



The Habi-Chat

Summer 2019

News from the Merritt Island Wildlife Association, Friends of Merritt Island NWR

About MIWA

The Merritt Island Wildlife Association (MIWA), the non-profit friend's organization of the Merritt Island National Wildlife Refuge Complex, was established in 1994 to promote conservation, awareness, and appreciation of the Refuge and provide assistance to Refuge programs. MIWA helps support the Merritt Island NWR, St. Johns NWR and Lake Woodruff NWR through donations, fundraising, grants, membership and nature store sales.

www.merrittislandwildlife.org



2019 MIWA Members Sea Turtle Walks

Wed. June 19 & Sat. July 13

Hello MIWA Members, summer is here and that means it is sea turtle nesting season!

You are invited to join us at the Merritt Island NWR for an amazing evening as we learn about sea turtles and then go on a late night exploration at Canaveral National Seashore where we will watch a sea turtle lay her eggs.

These night walks are an incredible way to learn about sea turtles, the seashore and how conservation efforts have made dramatic impacts in the sea turtle population, with record nesting numbers year after year now!

MIWA and the Refuge will be hosting two sea turtle walks this summer. The first is on Wednesday, June 19 and the second is on Saturday, July 13.

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Butterfly Group Recognized as 2019 Volunteers of the Year!

The Butterfly Group at Merritt Island National Wildlife Refuge was named Volunteer of the Year at the annual volunteer dinner in April.

The recognition applied to participants past and present, calling attention to one of the longest-organized and most enveloping activities volunteers pursue at MINWR. The group registered its 100th monthly count in 2018.

The group assembles at the Visitors Center the first Saturday of each month. After a presentation about a butterfly-related topic, the group fans out across the Refuge to count butterflies and gather data that is forwarded to the University of Florida and

then into a national database.

The science part of the activity rests in large part on adherence to Pollard walk lines laid out a decade ago by Betty Salter. That contributes to data reliability season to season and year to year.

But like most MINWR activities, participation in the group is a lot about camaraderie.

"We appreciate core people and welcome new people," said Barbara Peterson, who assembles and transmits the butterfly data.

"We're all learning as we go, especially when we spot new butterflies that you don't see all the time."

Comie Harrison, USFWS Volunteer

MIWA Presidents Update

The Merritt Island Wildlife Association (MIWA) board and members want to thank all those who volunteered their time and resources to support the refuge's activities this year. It has been a very productive year and we hope that you had a safe holiday season. Stop by the refuge during the summer and participate in the refuge's many educational and recreational activities.

We appreciate all those who attended the annual meeting on Oct 26 at the Kennedy Space Center Debus Center. The key note speaker, Michael Brothers provided an outstanding talk on bird migration and the silent auction was a huge success, providing additional funds for refuge projects.

The Merritt Island and Lake Woodruff NWR education programs continue to grow which allows for more students to participate in this program.

The Brevard Tourism Development Council grant (\$500,000) was approved by the Brevard County Commissioners in their September meeting for the Community Conservation Education Center (CCEC) exhibits that is scheduled to open Dec 2020.

This brings the total raised for the exhibit project to \$1.14M. The opportunity to exhibit the past, present and future of the refuge, sea shore, partnerships with NASA, National Park Service, local communities and become the east end of the Florida Coast to Coast Bike trail provides a unique opportunity for the refuge. We appreciate the interest and enthusiasm that has been expressed about the refuge, the CCEC and the exhibits.

The fundraising period will continue in 2019 and we welcome anyone who would like to make a donation or volunteer their time to this wonderful project.

Chris Fahey, MIWA President



For any questions or more information please contact us at habichat@merrittislandwildlifeassociation.org or visit us at merrittislandwildlifeassociation.org

Little Green Heron at the refuge. Photo by Bill Nunn.

Intern Travels a Marine Biology Route from Missouri to MINWR

Breilly Roy didn't hesitate when her third-grade teacher asked the youngster what she wanted to be when she grew up.

"Marine biologist," Breilly proclaimed. In land-locked northwest Missouri, that response caught the teacher's attention.

Breilly has a unique standing among that teacher's students. She is the only third-grader who followed through on her early career pronouncement.

That kind of focus eventually led Breilly to her internship at Merritt Island National Wildlife Refuge, where she is primarily working with classroom and other environmental education programs.

"I was able to dive right in" with the popular Refuge staff presentation based on the Caldecott-winning children's story, "Make Way for Ducklings," she said.

Each year hundreds of area students in kindergarten through third grade hear that tale of ducklings, learn about good conservation practices, and draw pictures of Mallard ducks to be entered in the Junior Duck Stamp art competition.

During her MINWR internship, which ends in May, Breilly will be participating in a wide range of education programs. Although she had no familiarity with the Refuge before she applied for the internship, the well-organized array of programs laid out for all grades "blew me away," she said.

Her internship duties allow Breilly to exercise a broad range of experience and interests, starting with that long-held focus on marine biology.

The passion of one of her high school

teachers had managed to insert marine biology into her high school's curriculum. When he soon moved on to help launch a marine biology major at Central Methodist University, Breilly's college choice fell into place. With only a couple dozen students in the new program.

"We felt comfortable asking questions," she explained.

The small-class focus also made it possible to leverage exposure to SCUBA diving instructions and experience marine biology initiatives under way in the Caribbean and other bodies of water away from the rolling farmland of central Missouri.

Her minor at CMU was theater and public speaking, a strong platform for her growing interest in educational outreach and a natural follow-on to her presentations as a member of her high school's Future Farmers of America chapter.

