

tributaries

MAGAZINE OF THE SOUTH CAROLINA AQUARIUM



20
YEARS



South Carolina
Aquarium

EXPLORING EARTH DAY

SPRING 2020 / VOLUME 67

FROM THE PRESIDENT

In a sense, it took a trip to the moon to rediscover the earth.

Three American astronauts aboard the 1968 flight of Apollo 8 were the first humans to witness a remarkable view – the “rising” of our bright blue planet above the lunar landscape. Major Bill Anders captured this moment with a photograph, and widespread distribution of “Earthrise” forever changed the way that humans perceive our planet.

Within two years, broad bipartisan support led to the creation of Earth Day, and the modern environmental movement was born. Now, 50 years later, we can credit Earth Day with establishing the framework for ensuing legislation that has protected our environment, from the Endangered Species Act to the Clean Water Act.

Earth Day’s enduring legacy has resulted in cleaner waters and cleaner air, and greater hope for the many species who share this planet. But our work is far from finished – new challenges, from climate change to human over-population, threaten to undermine the environmental work of the past 50 years. We need to maintain the optimistic “can-do” spirit of Earth Day, while we arrive at new policies, behaviors and innovation that safeguard our planet.

You can read more about Earth Day and its legacy in this issue. As we celebrate its milestone passage, it’s also worth noting that the South Carolina Aquarium itself will enjoy its 20th anniversary this year! We are grateful to all who join us in protecting what we love, and who commit to making every day an Earth Day.



Kevin Mills, President and CEO



Leading the way to connect people with water, wildlife and wild places.

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Monday – Friday, 9 a.m. – 5 p.m.

Aquarium News



StoryCorps Comes to the Aquarium

StoryCorps, a national oral history project, visited Charleston to record and preserve the stories of the Aquarium. Aquarium staff (like Nigel and Shannon, pictured above) and members of the community, including Mayor Joe Riley, participated in meaningful conversations, sharing their favorite Aquarium memories and discussing the positive impact the Aquarium has had on their lives. This incredible opportunity was a gift from the Institute of Museum and Library Services along with the National Medal we received.

The recorded sessions are archived at the Library of Congress and will serve as an essential part of the Aquarium's legacy for years to come. We will be sharing these stories throughout the year in celebration of our 20th Anniversary! Learn more about StoryCorps by visiting storycorps.org/stories.



Meet Your New Membership Manager, Kayla Halchak

Kayla joined the Aquarium as membership manager in October 2019. Having lived in all major regions of the state, Kayla is a true South Carolinian with a heart for conservation and a passion for showcasing the state's vast beauty! After graduating from Clemson University, Kayla began her career in advertising in Greenville, South Carolina. She moved to Charleston four years ago to work in tourism marketing at Patriots Point Naval & Maritime Museum and is excited to translate those skills into building the Aquarium's membership base. Kayla hopes to grow membership, increase member engagement and add more interactive programs to the calendar for you all to enjoy. Kayla is eager to hear from you; reach out to say hello by sending an email to khalchak@scaquarium.org.



Accessibility through American Sign Language

The Aquarium continually seeks ways to be a more accessible institution for all audiences. This past summer, Aquarium staff had the opportunity to take an introductory class on the basics of American Sign Language (ASL). Meghan Mulone from the School of Deaf and Blind taught staff basic signs and skills to be able to engage with our deaf and hard of hearing guests at specific exhibits throughout the Aquarium. Staff also got to practice these skills hands-on with members of the community. Four staff members are currently in weekly training with the South Carolina School of the Deaf and the Blind Division of Outreach Services to further their ASL communication skills. For more information on visiting the Aquarium with an official ASL interpreter, please refer to our accessibility information located at scaquarium.org/accessibility.

What's Happening

AFTER HOURS: GOOD CATCH OYSTERFEST (21+)
FEBRUARY 21 • 7:30 – 10:30 p.m. • Aquarium

After Hours is back! Enjoy views of the Charleston Harbor while shucking fresh oysters and sipping beer. Our local Good Catch partners will also feature special chili and chowder recipes throughout the night. Enjoy food, drinks, entertainment and animal encounters — all included with your ticket. Grab a VIP ticket for early access to the event, a souvenir shucker and an exclusive bar for the evening. VIP tickets are \$75, member tickets are \$45. All After Hours events are 21+. Learn more at scaquarium.org/afterhours.

