# tributaries

MAGAZINE OF THE SOUTH CAROLINA AQUARIUM



South Carolina Aquarium BREAKING DOWN PLASTIC

WINTER 2017 / VOLUME 58

#### From the President

If you've visited our Sea Turtle Hospital, chances are you've encountered a patient that was in some way harmed by plastic—whether by ingestion or by entanglement in plastic debris or fishing lines.

It's small wonder. Plastic is found everywhere in our streams, marshes and oceans. Large gyres of plastic pollution float in ocean patches the size of Texas, while clouds of microplastic smog swirl underwater, smothering life and contaminating the food chain.

Some scientists predict that by 2050, there will be more plastic than fish in our oceans.

While that sounds daunting, the good news is that most people want to help—once they're aware of the problem. That's why the Aquarium is hosting *Breaking Down Plastic*, a daylong symposium and interactive event at the Gaillard Center on March 30. In partnership with the Five Gyres Institute and the Lonely Whale Foundation, we'll present different perspectives from international thought leaders and posit practical solutions to this growing crisis.

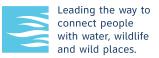
You can read more about the Aquarium's commitment to address plastic pollution on page 2, including our development of a new citizen science app.

Elsewhere in this issue, you'll read about the legacy of Jim Ferguson, our founding board chairman who passed away late last year. Jim was instrumental in translating Mayor Joe Riley's vision of a marine conservation resource into reality, spearheading early funding and ensuring a world-class operation. He remained a steadfast supporter and source of counsel to the end.

Jim, we are forever grateful for your leadership. You will be missed.



Kevin Mills, President and CEO



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\* deceased

South Carolina Aquarium (843) 577-FISH (3474) Open Daily 9 a.m. – 4 p.m. Building closes at 5 p.m. Closed Thanksqiving Day and Christmas Day

Membership Department

(843) 579-8518 Monday-Friday 9 a.m. - 5 p.m.

The South Carolina Aquarium is a 501(c)(3) not-for-profit organization and relies on the generosity of individuals, foundations and corporations.

To help support the South Carolina Aquarium, contact us at (843) 579-8595 or advancement@scaquarium.org.