Finishing her undergraduate studies in an intense three years, Breilly headed to the University of Miami for a master's degree in professional science.

While she maintained her core marine focus, the curriculum also picked up on her broader interests in environmental law, how the environment is projected in the media, even a psychology class with an environmental bent.

Those studies got real-world applications in various ecotourism-related projects during spring breaks and other school programs. For Breilly those assignments involved agritourism-expansion plans in Chile and Ecuador, including the Galapagos Islands.

Students stayed with local farmers and developed specific initiatives to help them and their communities.

"My passion is to convey what I know" about the environment overall and marine biology in particular, Breilly explains. "We as agriculturists in Missouri are still tied to the ocean."

Conne Harrison, USFWS Volunteer



Did You Know? Internships, such as Breilly's, are a very important part of the Refuge. With federal budgets shrinking year after year, and ever decreasing staff, interns can help make a huge difference!

MIWA is committed to providing funds to both refuges for internships. This year, Breilly's position was graciously funded by donations from the Beard Creek Manatee Foundation and private donors.

If you are interested in ways to help support refuge internships through donations, call (321) 861-2377. For more information about internships positions contact the Refuge at (321) 861-0669.



Erica McCaughey ready with her net and the netted prism structures she used for collecting her specimens. Erica's internship is funded by MIWA as part of our yearly support of the Merritt Island NWR Complex. Photo by USFWS staff.

Pathways Intern Studies Macroinvertebrates

Hello MIWA Members, my name is Erica McCaughey and I am currently a Marine Biology student finishing my degree at Stetson University in Deland, FL.

As I searched for an internship for my undergrad, as luck would have it, Lake Woodruff NWR had a project proposal they were hoping to initiate soon. With the help of funding from Merritt Island Wildlife Association, I was given the opportunity to study macroinvertebrates within the marsh at Lake Woodruff.

I spent many hot days during the summer going out with a net scooping up lots of muck and scavenging for tiny bugs! Later through the summer, I decided the net just was not doing the job I wanted to. I researched some alternatives and came up with a netted prism structure.

These devices hold a selected type of vegetation that match the surrounding vegetation where they are placed in the marsh. After a couple of weeks, these traps are taken out of the impoundments and analyzed for macroinvertebrates that were found within the vegetation of the structure.

As my summer was coming to an end, my project was just starting to really come together. Fortunately, I was granted access to continue my research to study plant and macroinvertebrate relations through the

opening of a Pathways position at Lake Woodruff National Wildlife Refuge. I am very thankful for the opportunity!

Currently, my first round of samples is complete! I was able to find true bugs, dragonfly larvae, beetles, mayfly larvae to name a few! I even found the occasional snake, catfish, and fish! (Don't worry I rescued them and took them back to the marsh!).

As my final semester at Stetson progresses, I will be continuing with going into the marsh with my new waders to complete more sampling, which I am very excited for! I will be studying different types of vegetation, as well as comparing the free-flowing marsh to the impounded marsh.

Through my experience here at Lake Woodruff National Wildlife Refuge, I have learned the importance of studying the smallest of factors to better understand waterfowl management.

It's important to understand the relationship between macroinvertebrates and vegetation to understand how we can control the vegetation to best manage waterfowl populations.

I am looking forward to continue with my sampling and contribute my findings to the Refuge System!

Erica McCaughey, LWNWR Intern

Check Stations Check Hunting, Gather Data

Everyone who hunts waterfowl at Merritt Island National Wildlife Refuge must check out at one of two check stations when they exit the refuge. However, not everyone who stops is a hunter.

"Sometimes there are hunters who just want to find out what's coming out. Sometimes the people who stop are just curious about what the hunters are shooting that day," said Lindsey Green, a MINWR Ranger who has worked at the check stations the last two years.

The check stations are set up at the Refuge's main entrance on SR 402 and at the north end on SR 3. At the check stations,

"we look at the ducks and ask four questions. About how many hunters were in the hunting party, where they were hunting, whether any birds were lost or wounded," Lindsey said.

The information gathered from the conversations with hunters helps inform the refuge.

Thanksgiving weekend marked the end of the first phase of the 2018-19 waterfowl habitat management practices across the

hunting season. Mike Legare, Supervisory Wildlife Biologist at MINWR, told participants in the Welcome Back Volunteer Refresher on November 28th that 790 hunters had harvested 1,800 birds in the eight-day November hunting period.

Hunting dates are specifically spelled out in Hunting Regulations brochures available at the information desk in the Visitors Center. Enforcing the regulations is one of the responsibilities of Refuge law enforcement officers.

All hunters must stop at one of the check stations when they leave the Refuge, even if they haven't bagged any waterfowl.

"Hunters are really good at checking with us," Lindsey observed.

On days when hunting is allowed, hunters may enter the Refuge at 4 a.m. They can shoot waterfowl from a half hour before sunrise until noon. They have to leave the Refuge by 1:00 p.m. Some hunters hit their limit of six birds. More go through the check stations with none. All have experiences to share.

Connie Harris, USFWS Volunteer



Merritt Island National Wildlife Refuge is a premier waterfowl hunting area that provides unparalleled opportunities to the public during the early teal and regular season, as well as a special youth hunt.

Waterfowl hunting is permitted on 36,000 acres of the refuge's 140,000 acres. The remainder of the refuge is closed to hunting to protect non-game birds and endangered species and to permit other recreational activities. The 2019-2020 regulations are now available in the Visitor Center.