MEET THE KEEPER: AMBIBIANS + REPTILES
FEBRUARY 29 • 10 – 11:30 a.m. • Aquarium

It's LEAP DAY at the Aquarium! Our herpetologist, Joshua Zalabak, will take you on a fun "edventure" and share what it's like to care for your favorite cold-blooded friends. Find out how he handles venomous snakes, and learn more about the frogs, toads, alligators and other reptiles and amphibians in his care. Recommended for ages 8 and up. \$5 per member participant; chaperones attend free. To register, call (843) 577-FISH (3474).

HOMESCHOOL EXPLORERS CLUB: POWERFUL PLANTS
MARCH 4 • 10 a.m. – 1 p.m. (Registration opens at 9 a.m.) • Aquarium

Get your Plant 101 lessons packed into one day! Learn about invasive plants and the benefits of natives for our local wildlife. Discover the power of plants as game changers throughout the world's history. While we plant seeds of knowledge, we'll also plant native seeds for you to bring home. Member tickets are \$9.50 (grades K-8) and \$13.50 (grades 9-12). To register, call (843) 577-FISH (3474).

ADULT FIELD TRIP: ST. STEPHEN FISH LIFT
MARCH 14 • 8 a.m. – 1:30 p.m. • St. Stephen Fish Lift

Join Aquarium staff as we travel to St. Stephen, South Carolina for our first adults-only field trip! By using a lock, or "fish lift," hundreds of thousands of fish are lifted and passed through the St. Stephen dam to complete their life cycles! The trip will include a behind-the-scenes tour of the fish lift facility. Bring binoculars, as birds like to take advantage of the swimming buffet. Transportation will be provided by School Wheels Direct. Ages 18+. Member tickets are \$15, reservations required. To register, call (843) 577-FISH (3474).

MEET THE KEEPER: STINGRAYS
MARCH 21 • 8 – 9:30 a.m. • Aquarium

Come feed the stingrays! Join our aquarist, Jen Krizan, as she takes you behind-the-scenes to the food prep kitchen to learn all about the eating habits of these beautiful creatures. After the tour, she will lead you to The Shallows to feed the rays their breakfast. Recommended for ages 8 and up. \$5 per member participant; chaperones attend free. Space is limited. To register, call (843) 577-FISH (3474).

TUCK IN WITH THE TURTLES: MEMBER SLEEPOVER
APRIL 5 - 6 • 6:30 p.m. – 8 a.m. • Aquarium

Back by popular demand! Have you ever wanted to see the Aquarium at night? Well, now's your chance! Bring your blankets and pillows and join us for a fun-filled night with animal encounters, crafts, scavenger hunts and more! End the night by tucking in with the sea turtles, and setting up camp near your favorite aquatic creatures. Early bird pricing is \$55 per person (through 2/23/20); Regular pricing is \$65 per person. Dinner and breakfast are included. Reservations required and space is limited; to register, call (843) 577-FISH (3474).





ART BUZZ KIDS PAINTING

APRIL 9 • 10 – 11:30 a.m. • APRIL 16 • 2 – 3:30 p.m. • Aquarium

Kids get the chance to free their inner artist as they paint a marine animal with acrylic paints. Painting guidance will be provided by Art Buzz Kids. \$20 per member child; chaperones attend free. Reservations required and space is limited; to register, call (843) 577-FISH (3474).

SALTWATER FAMILY FISHING CLINIC

APRIL 25 • 9 a.m. – noon • Palmetto Island County Park

Want to learn how to fish or refresh your skills? The South Carolina Department of Natural Resources' (SCDNR) family fishing clinic teaches skills, including how to tie fishing knots, rig a rod and reel and cast — then it's your turn to try your hand at fishing! Children ages 4 and older and accompanied by adults are welcome, so come out and play, enjoy the outdoors and make this a family fun day! \$5 per member. Reservations required; to register, call (843) 577-FISH (3474).

BOOK CLUB: "SOUL OF AN OCTOPUS"

APRIL 29 • 6 – 8 p.m. • Aquarium

Join the Aquarium for the kickoff of Member Book Club! Enjoy a glass of wine, make new friends and discuss "Soul of an Octopus," a National Book Award finalist written by Sy Montgomery. Through vivid storytelling, Montgomery explores the emotional and physical world of this intelligent animal. Be sure to pick up the book before the event. Free for members. Reservations required; to register, call (843) 577-FISH (3474).



