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Our website is full of conservation information, animal facts, and details that will help you plan your next trip to the Aquarium.

On the cover: Visitors returning to the Aguarium.

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We are grateful to The Boston Foundation for its support of our reopening efforts.

Dear Friends.

I write on the heels of our successful reopening with renewed appreciation for the role the Aquarium plays in our extended community, and deep gratitude and appreciation for our staff and for you, our members and supporters.

The past few months have been incredibly challenging for so many. At the Aquarium, where ticket sales and events make up 80 percent of our revenue, the 18 weeks of our temporary closure challenged our budget, but did not diminish our work to protect the blue planet.



From the President and CEO

As you'll read in this issue, our facilities and animal care teams provided safe environments and excellent care for our 20,000 animals at the Aguarium and at our Animal Care Center in Quincy. Our scientists bided their time until they could return to the field, advancing their research and publishing papers from home.

Our staff in various departments also rose to the challenge, supporting our nearly 200 remote employees, educating and inspiring children and adults from afar, stewarding existing resources, and seeking new funding.

At the same time, a cross-section of staff came together to plan for a new Aguarium experience that balanced safety with joy and wonder.

All this to help ensure the Aquarium's future.

I would be remiss if I didn't take this opportunity to acknowledge our dedicated staff and to thank you, our steadfast friends and members. Your support sustains us. We cannot wait to see you back on Central Wharf.

Schlu Wormill

President and CEO, New England Aquarium

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Each year, the Aquarium is honored to receive bequests from forward-looking supporters, and every one of these gifts represents a unique legacy. Your bequest can support the Aquarium's mission and help to inspire awe, curiosity, understanding, caring, and action for our blue planet for years to come.

The Legacy Society honors individuals who have created a gift for the Aguarium in their plans. If you have included the Aguarium in your will or estate plans, please let us know so that we can convey our gratitude.

Please contact Margaret Phan, Individual Giving Officer, at 617-226-2145 or mphan@neaq.org with questions or to notify us of your gift.

SCIENCE IN ACTION

Back to the Field

Aquarium Researchers Restart Their Field Season with New Safety Protocols

Science stops for no one—but fieldwork did take a pause for COVID-19. Like the rest of the nation, the scientists and researchers at the New England Aguarium and our Anderson Cabot Center for Ocean Life hit "pause" in mid-March when cases of the novel coronavirus started to spike.

"On Monday, no one ever thought we were going to get sent home, but then by Friday everything was stopped," said Orla O'Brien, Anderson Cabot Center Assistant Scientist and member of the aerial survey team. The team took their first flight of the spring the Wednesday before the Aquarium set its work-from-home orders and was grounded until safety protocols could be established in early June. In a normal year, the team would fly two to three times a month all spring—an important time for data collecting as large marine mammal species like the North Atlantic right whale make their way north.

"We're not waiting for field season to start. This has been our field season the whole time," said Orla. "So as soon as you tell me I can fly, I want to fly." But as much as she, and the rest of the scientists, were anxious to get back into the field, they wanted to do it safely.

As such, the Aquarium created new guidelines to make sure that staff would be safe during field season. Researchers needed to apply to get their normal fieldwork approved—explaining how they would utilize the CDC-recommended guidelines for minimizing COVID-19 risk. Precautions included minimizing the number of staff in the field, wearing PPE, not sharing equipment, performing temperature checks, and enhanced cleaning protocols.

The aerial survey team got back in the air in early June and Orla called it a "return to the new normal," adding that the team

hopes to fly twice a month for the rest of the summer and into September.

Things have been a little more complicated for the right whale research team, which spends every summer at the Aquarium's field house in Lubec, Maine, to conduct vesselbased fieldwork in the Bay of Fundy

and Gulf of St. Lawrence. This year's Gulf of St. Lawrence work has been scrapped entirely. The nature of that work-large crews on large boats—made the risks from COVID-19 higher than either the Aquarium or our colleagues at Canadian institutions were willing to chance. But the Aquarium team is still headed into the Bay of Fundy, marking their 40th straight year of research there.

"Because every year is so different, it's been interesting to have that long-term effort to see the ups and downs that the right whales are experiencing," said Senior Scientist Amy Knowlton, adding that the team is extremely interested to see if this spring's lack of fishing has an impact on the health of the population specifically whether there are fewer animals entangled in fishing gear than in previous years.

It's not just the New England Aquarium that's taking field protocols more seriously than usual. For the last 26 years, Nick Whitney and Wes Pratt—Aquarium Senior Scientist and Adjunct Scientist, respectively-have observed and tagged



Katherine McKenna, a research assistant with the aerial survey team, takes photos during a June 2020 aerial survey of offshore wind energy areas sponsored by MassCEC and the Bureau of Ocean Energy Management. Photo: Orla O'Brien

mating nurse sharks on a remote site off the Florida Keys. Until the second week in June, they thought this year's trip wouldn't be happening. That changed when Nick was able to hop a flight on June 22.

