A man with grey hair and a beard, wearing a light green button-down shirt, is smiling and holding a small, colorful parrot chick. The chick has a red head, white body, and colorful wings with blue, green, and yellow feathers. The background is a lush, green jungle with various plants and trees.

2018 ANNUAL REPORT
THE SAFINA CENTER

KATHLEEN DEAN MOORE: INSPIRING A CONSERVATION ETHIC THROUGH SOUND AND SPOKEN WORD

by Erica Cirino, Writer, Artist and Social Media Coordinator



▲ Photo courtesy: Kathleen Dean Moore.

“Kathleen somehow braids the most rigorous intellectual standards and soaring poetic language; the result is strong as spider’s silk, light as air, and deep as the ocean.”— Carl Safina

“It means the world to me—literally—to be a Safina Center Creative Affiliate. People often ask me, What can one person do to protect this lovely, reeling planet? I always answer, ‘Stop being one person.’ To join in common cause with people with widely varying expertise, but all with the same creative energy and moral courage, all with the same passion for the planet—that is hugely empowering.”

— Kathleen Dean Moore

It was early 2015 and Safina Center Creative Affiliate Kathleen Dean Moore, PhD, a philosopher, environmental advocate and writer stood before a large audience at Oregon State University, giving a talk on the moral urgency of climate action. After her speech, she walked off the stage, making her way back down an aisle to her seat. As she moved, a woman in the audience beckoned to her. “When I listen to you speak,” the woman said, “I hear Rachmaninoff.”

The woman turned out to be renowned concert pianist Rachelle McCabe, who also works as a professor of music at Oregon State University. A few days later, Rachelle played Rachmaninoff’s “Variations on a Theme of Corelli” in her studio for Kathleen. Kathleen was floored by the madness, power and depth of the music and its connection to the extinction crisis. “A formidable piece of music,” Rachelle said, “for a formidable challenge.” The women cried and realized they had uncovered a beautiful opportunity for collaboration.

Kathleen and Rachelle worked together for countless hours in Rachelle’s studio trying to strike the right balance between words and music.

“As she played the piece, again and again, the narrative arc of the music—from sorrow and terror to bewilderment to resolute courage—caught me up and I began to write,” said Kathleen. “My words weave into the silences between the variations or spill on top of the music.”

The outcome of their many practice sessions, a finished work titled “A Call to Life: Variations on a Theme of Extinction,” layers Kathleen’s strong, spoken words with Rachelle at the piano playing Rachmaninoff’s emotional, grief-stricken and sometimes haunting work.

In just a few years, Kathleen and Rachelle have taken “A Call to Life” across the United States, north to south from Calgary to Arizona, and east to west, from Wisconsin to Hawaii, where they performed at the 2016 International Union for the Conservation of Nature’s World Conservation Congress. Next year, the duo is headed to Scotland—and wherever else they are invited to perform.

Together they’ve unexpectedly inspired many people walking across a wide swath of life paths, in a variety of ways: “A young man deciding that he will turn his own piano talents to the cause of bird species preservation. A white-haired man deciding suddenly to turn his farm into a wildlife reserve. A group of women in the front row of an Arizona church, immediately forming a committee of action on pesticides,” Kathleen said.

“A Call to Life” is so effectively inspiring because it uses art as a vessel for delivering science into the hearts and minds of the public. With the Earth in the midst of an extinction crisis, and facing so many other ecological problems—from climate change to pollution, among others—Kathleen said a natural reaction is to close one’s heart to the distressing truths about the world.

“So the challenge is to deliver those truths in such a way that they open people’s hearts without breaking them,” said Kathleen. “That is the power of art—it goes directly to the places where we grieve, rejoice, and allows us to find the courage to take action.”



▲ Kathleen Dean Moore (right), with pianist Rachelle McCabe.

Photo: Michelle Bermudez.

To learn more about “A Call to Life” and to book a performance, visit: <https://www.musicandclimateaction.com/>



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FRONT COVER PHOTO

Carl Safina with scarlet macaw chick, Peruvian Amazon. Photo: Ines Duran.

THIS PAGE

Orca, Southeast Alaska. Photo: Carl Safina.

BACK COVER

(Top) Black bear mother and cubs resting near the Mendenhall Glacier Visitor Center boardwalk. Carl visited Alaska as part of research on his coming book about how animals learn to be animals. Motherly protection as well as her example are often crucial in her cubs' development into adults.

Photo: Carl Safina.

(Bottom) Safina Center Fellow Ben Mirin records the sounds of an exquisite spike thumbed frog in Cusuco Cloud Forest, Honduras. Photo: Ryan Marshall.

MISSION

At The Safina Center we advance the case for life on Earth by fusing scientific understanding, emotional connection, and a moral call to action. We create an original blend of science, art, and literature in the form of books and articles, scientific research, photography, films, sound-art, and spoken words. We bear first-hand witness and then we speak up, we speak out, and we teach. Our work is designed to inspire and engage you to devote your time and energies to conservation of wild things and wild places.

The Safina Center is a 501(c)3 nonprofit based on Long Island, N.Y.

WE ARE ABOUT VALUES

by Dr. Carl Safina, Safina Center Founder & President

This, too, shall pass. And so we're playing a long game.

Forty years of protections for nature, environmental health, endangered species, wild lands—even science itself—are under attack as never before in our lifetime, from within the very agencies created to protect all of those things. And all of us.

It matters that too many people don't value Life on Earth. And so our mission is nothing less than making a case for Life on Earth on a world stage. In the wide spectrum of nature, conservation, and environmental not-for-profits, the Safina Center is different. What makes us different is our emphasis: we are the creative end.