MEET THE KEEPER: JELLIES

MAY 2 • 10:30 a.m – noon • Aquarium

As the base of the ocean food web, jellies play an important role in ocean health. Join senior biologist, Shannon Howard, to learn more about local species, their complex lifecycle and Aquarium care. You'll be itching to learn more! Recommended for ages 6 and up. \$5 per member participant; chaperones attend free. To register, call (843) 577-FISH (3474).

AFTER HOURS: CAROLINA WINE MIXER (21+)

MAY 8 • 7 – 10 p.m. • Aquarium

Treat your inner sommelier to an evening of fabulous wine tasting! Stroll through the Aquarium to find tasting stations with a variety of wines for every palate. Our local Good Catch partners will be providing small plates during the event. Additional bar refreshments along with live entertainment and animal encounters are all included with your ticket! Member tickets are \$45. All After Hours events are 21+. Learn more at scaquarium.org/afterhours.

MOTHER'S DAY PAINTING

MAY 9 • 10 – 11:30 a.m. • Aquarium

This Mother's Day, free your inner artist and receive painting guidance from Art Buzz Kids as we paint a special painting for mom with acrylic paints. Give the finished product as a Mother's Day gift or bring your mom along and paint together! Two different size canvases will be offered. Member price is \$25 for an 8x10 canvas or \$35 for a 16x20. Price is per canvas. Reservations required, space is limited; to register, call (843) 577-FISH (3474).