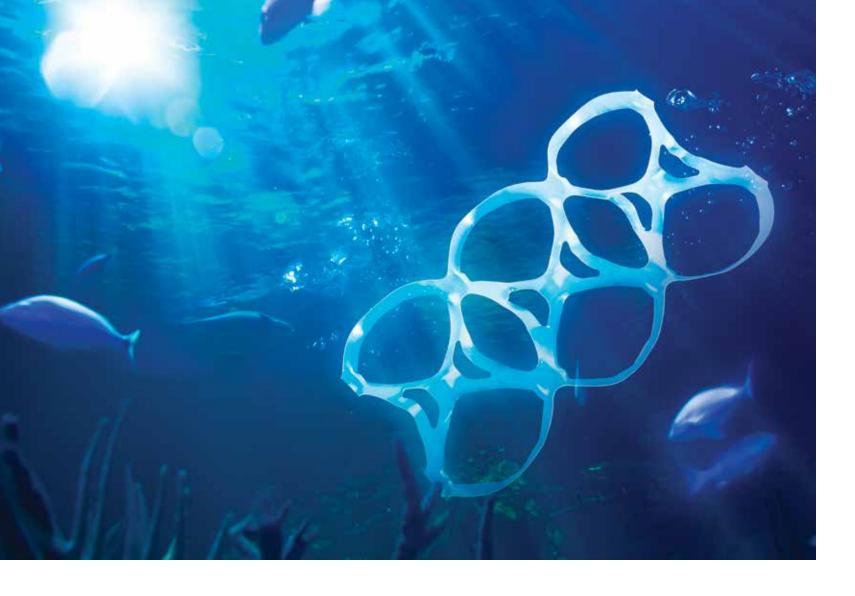
## Calendar of Events

Saturday, February 18*	<b>LEGO</b> <sup>®</sup> <b>Brick Workshop with Bricks 4 Kidz</b> , 10 – 11 a.m.
Saturday, February 25*	Meet the Keeper: Reptile Discovery, 10:30 a.m. – noon
Tuesday, March 7*	JumpBunch, 10 - 10:30 a.m. Free for members!
Thursday, March 9*	Dance Moves, 10 – 10:30 a.m. Free for members!
Saturday, March 11*	<b>Tadpole Explorers</b> , 8 − 9 a.m.
Saturday, March 11*	LEGO® Brick Workshop with Bricks 4 Kidz, 10 - 11 a.m.
Wednesday, March 15*	Homeschool Explorers Club: JAW-some Sharks, 10 a.m. – 1 p.m.
Thursday, March 16	Aquarium After Hours: Marsh Madness, 5 – 10 p.m. Free for members!
Saturday, March 25	Saltwater Sounds, 9:30 a.m. – noon Free for members!
Thursday, March 30*	<b>Breaking Down Plastic: Plastic Pollution Summit</b> , 8 a.m. – 5 p.m. at The Charleston Gaillard Center
Thursday, March 30*	Holland Lifelong Learning presents <i>Plastic Planet: Turning the Tides</i> on the <i>Plastic Pollution Crisis</i> , 6 p.m. at the Francis Marion Hotel
Thursday, March 30*	Annual Watershed Dinner, 7:30 p.m. at the Francis Marion Hotel
Friday, March 31 – Sunday, April 2	The World-Famous Weeki Wachee Mermaids Free for members!
Tuesday, April 4*	JumpBunch, 10 - 10:30 a.m. Free for members!
Thursday, April 6*	Dance Moves, 10 – 10:30 a.m. Free for members!
Thursday, April 6*	Mermaids and Me, 6 - 8:30 p.m.
Friday, April 7	Member Morning with the Mermaids, 8 – 9 a.m. Free for members!
Friday, April 7 – Sunday, April 9	The World-Famous Weeki Wachee Mermaids Free for members!
Friday, April 14	Member Morning with the Mermaids, 8 – 9 a.m. Free for members!
riday, April 14 – Saturday, April 15	The World-Famous Weeki Wachee Mermaids Free for members!
Thursday, April 20	<b>Aquarium After Hours: April Fools</b> , 5 – 10 p.m. <i>Free for members!</i>
Saturday, May 13*	<b>Tadpole Explorers</b> , 8 - 9 a.m.
Thursday, May 18	Aquarium After Hours: May-ting Season, 5 – 10 p.m. Free for members!
Saturday, May 20*	Conservation Gala, 6 - 11 p.m.
Saturday, May 27	Opening of Zucker Family Sea Turtle Recovery™

\*Reservations required Aquarium Members Only

Events will be held at the South Carolina Aquarium unless otherwise stated. For more information, pricing, and to register, visit scaquarium.org or call (843) 579-8518.

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# Breaking Down Plastic

#### The Problem with Plastic

Plastic pollution is one of the most pressing issues facing the health of our oceans and ocean life. An estimated 8 million metric tons of plastic enter the ocean each year, continuously adding to the 5.25

trillion pieces of plastic debris that already exist in the ocean, weighing approximately 269,000 tons.

Plastics are problematic for marine life because they do not biodegrade, or get broken down by living organisms. Instead, they photodegrade, or get broken down by the sun's light, into progressively smaller plastic pieces. Because plastic never fully deteriorates, nearly every piece of plastic ever made still exists in some form.

Many people have heard of the Great Pacific Garbage Patch, a smog-like vortex of marine debris the size of Texas that spans from North America's west coast all the way to Japan, but another example of plastic pollution lies even closer to home. Using data collected since the early 1980s, the Sea Education Association has shown the existence of a North Atlantic Garbage Patch containing a similar concentration of plastic trash.

Garbage patches are formed as a result of ocean gyres, systems of circular ocean currents formed by the Earth's wind patterns and forces associated with the rotation of the planet. There are five major gyres in the world's oceans, each collecting a smog-like soup of litter composed primarily of tiny plastic particles.