Accommodations are different too: usually there are three or four researchers bunked together in the old Civil War fort run by the National Park Service, but this year, the Park Service only allowed two Aquarium researchers and each was required to have his own room. It was a challenge to measure and tag the sharks with the limited field team. Nurse sharks can grow up to 7 feet long and usually two scientists hold a shark while another writes measurements, attaches tags, and collects other data.

"The difference between two people and three people when tagging a shark is huge. There were all kinds of unique challenges this year," said Nick. "It wasn't ideal, but we felt very lucky that we were allowed to go out."

-Emily Greenhalgh

Continuing the Care

To the 20,000 animals that call the Aquarium home, the 124 days of closure to the public were fairly routine. It was a different story for the members of our animal care team. We spoke to several of these unsung heroes to gain a better understanding of what life has been like over the past few months.

"Animal care and staff safety were our guiding principles throughout the closure," says Leigh Clayton, Vice President of Animal Care.

Without the additional help of volunteers and interns, all care protocols were reexamined for efficiency and departments were split into two nonoverlapping teams to allow for social distancing. Routine medical procedures were postponed. "We adapted quickly," according to Barbara Bailey, Curator of Husbandry and Sustainability for the fishes department. "I think the experience also brought the entire [Aquarium] team

together in new ways because we had to change how we did our work."

The work of our rescue team also carried on. According to Rescue Manager Connie Merigo, 15 rehabilitated loggerhead and Kemp's ridley sea turtles were released in July on Cape Cod.

"We have a lot to continue to figure out with coronavirus," says Clayton, "co-existing with it and determining what the new normal is—but the team has learned a lot and we have a really good foundation moving forward."

-Maria Palomino

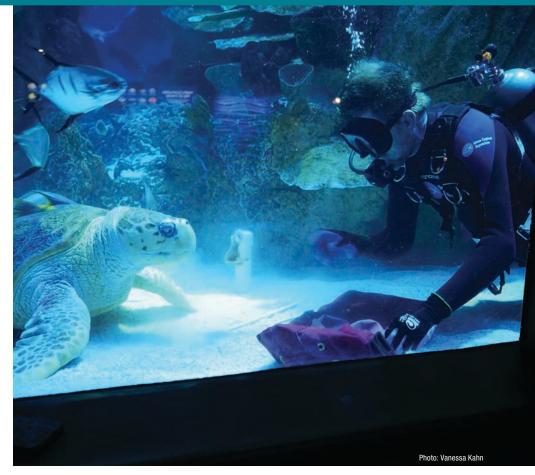
Marine Mammals

Wondering if the marine mammals noticed trainers in masks? Department Co-supervisor Belinda Bracket says, "We went—over a two-day period—to wearing no masks to always wearing masks and the animals showed next to no reaction." Was this surprising? "It was, because they do pick up on different things." For example, she says, "with our sea lions, if you have on different shoes, they'll stare at your feet. They notice if we're not wearing our typical rain gear or if we're just wearing the khaki shorts....They are just curious and observant by nature."



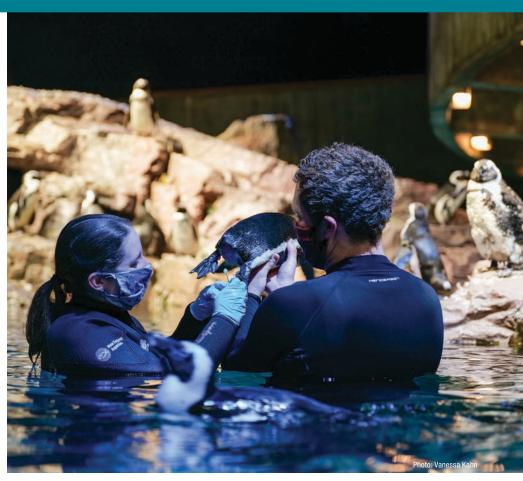
Giant Ocean Tank

It's no secret that our Giant Ocean Tank (GOT), which approximates a Caribbean coral reef, easily handles thousands of visitors a day. This 40-foot wide cylindrical tank spans four stories and is home to 1,000 animals—including Myrtle the turtle, bonnethead sharks, stingrays, eels, and 100 other species. Daily care for this 200,000-gallon salt water exhibit is typically shared by 10 staff and volunteers. During the closure, the GOT team transitioned to two alternating three-person care teams, with occasional assistance from other departments. By creatively adapting dive times, GOT staffers were able to maximize feeding, caretaking, training, and essential maintenance.