Waterfowl, including Redheads, along Pump House Road during the winter. Photo by USFWS Volunteer Al Brayton.

15th Annual Brevard Watercolor Society Exhibit

Featured Flora, Fauna, and Scrub Habitat of the Merritt Island NWR

"Flora, Fauna and Florida Scrub Jay Habitat" was the theme for the Brevard Watercolor Society (BWS) 15th annual exhibition at the Refuge Visitor Center.

For 2018, the watercolor artists were invited to create paintings depicting flora and fauna on the Merritt Island NWR and also to focus on Florida Scrub Jay Habitat to tie in with the annual Florida Scrub Jay Festival which was held in late February in Titusville.

The 32 paintings on exhibit represent a wide variety of nature and wildlife seen on the refuge including scrub habitat.

This year's show was juried by Jon Houghton, a well-respected local artist and

workshop leader. A "Refuge Award" and "Scrub Habitat Award" was selected by Layne Hamilton, Refuge Manager and Kim King-Wren, Visitor Services Manager.

Award winners are:

Refuge Award, "Baby Teeth" by Jane Steiner

Scrub Habitat Award, "Scrub Shadows" by Darleen Hunt

Best of Flora, "Berries Gone Wild" by Lori Jenkins

Best of Fauna, "Florida Scrub Jay" by Darleen Hunt

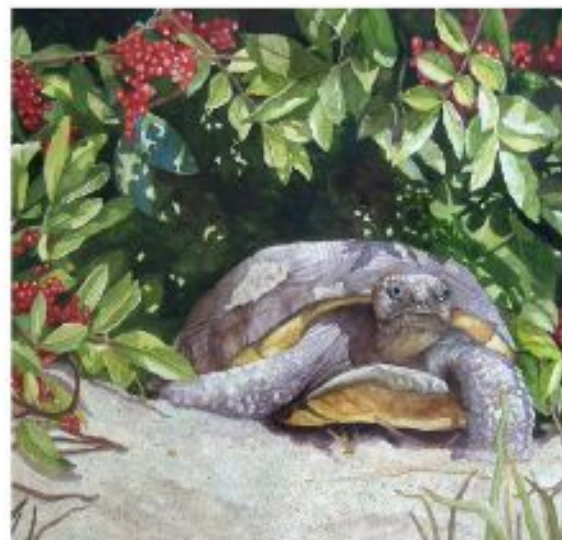
Judge's Merit Awards - "Colorful Sea Grape Berries" and "Peek-a-boo" by Therese Ferguson

"Swamp Gator" by Jeanette Drake; "Family Bliss" by Witha Lacuesta; "Baby's" by Dorothy Koliba; and "Day Dawns in the Scrub" by Cindy McKee.

This collection of original paintings was on display in the Refuge Visitor Center Conference Room from December through February 25. Original paintings and some prints are still offered for sale with a portion of the proceeds donated to MIWA.

As always thank you to the wonderful artists that helped support the refuge and MIWA!

Darleen Hunt, MIWA Board Member & BWS Artist



Another year of amazing artwork by local watercolor artists! Shown above are (from left to right) "Peek-a-boo" and "Colorful Sea Grape Berries" by Therese Ferguson and Best of Fauna winner "Florida Scrub Jay" by Darleen Hunt.

From Page 1

MIWA Sea Turtle Walks

For both walks we will be meeting in the Refuge Visitor Center at 7:30pm (the Visitor Center will be open early if you want to take a stroll on the boardwalk or shop in the Bookery).

FWS Intern Brielly Roy will present a program about sea turtles. Afterwards everyone will take their own vehicles and caravan out to Playalinda Beach at Canaveral National Seashore.

When we are all out at the beach, we will wait at a designated parking lot until the CNS volunteers have spotted a turtle and she has started her trip onshore.

Then everyone will go to the corresponding parking lot and head out over to the beach as a group.

Once on the beach we will watch as she digs her nest, lays her eggs, covers her nest and then journeys back out to sea.

Space is limited to 30 attendees and reservations are required.

To place your reservations for a walk please call MIWA at (321) 861-0669, or stop by the Visitor Center from 9am - 4pm Monday - Saturday.

Reservations can also be made online by emailing your information to us at hatchat@merrittislandwildlifeassociation.org.

Please note: For the safety and fun of all we ask for no children under 8. Since our mama turtle will be in a stressful enough situation, there will be no cameras, flashlights or cellphones on the beach.

Please bring bug repellent! It will be buggy! Also we highly suggest wearing loose comfortable clothing (long sleeves and pants are recommended). No flip-flops, wear shoes suited for hiking. Make sure your vehicle has fuel and lastly have fun!

Thank you MIWA members, we appreciate your support and love of this great place. See you on the Refuge!

Did You Know? Sea turtles serve a larger purpose than being creatures we love to admire from afar?

That's right! Sea turtles play a large role in the coastal environment.

During nesting season many sea turtles lay their eggs in sands on or near the backshore portion of the beach. Unfortunately, not all of the eggs hatch, but these "duds" act as a natural fertilizer for plants that grow on the beach.

A Loggerhead nesting on Playalinda Beach at CNS. Photo by USFWS Steven Trull.



Q: Why does the refuge routinely burn areas?