#### **Innovating for Solutions**

The rise of plastic pollution has presented an opportunity for innovation. Scientists, policymakers and entrepreneurs have begun to create solutions to encourage responsible use of plastic, provide technologically advanced alternative materials, and prevent plastic waste from entering the ocean.

One example is social entrepreneur
David Katz's project, The Plastic Bank,
which aims to prevent plastic waste
from entering our oceans by making
it a currency with value. In
disadvantaged areas of the world,
The Plastic Bank empowers local
entrepreneurs to operate Social
Plastic recycling markets that enable
individuals to recycle plastic in
exchange for cash, items or services.
Producers of plastic products then
buy this Social Plastic instead of new,
virgin plastic, thus adding a positive
social impact to their products.

Another instance of innovation to fight plastic pollution—and one that you can be a part of!—is Anecdata, an online citizen science community. Developed by the MDI Biological Laboratory, Anecdata enables anyone, from individuals to institutions, to contribute to crowdsourced environmental data that is fully transparent and accessible to all. The goal of collecting this important data is to help build a bigger picture of our changing environment in order to inform meaningful, actionable change on a local level. The data may even be used to support local policy to benefit communities. For example, the recent ordinance banning single-use plastic bags, balloons and polystyrene foam at Folly Beach was guided by data collected through Anecdata!

#### Choose to Refuse Single-Use Plastic

Many of the leading causes of plastic pollution in the ocean are preventable through individual change. You can make the choice to replace single-use plastic products with forward-thinking alternatives.

Start your plastic-free journey with the simple step of eliminating plastic bags.

The average American uses 325 of these single-use sacks per year! Tote your purchases in reusable bags to make a notable decrease in your plastic consumption.

Expand your impact further by choosing to eschew plastic beverage bottles. Bottles and caps make up about 23 percent of all plastic pollution in the environment by unit count. Luckily, these items are easy to replace with stylish reusable bottles, which not only reduce pollution but also cost less than single-serving drinks when used over time.

Finally, protect our oceans by avoiding the use of balloons. They may look festive rising through the air, but what goes up must come down—and when balloons and ribbons fall into our waterways, they don't degrade and may cause wildlife, including threatened or endangered species like sea turtles, to choke or become entangled.

Celebrate sustainably by decorating with banners, flags and bunting.
As alternatives to balloon releases, consider blowing bubbles, planting trees or lighting candles.





WANT TO JOIN THE CONVERSATION ABOUT PLASTIC POLLUTION?

The Charleston Gaillard Center Thursday, March 30, 8 a.m. – 5 p.m.

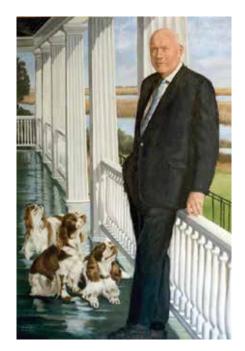
Breaking Down Plastic is an engaging, single-day event designed to bring together thought leaders, plastics experts, innovative entrepreneurs, scientific researchers and public policy advisors to generate long-term solutions to plastic pollution – a pressing ecological issue that can affect the health of all living organisms on our planet.

Individuals, organizations, community leaders and corporations committed to addressing plastic pollution are invited to exchange ideas in order to amplify our voices and create lasting impacts in communities around the globe.

To learn more or to register, please visit scaquarium.org/plastic.

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# Remembering Jim Ferguson



Artist: Claude Buckley



FOR THE AQUARIUM TO
BECOME REALITY AND
ACHIEVE WORLD-CLASS
STATUS, A WORLD-CLASS
LEADER WAS REQUIRED.

Mayor Joe Riley had a compelling vision for the South Carolina Aquarium, but he needed a champion to see it through.

For the Aquarium to become reality and achieve world-class status, a world-class leader was required to mold an effective team, lead the planning process and effectively sell the proposition to future investors.

One person immediately came to mind: James L. ("Jim") Ferguson.