Penguins

Island living continued uninterrupted for our penguin colony. Keeping this massive 150,000-gallon exhibit going is quite a feat. In addition to the care and feeding of 70 penguins, the exhibit's six islands require daily hand scrubbing and disinfecting, not to mention the pool vacuuming required. Supervisor Eric Fox says they strived to keep things consistent for the animals and still managed daily enrichment activities, like using floating ice blocks filled with fish to encourage swimming and water play. He reports they are unphased by trainers wearing masks and their new celebrity, thanks to live camera views of the exhibit on the Aquarium's website!



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A SAFE RETURN

n July 16, after 124 relatively quiet days here on Central Wharf, we reopened the majority of our exhibits to the public. Now that Massachusetts is in Phase 3 of its reopening plan, we are taking every precaution to ensure that your return to the Aquarium is a safe and enjoyable one.

"We are so eager to welcome back visitors to Central Wharf," says President and CEO Vikki Spruill. "We know many people cannot wait to see Myrtle the turtle, our penguins, and the 20,000 other marine animals in person."

In this unprecedented moment, Spruill says, "the safety of visitors and staff is the number one priority." The Aquarium assembled an eleven-member, multi-disciplinary working group to figure out every aspect of what it would take to reopen safely, from new ticketing and visitor flow procedures to social distancing precautions.

"We made sure we brought together the right people, with the right subject matter expertise, to create this reopening process," says Vice President for Animal Care Leigh Clayton, who directed the group. As Clayton and her colleagues drew up their plan, they kept an eagle eye on safety guidelines provided by the state and the CDC, and consulted with other U.S. aquariums that have already reopened safely.

One new—and crucial—element is timed ticketing. Now, whether you purchase your tickets online or at the box office, you'll choose a specific time of day for your visit. This new system will ensure that the building and plaza remain well



under capacity, so that social and family units can maintain distance as they move through the exhibits.

Currently, only 180 people are entering the building each hour, with no more than 240 visitors inside at any given time—though this number is subject to change as safety dictates. For comparison, as many as 1,600 visitors might pass through the Aquarium every hour on a typical prepandemic summer day.

"We took a long, hard look at capacity in the building to make sure that we could maintain appropriate social distancing," says Deb Bobek, Associate Vice President for Visitor Operations and Engagement. In addition to ensuring safe distancing, she says, a quieter visit offers "an opportunity to see the animals in a different light."

Members were among the first to experience the reopened Aquarium during a soft opening the day before the building opened to the general public. "We are grateful to our members for their continued support through this time, and we want to offer an optional three month extension for all memberships that were active during our closure," says Hailey Conneely, Director of Membership and Annual Giving. Information on how to optin to the membership extension can be found on the Aquarium's website at neaq.org/memberupdates or in the sidebar of this story.

In addition to timed ticketing, we have put several other safety measures in place. Following the lead of other aquariums and museums that have reopened successfully, we have designed a new, unidirectional path through the main building. Director of Project Management, Exhibits, and Planning Glenn Remick and his team created a clearly signed, one-way journey through the exhibits to minimize the likelihood of passing in close quarters. For the time being, our touch tanks will be view-only, and the interactive Science of Sharks and Edge of

the Sea exhibits will be closed. In-person presentations in the main building and events in the Simons Theatre will have to wait until it's safe for large groups to gather.

We have also ramped up our already rigorous sanitization protocols. Visitors and staff will be required to wear face coverings, and hand sanitizer will be available throughout the building. To ensure that our spaces stay germless, we are working with Cushman & Wakefield, an experienced global property services provider.

"They have an excellent safety training program that keeps them current in best practices as well as the purchasing power to allow us access to all the necessary cleaning and sanitizing products," says Chris Fernald, Director of Facilities.

Throughout the lockdown, our dedicated staff continued to feed and train our 20,000 animals on-site, practicing social distancing all the while. "Our staff were hit with so much newness, and they did a phenomenal job," says Clayton.

As for the animals, they've been mostly unfazed by the human changes happening around them, staying healthy through these quiet months. Now, they get to see their fans again, even if it's under new circumstances.

"There is no doubt it is a different visitor experience," says Vikki Spruill. "But we are equally focused on being the Aquarium people love—a source of joy and inspiration, a place of science and education, and an advocate for our blue planet that motivates others to care about our ocean."

—John Shakespear



Membership Extensions

We are pleased to offer an optional three-month extension for all memberships that were active during our closure. Many of our members have generously expressed that they would like to support us during this time, and one way to offer support is by keeping your original expiration date. If you would like to keep your original expiration date, we would be grateful. If you prefer to take the three-month extension, please complete the opt-in form online by August 31 by visiting https://bit.ly/3hbtWFn.





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