A: Fire is a naturally occurring process in many habitats across the United States. Here at Merritt Island National Wildlife Refuge Complex, our fire crews conduct burns for two main reasons:

First, many habitats have evolved to fit around fire. Certain plant species and animals like the Eastern indigo snakes, Florida Scrub-Jays, and gopher tortoises depend on fire to manage and maintain healthy scrub habitat. Without repeated fire at intervals, scrub habitat becomes too tall and dense, resulting in increased nest predation and low Scrub-Jay reproduction rates.

Second, we burn to reduce the risk of wildfires which are different than prescribed burns. Infrequent fire causes a build-up of continuous hazardous fuels. This increases the risk of long and intense uncontrolled wildfires, which can have catastrophic effects on wildlife populations and pose a risk to NASA structures.

The past few weeks was big for burns at the refuge. FWS staff conducted 3,166 acres of prescribed fire treatments on St Johns and Merritt Island National Wildlife Refuges.

In addition, our staff assisted in suppressing a wildfire that threatened homes in Port St. John totaling 253 acres. Thanks to the shared efforts from the U.S. Forest Service, Florida Forest Service, National Park Service, St. Johns River Water Management District, Brevard County Fire Rescue and Florida Highway Patrol that fire was contained!



Top Left: A helicopter oversees a prescribed burn at St Johns National Wildlife Refuge within the Merritt Island National Wildlife Refuge Complex. *Photo courtesy of Chuck Hensler.*

Top Right and Bottom: The VAB during a prescribed fire in the secure area of the Kennedy Space Center. Prescribed burning is an important habitat management tool used here at the refuge. Many species like the Florida Scrub-Jay and Gopher Tortoise rely on fire for the well-being of their habitat. Last year, prescribed burns covered a total 17,614 acres. *Photos courtesy of USFWS.*



On Saturday, April 16th we hosted our first Archery Open House!

Visitors had fun learning about the history of archery, the big game hunt program on the Refuge, and how to shoot on a compound bow.

We look forward to holding another archery class in the future. Thank you to everyone that came out and had a great time!

The Merritt Island NWR always has fun, free activities for all age ranges. Follow us on Facebook for the latest calendars and upcoming events.

The monthly calendar is also available in the Visitor Center at the front desk. Or call us at (321) 861-0669 for information and questions.

See page 7 for upcoming events, tours and more!

Refuge Volunteers Donate over 16,000 Hours

Thank you to our Merritt Island National Wildlife Refuge Volunteers! From bus tours to guided walks and talks to empty trash cans, from painting projects and signs and lawn mowers and litter pickups, from education groups to Christmas Bird Count, our over 279 volunteers gave 16,452 hours to Merritt Island National Wildlife Refuge over the calendar year of 2018.

Our volunteers represent this refuge and its agency at its best through their passion and selflessness. The refuge volunteers make sure visitors have a safe and memorable experience and help inspire folks to have emotional and intellectual connections to its resources.

Again THANK YOU to our 2018 volunteers. You gave us yet another wonderful year at the refuge!

Want to get involved with volunteering at the refuge? We are always looking for friendly faces to help at the Visitor Information Center front desk, help support the Environmental Education program, pound nails, pick up trash, guide tours and all around help us keep the Refuge a beautiful place for all to enjoy! For more information, stop by the Visitor Center today and fill out an application or call (321) 861-0669.

Those that can do - and those that can do more volunteer!

In 2018, we had 279 volunteers total who donated a total of 14,492 hours during the calendar year for a grand total of 206,938 hours since the beginning of record-keeping of volunteer hours at Merritt Island NWR.

We're so grateful for all that choose to give their time to the refuge to better the facilities and programming for our visitors and the wildlife!

Presidential Volunteer Service Awards

Bronze 100 - 249 hours

Bob Ambruster
Curtis Arnold
John Boucher
Andrew Charles
Jabez Coggan IV
Peg DeTiberus
Curt Diffenderfer
Steve Dunn
Kristina Fisher
Doris Franklin
Eric Gardze
Rosemary Georganna
Tim Harper
Connie Harrison
JoAnne Heenan
Natalie Hoffman
Pat Kingery
Donald Metzger
Dale Nichols
Bill Nunn
Barb Peterson
Kathie Reninger
Judi Schindler
Trish Thomas-Arnold
Bill Thompson
Jim Willis
Dan Witmer

Silver 250 - 499 hours

Al Brayton
Paul Greenway
Al McKinley
Jim Stahl
Ned Steel

Gold 500+ hours

Jayne Price
Roger Price
Steve Schindler
Mary Weiler
Kevin Weiler

Youth Leadership Council

Gabrielle Russon
Destiny Brown
Logan Bowers
Shawn Merrick-Miller
Madison Turney
Rachel Trull
Sarah Worthington
Corban Smolk
Caleb Brandon
Maggie DeCoursey

Cumulative Hour Recognition Volunteer 1,000 + hours

Peter Bartman	1,466
Kathie Benson	1,477
Steve Dunn	1,433
Eric Gardze	1,433
Rosemary Georganna	1,682
Pat Kingery	1,047
Dale Nichols	1,148
Kay Stahl	1,412
Steve Schindler	1,959
Trish Thomas-Arnold	1,985
Bob Ambruster	2,471
Curt Arnold	2,423
Doris Franklin	2,228
John Boucher	3,193
Al McKinley	3,484
Ned Steel	3,003
Al Brayton	4,338
JoAnne Heenan	4,728
Dan Witmer	4,330
Jim Stahl	5,427
Betty Selter	7,109
Bill Nunn	8,169
Connie Foreman	8,889
Daryl Foreman	8,266



THANK YOU, VOLUNTEERS!