SCAQUARIUM.ORG/CALENDAR

There's always more to explore





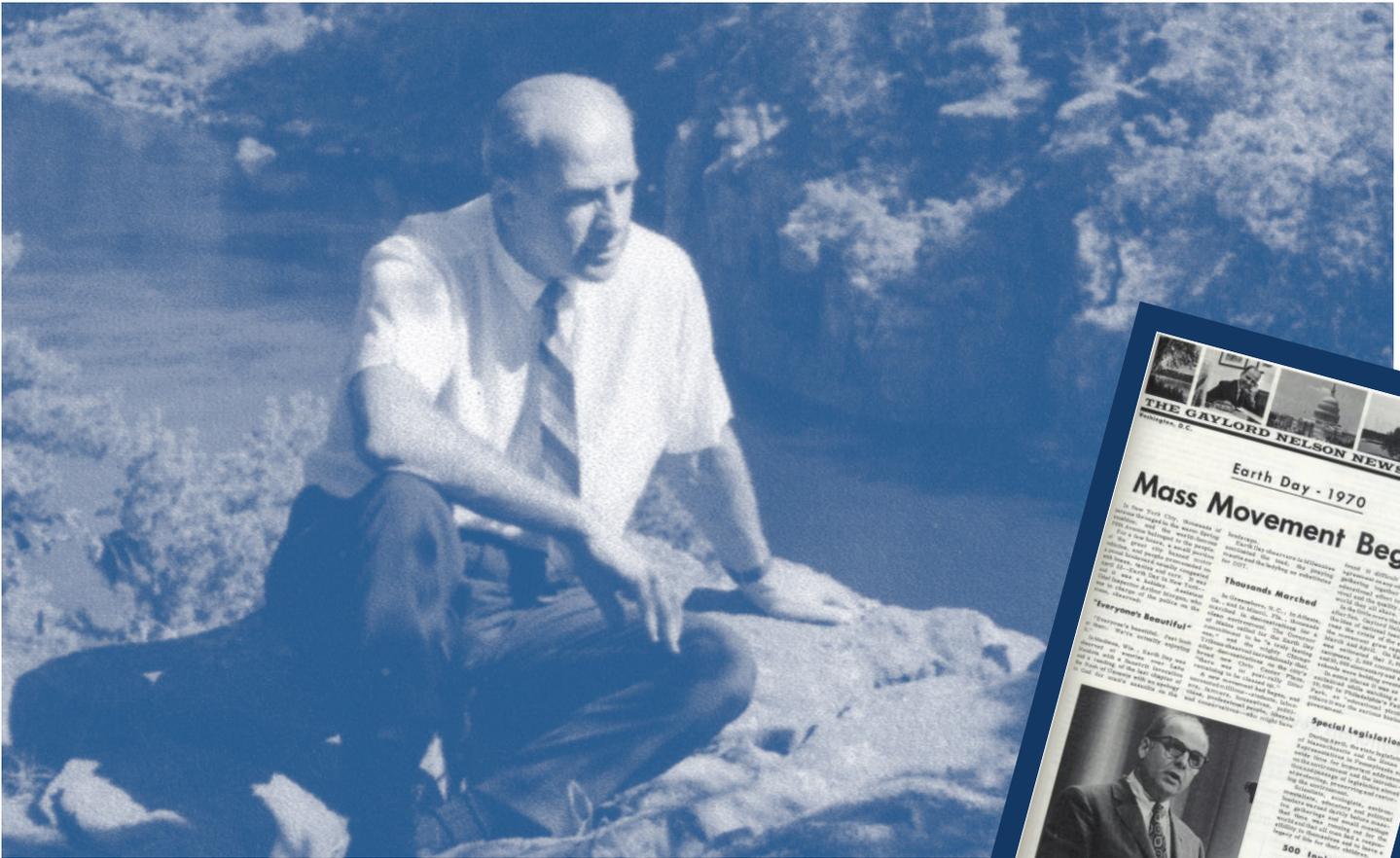
EXPLORING EARTH Day

APRIL 22

HAVE YOU HEARD OF
GAYLORD NELSON?
WHAT ABOUT EARTH DAY?

Without Nelson, Earth Day wouldn't exist, nor would the success stories that stemmed from it. We have a lot to thank him for!

Back in 1969, Nelson was a politician from Wisconsin who had just witnessed the aftermath of a major oil spill. He decided to enlist the help of fellow politician Pete McCloskey and Harvard graduate Denis Hayes for a bi-partisan campaign to incorporate the environment in nationwide political conversations, culminating with a "teach-in" event.



Top Left: Gaylord Nelson in Wisconsin.

Top Right: Earth Day efforts spread through print.

Bottom Left: Attendees gather for the inaugural Earth Day teach-in.

They chose a day — April 22, right between college spring break and final exams — and their campaign across the country began!

On April 22, 1970, something incredible occurred. Spanning communities from coast to

coast, 20 million Americans stood side-by-side in support of an environmentally sound world. They didn't see color, gender, societal class, political party or any other divisive affiliate. All these Americans wanted was to demonstrate the power of people coming together for a common goal: to push for environmental protections on a national scale.

That inaugural Earth Day led to countless initiatives and acts in favor of the environment.

Thanks to the inception of the Environmental Protection Agency, we now have a

government entity responsible for setting and controlling regulations that keep the interests of the environment and its diverse populations at the forefront.

Thanks to the Clean Air Act, we breathe better air. On average, we breathe 3,000 gallons of air in a day; if air quality is poor, so is our health. Since 1970, the six most common air pollutants have decreased 50% and airborne toxins from industrial plants have decreased 70%. Newer cars are now manufactured with reduced carbon emissions in mind.

Thanks to the Clean Water Act, we have safer water surrounding us. This act targeted solutions to deadly pollutant runoff and focused on overall water quality. Now, we can swim and/or fish in roughly 60% of our wetlands, lakes, rivers and shores.

Thanks to the Endangered Species Act, entire populations are protected from various stressors causing their demise. 99% of species listed have escaped extinction, while others have made full recoveries (like the American alligator, bald eagle and

brown pelican, to name a few). Currently, over 1,600 plant and animal species are protected by the Endangered Species Act, giving them the chance to rebound and recover.

