alva Community Park (half-mile directly south of the preserve) to coordinate a carpool into 3-4 vehicles. Detailed instructions will be delivered separately to those who register.

Field Trip 4 Powell Creek Preserve bird photography workshop Location: 15601 Hart Road, North Fort Myers, FL 33917 Duration: 3:30-5 pm Ma

Join Conservation 20/20 coordinator Jason Boeckman for this instructional workshop to learn beginners' tips for photographing birds. Participants are encouraged to bring their personal camera and equipment (any type and model is acceptable), and be familiar with its general settings. This workshop will focus on planning successful bird photography outings, including scouting for subjects based on species, preferred habitat, and time of day; and recommended angles for photographing birds to tell a unique story through images.

For all field trips, please wear comfortable clothing and closed-toe shoes. Bring a water bottle, sunscreen, sunglasses and hat. For questions, call (239) 204-1125 or e-mail jboeckman@leegov.com.

Maximum group size: 25 people

Maximum group size: 15 people

Maximum group size: 25 people