Construction on Haulover Canal in the new area. This is the same foot print we use today, including a draw bridge to allow for larger vessels. Photo courtesy of NASA Kennedy Space Center Archives

History on the Refuge: Haulover Canal

Native Americans explored, and settlers carried canoes and small boats over the narrow strip of land between Mosquito Lagoon and the Indian River, eventually this area would be known as "haulover." Connecting both bodies of water had long plagued early settlers of this area. Spaniards visited as early as 1605 and slid boats over the ground covered with mulberry tree bark. Fort Ann was established nearby in 1837 during the 2nd Seminole War (1835-1842), to protect the haulover from Indians and carry military supplies from the Lagoon to the river.

In 1852, contractor G.E. Hawes dug the first canal using slave labor. It was 3ft. deep,

14ft. wide and completed in time for the 3rd Seminole War (1856-1858). Steamboat and cargo ships used the passage until the railroad arrived in 1885.

By 1887, the Florida Coast Line Canal and Transportation Company dug a new, deeper canal which is in use today a short distance from the original spot. It is now part of the Intracoastal Waterway and maintained by the U.S. Army Corps of Engineers. To this day, it remains one of the most highly used waterways in Brevard County, home to Bairs Cove Boat Ramp and the Manatee Observation Deck. From birders to kayakers, Haulover is an integral part of the Merritt Island experience.



Save the Date

Join us on the refuge and in the local community this summer. For more events, activities and tours, visit the Merritt Island NWR Facebook page or stop by the Visitor Center and pick up a monthly calendar. Please note some tours may require reservations.

June

Manatee Mania

Wednesdays 1pm – 3pm

Manatee Observation Deck

Visit the Manatee Observation Deck at Haulover Canal to chat with volunteers about one of Florida's favorite megafauna. Learn about their diets, habits and threats on the Merritt Island NWR and touch manatee bones to discover their natural history.

June

How Hands Changed the Land

Thursdays 10am

Merritt Island NWR Visitor Center

Long before the Kennedy Space Center or Merritt Island National Wildlife Refuge came to exist, wildlife and people alike called this place home. Learn about how the land changed hands and hands changed lands in this 45-minute auditorium talk. There will be no program on June 7th.

June 8

Butterfly Survey

Saturday 9am

Merritt Island NWR Visitor Center

View a photo presentation to learn how to identify butterflies. Then participate in a survey to collect data for North American Butterfly count and Florida Butterfly Monitoring Network. Bring water, snacks, insect repellent and wear closed shoes and long pants. Meet in the auditorium of the refuge Visitor Center.

June 9

Cruikshank Sanctuary Hike

Sunday 10am – 12pm

Helen & Allan Cruikshank Sanctuary

Hike with Florida Master Naturalist Mark Prynoski at the Cruikshank Sanctuary in Rockledge. This Sanctuary is home to many plants and animals specific to the Scrub Habitat! The hike will meet at Cruikshank and please wear closed toe shoes, sunscreen, hat and bring plenty of drinking water—there are no facilities on site so plan accordingly! Please call to register for this hike—spaces are limited!!! Call 321-449-4720.

June 11

Science on Merritt Island

Tuesday 6pm

Merritt Island NWR Visitor Center

Summer Speaker Series: Shannon Egger

June 22

Bat House Workshop at Sams House

Saturday 10am – 12pm

Sams House / Pine Island Conservation Area

Join Shari Blissett-Clark, President of the Florida Bat Conservancy, to make and take home your very own Bat House! This workshop is limited to 15 Bat Houses and the materials cost is \$50 per structure. All materials provided in your kit, all instructions available when reserving your spot by calling Shari at 321-890-6150. Be sure to call and reserve for this workshop!

June 22

Lagoon Friendly Lawn Plant Sale

Saturday 8am – 12pm

KBB Office, 1620 Adamson Rd. Cocoa FL

Join us for our 2nd annual LFL Plant Sale! Hundreds of plants to choose from and great people to talk to. All proceeds benefit Keep Brevard Beautiful Lagoon Friendly Lawn program, dedicated to reducing nutrient pollution and restoring native habitats in Brevard County. If you are interested in donating plants or volunteering, please contact Kaylyn at 321-631-0501 ext. 212.

June & July

Refuge Bus Tour

9am (every Thursday, Friday and Saturday)

Merritt Island NWR Visitor Center

Join us for a 2-hour tour of the Refuge. Space is limited so please call (321) 861-0669 to make a reservation. Fee of \$5 per person, \$2.50 with Senior or Access pass.

June & July

Sams House and Cabin Tours

Saturdays 3pm

Sams House / Pine Island Conservation Area

Tour the Sams House and Cabin where History Meets Nature! The oldest standing structure in Brevard County is the Sams Cabin, originally built in Eau Gallie in 1875. Visit and learn about this homestead and the history of Courtenay.

June & July

All About Alligators

Thursdays 11:30am

Merritt Island NWR Visitor Center

Explore the natural history of this intriguing reptile. Handle gator bio-facts and learn fun facts like how to estimate size.

June & July

Sea Turtle Night Walks

Wednesday 8pm (excluding June 19)

Merritt Island NWR Visitor Center

Meet at the Visitor Center for a presentation, then continue to Playalinda Beach to watch a sea turtle lay her eggs! Space is limited, call (321) 861-0669 to make a reservation. Open to the public, cost is \$14 per person.