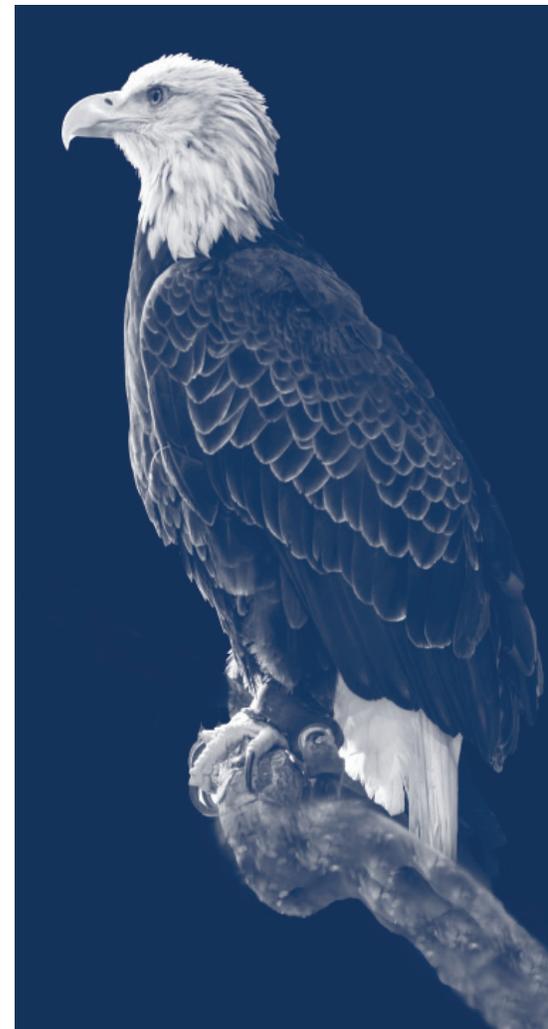
Earth Day spread from a national celebration in the States to a movement traversing the globe. Twenty million people turned into 1 billion people. Overall, we saw what dedicated, collaborative citizens can accomplish together.

On the 50th anniversary of Earth Day (April 22, 2020), we'll once again bring attention to the impact we, as humans, have on our world. This year, the conversation is all around climate change. We see its effects firsthand through flooding, beach erosion, habitat loss, species decline, extreme weather scenarios and plenty more. In the 1970s, four days of flooding (on average) occurred in Charleston each year; now we experience 40 plus days of flooding and by 2045, that number is expected to exceed 180 days annually. And we're not the only ones feeling the heat; sea turtles face significant changes to their nesting habitat, among

other issues.

Our future relies on our efforts today. We can alter our world's current trajectory, with education, awareness and action. We get it — climate change can be a tricky subject to talk about, and certainly daunting. Sometimes it can be hard to consider the solutions when you're still trying to comprehend the facts. But dialogue is a great place to start, and daily changes will follow. So, here's our ask of you: Start conversations, participate in Earth Day activities and stay tuned for the release of our "Climate Friendly Challenge" this summer!

The Endangered Species Act led to the full recovery of the American alligator (bottom left) and American bald eagle (below).



Animal Care



Ace (left) is 17 years old and Stono (right) is 16 years old.

Ace & Stono

Ace and Stono are the main residents of the Mountain Forest, and boy are these North American river otters fan favorites! We've been lucky to have these two bonded bachelors for many years. Now, as they become senior animals, our care for them is starting to shift to accommodate the aging process.

So what alterations have we made?

It started with their after-hours area a few years back. Ace and Stono have a private area off-exhibit, accessible by a hidden ramp. We've altered this ramp so the incline isn't as steep, and they have an easier time going to and from their private and public habitats to do what-otter their hearts desire!

This year, we made the decision to forego any hands-on check-ups that involve anesthesia for the otters, unless absolutely necessary. Don't worry, though — we still track their health in various ways! Over the years, we've built up baseline medical data for Ace and Stono through annual tests and daily observations. We know their history and understand their norms; if we see irregular behavior or fluctuations in their appearance, we take note and take action accordingly! Ace and Stono have the opportunity to voluntarily participate in their own care; they are trained to step on a scale for monthly weight checks. We also administer Cosequin®, a medicine used for joint health, and take regular stool samples to test. And because their coat

is essential for daily swims, we pay close attention to its quality as well.

Despite their older age, Ace and Stono are still fairly active. They groom each other, interact with their enrichment and even build their own nests — all signs of fulfilled otters. As their mobility and vision changes over time, we are prepared to stretch our creative muscles and adapt their enrichment items to better suit their abilities. For example, they currently work to finagle fishy treats out of small holes in PVC pipe; in the future, we might make those holes bigger to encourage activity at a level that works for them. We're constantly coming up with new ideas to foster investigative and interactive behavior that replicates behaviors they would exhibit in the wild.

These efforts help us to assess Ace and Stono's overall welfare, ensuring their physical, behavioral and mental health are in balance. Though we know there will come a day when we'll have to say our goodbyes to these guys, for now we're happy to find new and exciting ways to keep them active and healthy members of the Aquarium family.