When Jim retired here from New York with his wife Esther in 1990, he brought with him a stellar record of managing one of the most profitable and innovative corporations in American history, General Foods. On his watch, products like Jell-O, Kool-Aid, Birds Eye frozen vegetables and Maxwell House coffee became household staples.

Jim graciously took the reins of the newly incorporated Aquarium and its board of directors in 1992, and he spent the ensuing decade on a tireless path of fundraising, problem solving and mission building. There were setbacks and delays along the way, and doubts raised by some about the Aquarium's ultimate success. Jim persevered, constantly prodding the team to seek solutions and maintain the highest standards.

He was an indefatigable champion. In a letter to The Post and Courier in 1993, Jim predicted that "... the South Carolina Aquarium will, indeed, have a substantial economic as well as an education impact – good news at any time, but especially these days."

Today, that promise has certainly come true. The Metro Chamber of Commerce estimates the Aquarium's annual economic impact to be \$250 million in direct and indirect spending, and it is the top family attraction in the region. And Jim was especially proud to learn last year that the Aquarium has now served more than 1 million students through its educational offerings.

Jim remained active with the Aquarium until the end, attending committee meetings, programs and special events. Even in the final days when his health declined, he valued frequent updates on the Aquarium's progress and strategic plan.

There can be no better way to remember Jim than by honoring him with the creation of the James L. Ferguson Permanent Endowment. This vital reserve – already valued at more than \$1.5 million – will help ensure the Aquarium's long-term sustainability and enable our mission of conservation and education to reach full fruition exactly as Jim envisioned.

We encourage you to contribute to this important fund through a direct donation or through inclusion of the Aquarium in your estate plans. To support the James L. Ferguson Permanent Endowment or to learn more about the Nautilus Society, our community of donors committing bequests to the Aquarium, please contact Amie Yam-Babinchak at (843) 579-8629 or ayam-babinchak@scaquarium.org.

### Color This Scene!

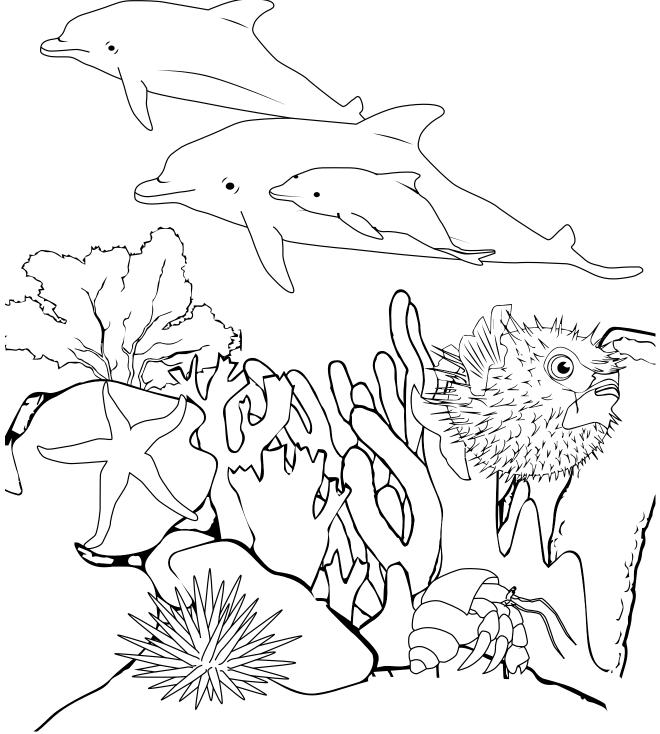
#### Color this underwater picture and you could win big.

STEP 1: Color this scene—on either this sheet, a photocopy or a printable download at scaquarium.org/colorthisscene.

Make sure to include your name, age, and phone number or email address.

STEP 2: Turn in your completed coloring sheet at Ollie's Trading Post or submit a scan or photo of your finished work to membership@scaquarium.org by March 31.

Winners in the age groups of 3-5 years, 6-8 years and 9-12 years will receive an Aquarium prize package including \$25 to spend at the Aquarium Gift Shop. Winners will be notified by April 30, and winning artwork may be used in Aquarium promotions.





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