June 16 & July 17

Forest Funday

Sunday 2pm – 4pm

Enchanted Forest Sanctuary

Free family-friendly hands on activities in the screen porch, ongoing in the afternoon! No registration required. For more information, please call 321-264-5185.

June 19 & July 13

MIWA Members Sea Turtle Walk

Wednesday & Saturday 8pm – midnight

Merritt Island NWR Visitor Center

Meet at the Visitor Center for a presentation, then continue to Playalinda Beach to watch a sea turtle lay her eggs! Space is limited, call (321) 861-0669 to make a reservation. Free to all MIWA members and up to 4 guests.

July 4

Red, White and Boom

Thursday 7pm – 10pm

Sand Point Park

The City of Titusville, the Titusville Area Chamber of Commerce and the Titusville Rotary present the annual Red, White and Boom. Experience a free, fun-filled, family-oriented day with live entertainment, concert by Them Seeds, food and activities, ending with a spectacular fireworks display!

July 16

Science on Merritt Island

Tuesday 6pm

Merritt Island NWR Visitor Center

Summer Speaker Series: Dr. Kate Marsfield

August 13

Science on Merritt Island

Tuesday 6pm

Merritt Island NWR Visitor Center

Summer Speaker Series: Jim Lyons

Happy Birthday, Black Point Wildlife Drive!

On Tuesday, May 28, 2019 one of Merritt Islands favorite places, Black Point Wildlife Drive, turned 43 years old!

Black Point was designated as the scenic auto tour we know and love for wildlife viewing back in 1976. Thanks to years of dedicated USFWS staff, volunteers and MIWA, the drive has remained a wonderful place.

The refuge is proud of Black Point, and we continue to show the drive our love, with the past few months seeing repairs to the bird blinds, new entrance kiosk and signage, and continued maintenance to the bathrooms and road.

We have had clean ups (even during the shutdown thanks to our amazing volunteers and local supporters!) and outreach – like the Eagle Program where volunteers teach set up scopes to view the nesting eagles and talk about these beloved raptors.

So we say again as tourist, novice naturalist, world renown birders and everyone in-between, Happy Birthday Black Point, thank you for the last 43 years and we look forward to sharing many more with you!



Robert Yoder (center) of the Merritt Island National Wildlife Refuge; the president of the Titusville Garden Club; and Edward Perry, KSC Chief Counsel, dedicated the Black Point Wildlife Drive. Share your favorite photos from Black Point in the comments below! Photo courtesy of NASA - Kennedy Space Center Archives

U.S. Fish & Wildlife Service

SCIENCE

ON MERRITT ISLAND

Summer Speaker Series





Tuesday, June 11
at 6:00 p.m.

Shannon Egger from the Marine Resources Council will share research concerning the Indian River Lagoon. Join this Lagoon Literacy presentation on the impacts human choices are having on this body of water.

Tuesday, July 16
at 6:00 p.m.

Dr. Kate Mansfield serves as the director of the Marine Turtle Research Group in the Department of Biology at the University of Central Florida. Her team's research revolves around Archie Carr National Wildlife Refuge.





Tuesday, August 13
at 6:00 p.m.

Refuge Biologist Jim Lyon studies wildlife and habitat management, particularly on Florida Scrub-Jays located within the Kennedy Space Center and Merritt Island National Wildlife Refuge.



U.S. Fish & Wildlife Service

Merritt Island

National Wildlife Refuge

Bird List



Photo: James Lyon

New Year, new you! We think this new look is working out pretty good!

Updated bird lists are now available at the Visitor Center. Thank you to all the USFWS staff and volunteers who worked on the project! Pick up a copy of our other brochures, including information on the refuge, fishing and Black Point Wildlife Drive at the Visitor Center.

Blinds on the Wild Bird Trail Repaired & Reopened!

Damaged in a previous hurricane, the bird blinds located on the Wild Birds Unlimited Trail on Black Pointe Wildlife Drive have been closed for a while. Thankful the refuge was able to work with Career Source Brevard. The crew worked hard and got the blinds back in excellent shape!

We're grateful for all our community partners who help keep the refuge in one piece! Thanks to Career Source Brevard and QLM for helping to make this happen. What birds have you seen from the blinds??



Q: "Where can I go to watch a rocket launch?"

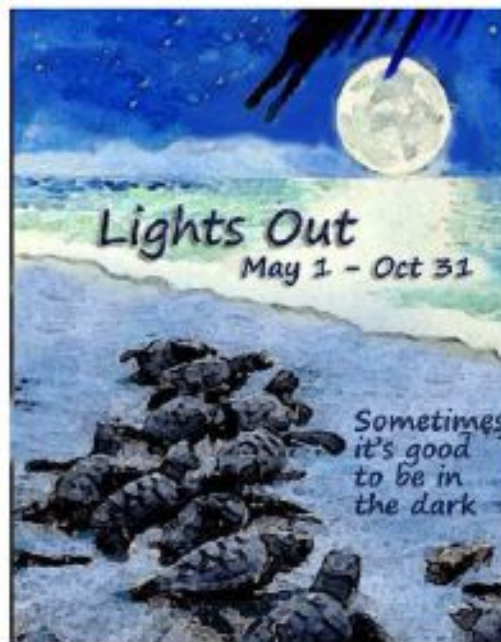
A: Merritt Island National Wildlife Refuge is only open from sunrise to sunset - regardless of launch schedules and times (meaning there is no viewing during night launches in our boundaries). For launches that occur during our open hours, visitors must be parked in a designated parking space and not alongside any major roads.