WANT TO HELP MAKE A DIFFERENCE?
Support the expert care of our animals, including Ace and Stono, with a symbolic adoption.
Adopt an animal at scaquarium.org/adopt.

Sea Turtle Care Center™ Update

The Journey Home:

Nearly 300 Sea Turtles Released!



During the early days of the Sea Turtle Care Center, Kelly Thorvalson treats a loggerhead sea turtle resting in a kiddie pool.

J.K. Rowling, a loggerhead sea turtle, is released at Isle of Palms County Park following a year of rehabilitation.



It seems like just yesterday that we admitted our very first loggerhead sea turtle, affectionately named Stinky, to the not-yet-established Sea Turtle Care Center™. Now, 20 years later, we've released nearly 300 healthy sea turtles back into the wild. As our 20th anniversary approaches, we think of the thousands of helping hands it took to help us rescue, rehabilitate and release every single one of these

turtles, from community members and volunteers, to South Carolina Department of Natural Resource employees and turtle teams. We're constantly amazed, humbled and moved by the outpouring of love and support by you, our community.

Here's to another 20 years and another 300 sea turtles!

Leaving a Legacy:

Karen and Jack Higgins

Not many folks on staff can say they saw the Aquarium from construction to its grand reveal, but our executive vice president and chief operating officer, Jack Higgins, can! Jack has not only been on the Aquarium staff for over 22 years, but he and his wife, Karen, are also charter members. When it came to organizing their financial future, a planned gift to the Aquarium was never a doubt.

Jack started at the Aquarium in September 1997, before the doors officially opened. Some of his favorite Aquarium memories come from building exhibits in the early years. Before having a dedicated design team, exhibit changes were all-hands-on-deck team events. Everyone on staff would chip in with carpentry, painting and more, and Jack was no exception. His favorite exhibit may not be one you would guess — it's the small pond exhibit that features snakes, turtles and small fish.

The Aquarium's opening day in 2000 was a highlight of his time here. "The building was sparkling; the staff were prepared." One thing he wishes more people knew about the South Carolina Aquarium is that it is not a government agency, but a private nonprofit, and 100% of ticket revenue goes back into the Aquarium, including our education programs, animal care efforts and conservation initiatives.

These days, Jack and Karen enjoy visiting the Aquarium with their grandchildren, Niko and Evan Marie. Just last summer, Jack and Niko had the opportunity to attend a sea turtle release together. Ever since that day, sea turtles have been Niko's favorite animal at the Aquarium.

Their decision for a planned gift was an easy one. "We want to ensure the things we love are taken care of," Jack says. Jack and Karen want to make sure that children across the state and country can enjoy the Aquarium, and its vision of connecting people with water, wildlife and wild places, for years to come.

For information about leaving your legacy, please visit scaquarium.org/planned-giving.

The South Carolina Aquarium has partnered with FreeWill to offer a way for supporters like you to write a legally valid will online. Most people finish writing their will in under 25 minutes and the service is completely free to use. Visit freewill.com/scaquarium to create your will today.



What's New: Teen Science Café

As the Aquarium's education programs continue to grow and thrive, we're always looking for new and innovative ways to lead kids of all ages to water, wildlife and wild places. That's why we're thrilled to announce that the Aquarium is now a member of the Teen Science Café Network! Teen Science Café out-of-school programs are a free, fun way for teens and STEM experts to engage in lively conversation, participate in hands-on activities and explore a topic on a deeper level.



Back in early December, the Aquarium hosted our very first Teen Science Café where teens dissected a shark and learned about shark biology and behavior from South Carolina Department of Natural Resources biologist, Bryan Frazier. The kids arrived with empty stomachs and curious minds, and left full of newfound knowledge and free pizza!



"Teen Science Café brings similarly minded teens together in a space where they can learn, explore and be themselves," said Ashley Zalabak, Aquarium teen programs manager.

The Aquarium plans to host four Teen Science Cafés in 2020, including two in the spring and two in the fall. For more information, contact Ashley Zalabak at azalabak@scaquarium.org.



Many Hands Make an Impact

Over a thousand people, from South Carolina and across the world, have collected and logged litter in the Litter-free Digital Journal (LFDJ), a project of the South Carolina Aquarium Citizen Science app. Litter-free data has been widely used by individuals and groups to inform policy and ban single-use plastic across our state. We owe these success stories to you, the ones who take this digital tool and put it to good use! Want to see our collective impact?