Kennedy Space Center Security has the jurisdiction and final call on when to close access from the Max Brewer Bridge and Haulover Canal onto the refuge and generally does so either 90 minutes prior to launch or when Canaveral National Seashore reaches near capacity.

Honestly, we recommend viewing from Titusville across the Indian River to have a better, clearer view with less tree-line as well as an easier escape plan from vehicle traffic.

As a direct overlay of the Kennedy Space Center, our refuge helps make space for wildlife here at Merritt Island National Wildlife Refuge.

Left: A Falcon 9 rocket launches the Crew Dragon Capsule from NASA's Kennedy Space Center at night lighting up the surrounding water. Photo courtesy of Steve Dunn USFWS Volunteer



The Sea Turtle Preservation Society (STPS) is a local Brevard county non-profit organization whose purpose is to educate the public about marine turtles. STPS reaches thousands of people each year through public presentations, exhibits at area events, and by their turtle watches during the sea turtle nesting season.

The STPS website at www.seaturtlespacecoast.org is a great resource for information on what to do and importantly who to contact if you find injured or sick sea turtles and hatchlings in Brevard County. The emergency number (321) 206-0646 is available 24/7. When calling please give the STPS the condition of the turtle, its location (street address), and your name.

If you are at Playalinda or Apollo beaches and see any sea turtles, hatchlings or nests that look in trouble please immediately contact the Canaveral National Seashore or the Merritt Island NWR front desk at (321) 861-0669.

Do not touch, remove or attempt to place any Sea turtles or hatchlings in the water! Get a Ranger to help, they will know what to do and are the best bet for the turtle's survival. Remember good intentions can easily be dangerous for distressed or injured wildlife!

Interested in taking a night walk this nesting season? MIWA members are invited to join us on June 19th or July 13th.

Not available those dates? The refuge offers walks on most Wednesday in June and July. The cost of \$14 per person and reservations are required.

To RSVP for either walk please call the Visitor Center front desk at (321)861-0669. Fee walks can also be purchased online at <https://squareup.com/store/miwa/> and select your date. We look forward to another fantastic nesting year and hope to see you on the refuge!



PO BOX 2683
Titusville, FL 32781

321-861-2377

www.merrittislandwildlife.org

miwa@merrittislandwildlifeassociation.org

The Merritt Island Wildlife Association (MIWA), the non-profit friend's organization of the Merritt Island National Wildlife Refuge, was established in 1994 to promote conservation, awareness, and appreciation of the Refuge and provide assistance to Refuge programs.

Directors & Officers

President	Chris Fahey
Vice President	Laurie Thompson
Treasurer	Carl Arnold
Secretary	Tom Allen
President Emeritus	George English

MIWA Board Members

Thad Altman	Charlie Veneto
Kathleen Burson	Marcia Gaedcke
Bob Champagne	Jim Eager
Eric Garde	David Hartgrove
Clay Henderson	Darleen Hunt
Robert Hutchison	Diane Stees
Austin Mahr	

Liaisons

MJNWR Manager	Layne Hamilton
MINWR VS Manager	Kim King-Wrenn
LWNWR Manager	Candice Stevenson
LWNWR Liaison	Dawn Jennings
NASA	Lynne Phillips

MIWA Staff

Executive Director	Connie Cranston
Bookery Staff	Lindsay Hobart
Bookery Staff	Jessica Cravey

The Habi-Chat is published 3 times a year and available via mail and email.

Newletter Editors	Connie Cranston Kim King-Wrenn
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Technical Consultant	Cheri Ehrhardt
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Manatee Mom & Calf Receive Help

Multiple Agencies Work Together to Move Manatees

So while we can't answer why the manatees crossed the road, we can answer how. In November Florida Fish and Wildlife Conservation Commission staff worked with Hubbs-SeaWorld Research Institute and our FWS folks to move a mother and a calf manatee that found themselves on the wrong side of an impoundment culvert. FWS staff asked for help relocated the pair in order to be able to close the culvert and hold water in the impoundment to maintain quality habitat for migratory birds.

Thank you to all who reported and helped relocate these two, and happy. If you ever see something odd on our refuge, don't hesitate to call our front desk at 321-861-0669.

Want to learn more about manatees? Come out to our Manatee Mania on Wednesdays at 1pm - 3pm. Refuge volunteers will be at the Manatee Observation Deck to talk about one of our favorite megafauna. Learn about their diets, habits and threats. For more information, please call the front desk at (321)861-0669.



Q: Why do those manatees have scars!

A: Those scars on the manatee mom and calf are from boat propellers. Sadly, most manatee have them. That's why it's important to be vigilant and keep a look out for them when boating. This is especially true in the fall when many manatees are on the move in search of warmer waters.

Feeding and watering manatees is also a culprit. It is illegal and encourages them to spend time at docks and marinas, making them susceptible to boat strikes which is one of the main causes of mortality.

Report a sick, injured, dead, or tagged manatee off the refuge to FWC's Wildlife Alert number at 1-888-404-3922. If on the refuge, please call us at (321) 861-0669.

Above: Manatees getting a help from FWC, MINWR and Hubbs-Sea World. Photo by USFWS.