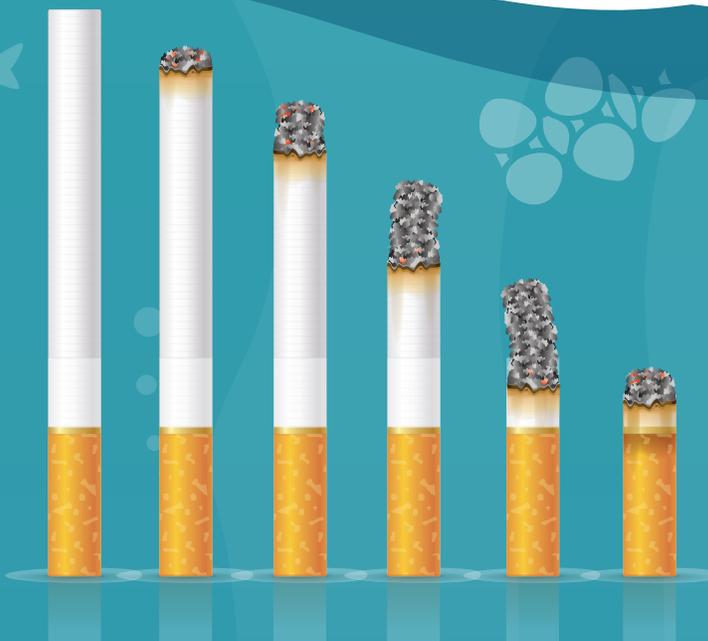
18,024 plastic bags

That would cover 4.84 miles laid out length-wise.



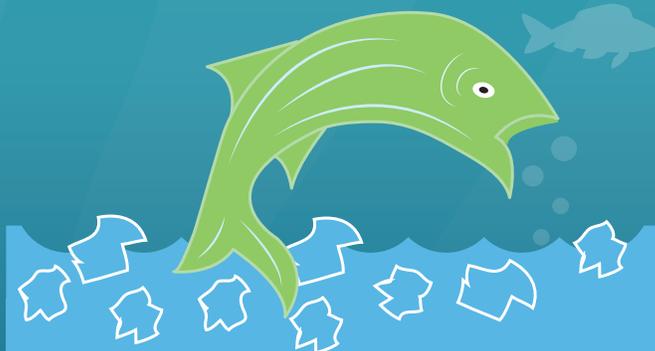
207,624

total pieces of plastic logged. This includes bags, bottles, caps/lids, food wrappers, straw wrappers, utensils/cups, toys, fragments, etc.



151,681 cigarettes/filters

With a standard cigarette being 2.76 inches long, that represents 6.6 miles end to end! This is nearly the same distance from the Aquarium to James Island County Park.



Want to help us collect and analyze data? Download the South Carolina Aquarium Citizen Science app, available in the App Store and Google Play!



19,806 aluminum cans

equal to 3,301 six-packs. If a six-pack of soda/beer cans takes up 179.4 cubic inches, the amount collected in the LFDJ could fill a 2,500-gallon tank!

That's the size of our Mountain Forest fish tanks (beside the river otter exhibit). Laid out end to end, all the cans would cover 1.5 miles!



43,942 pieces of Styrofoam

Make a deeper impact.
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Learn more at scaquarium.org/waystogive.



MOUNTAIN FOREST

PASSPORT TO FUN

SPRING BREAK

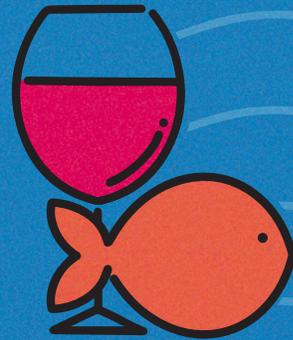
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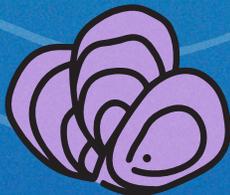
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21+

AFTER HOURS



FEBRUARY 21



**GOOD CATCH
OYSTERFEST**

MAY 8



**CAROLINA
WINE MIXER**

JUNE 5



**JAZZ ON THE
HARBOR**

AUGUST 21



**BEER FROM
HERE**

OCTOBER 30



**SOUTHERN
SPIRITS**

Learn more at scaquarium.org/afterhours.