Summer Hours

Visitor Center
8am - 4pm
Monday - Saturday

The Bookery
9am - 4pm
Monday - Saturday

**Wildlife Drives, Hiking Trails
& Boat Ramps**
Sunrise - Sunset Daily

Playalinda Beach
6am - 8pm Daily



An Eastern diamondback rattlesnake on the refuge.
Photo by James Lyon USFWS

The Eastern diamondback rattlesnake is a large bodied ambush predator once commonly found throughout the southeastern United States. On Merritt Island National Wildlife Refuge, diamondbacks can be found in scrub and coastal dune habitats. They are well adapted to the fire maintained ecosystem

Eastern Diamondback Rattlesnake

on the refuge and are known to use gopher tortoise burrows as refugia from extreme weather and wildfire. Diamondbacks have been declining across their range and now are being considered as a candidate for protection under the Endangered Species Act.

Several factors contribute to declines in Eastern diamondback rattlesnake population. Because they are venomous, diamondbacks inspire a great amount of fear. They are often killed on sight when found by people. Tracts of land large enough to support populations of diamondbacks are becoming rare because of habitat destruction and fragmentation for urban developments. Fragmented landscapes have roads with vehicles, non-native predators such as hogs, and more people, all of which contribute to higher mortality rates and increased extinction risk. Fragmentation of the land also interrupts several natural landscape processes (e.g., wildland fire,

surface water flow) that are essential for maintaining suitable habitat conditions for the diamondbacks and many other species.

We need to learn more about the life history and ecology of the Eastern diamondback rattlesnake to better manage land for diamondbacks and to develop land management plans that can contribute to the long-term survival of this species. However, data from the Refuge indicate that diamondbacks on Merritt Island NWR experience significant mortality from crossing roads, which is likely the largest threat to diamondbacks throughout their existing range. Mitigating for such mortality can be very difficult for land managers like the staff at Merritt Island, but we can all contribute by being careful when driving on the wildlife refuge, maintaining safe speeds, and watching for wildlife.

Sten Howarter, Wildlife Biologist, Merritt Island NWR

Growing Social Media Presence Extends Volunteers' and Visitors' Connection to MINWR

People use social media to stay in touch with one another. Increasingly they're also using social media to stay in touch with Merritt Island National Wildlife Refuge.

"Not only does it show people what is here and what beautiful areas we have" but it's also a way for people to keep up with Refuge activities and experiences when they can't be on site, explained MINWR Ranger Lindsey Green.

She, along with Visitor Services Manager Kimberley King-Wrenn and Volunteer Coordinator Emily DeLanzo handle the Refuge's Facebook page, keeping the activities calendar updated, posting notifications of road closings and similar near-term events, and sharing photos of the landscape and creatures that attract more than a million visitors a year to MINWR.

During this year's National Refuge Week Lindsey introduced an InstaMeet, leading participants to some especially photogenic Refuge sites, ending with an engrossing sunset. The participants were encouraged to share their photos on Instagram.

"It was a chance for people to come together, go to nice spots, and get cool pictures for the social media platform," Lindsey said. "It gives people a means to express what they love."

New photos appear almost daily on MINWR's Facebook page, thanks to volunteers as well as staff with a deep appreciation for the beauty around them and

their eagerness to share what they are seeing. And by keeping the Facebook page up to date,

"People know what's going on here. They connect with us and have another way to ask us questions," Lindsey added.

In recent months MINWR has set up three groups on the Facebook page, public ones for birders and photographers and a closed group for MINWR volunteers. Both open groups are available for postings by the general public. Several hundred people have already joined those groups, sharing their pictures from refuge visits, highlighting sightings of particular species, sharing spectacular sunsets, and otherwise conveying the natural beauty they have experienced.

Staff members keep an eye on Facebook posts to maintain high standards and keep the focus on the Refuge, Lindsey noted. Even with more than 12,000 likes so far, there's seldom a problem, she said, given the high regard in which visitors hold MINWR. More likely is that the staff will spot a photo to share with a wider audience, with the permission of the person who took it.

You can keep in touch with MINWR on social media by searching for Merritt Island National Wildlife Refuge from your Facebook page and clicking on Like. To immerse yourself more deeply in birding, photography, or volunteer activities, click on Groups in the list under the picture of the Scrub-Jay. From there it's one click apiece

to join the public groups or request being added to the volunteer group.

With Lindsey's encouragement, "Join one or more."

Connie Harrison, USFWS Volunteer



Merritt Island National Wildlife Refuge
April 6 at 12:00 PM · e

This juvenile Little Blue Heron was doing some self reflecting.

Photo courtesy of Mark Hainen

[Photo Description: A juvenile Little Blue Heron wades through the water]



53 Likes

Above: A post from the refuge Facebook. Photo by Mark Hainen.

The Merritt Island NWR official Facebook page is a great place to see awesome pictures of birds, wildlife flora and fauna. You can also get updates on closures, find out about activities and check out the monthly calendar of events.

Don't want or have a Facebook account? You can still view the page without a login or account!



MIWA
P.O. Box 2683
Titusville, FL 32781

NONPROFIT ORG
U.S. POSTAGE
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Orlando
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A photograph showing three sea turtles on a sandy beach. The turtles are dark-colored and are positioned in the foreground. In the background, there is a rocky shoreline and the ocean with waves under a cloudy sky.

2019 MIWA Members Annual Sea Turtle Night Walks

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Join us on the annual MIWA Members Sea Turtle Walk!
Open to all current members (plus four guests).

Wednesday June 19th

Saturday July 13th

Space is limited to 30 attendees; reservations are required. Please call (321)861-0669 Monday – Saturday from 9am – 4pm or email your name, phone number and name of all attendees to habichat@merrittislandwildlifeassociation.org. We look forward to seeing you on the refuge!