We travel to every continent and work in every ocean to fuse science, ideas, and emotion into books, films, visual art, sound art, and spoken word. People cannot engage unless they see solutions. We generate some light there; we are guides and thought-leaders. But it is more obvious than ever that information alone doesn't work. People have to feel it. Our work is to make the crucial emotional bridge of feeling between what is and what needs to be. We work on all continents to pry loose and bring back raw material to produce the science, books, award-winning films, photography, and art that really reaches people on an intellectual and emotional level.

We make, package, and share a rare and valuable commodity: ideas that change the conversation. I believe we are better at doing this than any not-for-profit group. I think we have assembled a team of world-class talent doing some important work. Thrilling work. I am so proud of them.

But don't take my word; we garner the recognitions to show that our work makes a difference. The Safina Center's Staff, Fellows and Creative Affiliates list among their awards the MacArthur "genius" Prize, a Pulitzer Prize, several Pew and Guggenheim Fellowships, The Communication Award of National Academies of Science, Art, and Medicine, various medals, and more. Our books have been *New York Times* best-sellers and our television shows have aired nationally on *PBS*.

In addition, our people also work on-the-ground and in-the-sea. Safina Center Fellows have worked to secure albatross nesting areas against feral animals in Kauai, train manta-ray hunters to become tour guides in Indonesia, stem the shark fin trade into China, study the effect of warming on Arctic wildlife in Canada, and even helping disrupt human trafficking in Asian fisheries. We help guide Whole Foods Market's seafood buying. *The New York Times* and *The Guardian* and others ask us to write for their global audiences. And we are teaching young people how to think critically and recognize when they are being fooled, and how to use science to formulate intelligent policy proposals. Our young-fellows program, named after NASA astronaut Kalpana Chawla, alters the trajectory of careers, creating decades-long tracks arcing into the future. That is reach!

Facts alone can't save the world. Hearts can. Hearts must. We're working to make sure that hearts do.

I thank you for supporting our Center's crucial and magnificent work.



The Safina Center



▲ Carl Safina in Uganda, where he studied the lives of free-living chimpanzees for a coming book on how animals learn to be animals. Photo courtesy: Carl Safina.

ACHIEVEMENTS OF 2018

Our Staff, Fellows and Creative Affiliates worked globally to do research, give workshops, sign books, speak, and present. Robin Huffman raised orphaned primates in Africa and painted haunting images to show their stories; In Canada Katarzyna Nowak analyzed how mountain goats' coats are changing with a changing climate; Hob Osterlund protected Hawaiian albatrosses, Paul Greenberg toured his new book—and more. Our Sustainable Seafood Program continues to work closely with Whole Foods Market.

To help you engage, we created the “Take Action” section of our website where we invite people to get involved in important conservation efforts relating to land, sea, animals, environmental policy, and climate. We're on Facebook, Instagram, Twitter, Tumblr and Medium.

Carl and the Safina Center's Fellows and Creative Affiliates continually reach new audiences through *National Public Radio*, *The New York Times*, *National Geographic*, *Scientific American* and other mainstream outlets.

Read more in the Making Waves section on page 32 and our Milestones and Firsts on page 28.

FELLOWS PROGRAM

Safina Center Fellows this year worked in wildlife and conservation, fisheries-related human rights, environmental health, sound-art and visual art. Current Fellows include:

- wildlife and conservation artist Robin Huffman
- conservation biologist and environmentalist Katarzyna Nowak, PhD
- *New York Times* best-selling author, Pew Fellow and Safina Center Writer in Residence Paul Greenberg
- investigative journalist Ian Urbina, whose previous *New York Times* work on human rights abuses on high-seas illegal fishing vessels earned him a Pulitzer Prize
- writer and photographer Hob Osterlund who protects Laysan albatross nesting areas
- sound artist and science educator Ben Mirin
- fisheries scientist Eric Gilman, PhD

For more about our Fellows, see page 14 and their essays throughout this report.

CARL SAFINA'S WORK

Carl Safina worked in Peru and Uganda (and at home) on his new book on how wild animals learn to be who they must be, and on invited articles for *The New York Times*, *The Guardian*, and more. His last book, *Beyond Words*, has 12 foreign language translations published or in the works. Carl's TED talk “What are Animals Thinking and Feeling,” has now been viewed more than 2.1 million times.

To read more about Carl's work this past year, see page 10 and his essay on page 11.



▲ Photo courtesy: Carl Safina.

THE SAFINA CENTER “KALPANA CHAWLA LAUNCHPAD” FELLOWSHIP PROGRAM COMPLETES ITS SECOND YEAR

“Though tragic, Ms. Chawla’s story is so inspiring. The generosity of Ms. Chawla and her family makes it possible for us to leverage the inspiration. Young people need to get into the orbit of mentors, and we know we are doing right by Kalpana Chawla’s legacy in helping the careers of extraordinary venture-level talent get off the launchpad and travel high and far.” – Carl Safina

Created in 2017, the Safina Center’s “Kalpana Chawla Launchpad Fellowship” kick-starts highly promising young venture-level talent, helping launch the early thrust of their careers. The fellowship is named after the dynamic, nature-loving astronaut who perished aboard the Columbia Space Shuttle in 2003. She’d chosen to bring Carl Safina’s book *Song for the Blue Ocean* as one of the few personal belongings to accompany her in space.

Her family and friends then established the Kalpana Chawla Scholarship at the Safina Center. We are honored to commemorate Kalpana’s adventurous and courageous spirit by supporting inspiring young conservationists.

In 2018, the Safina Center extended the nominations of Science Writer and Artist Erica Cirino and Anthropologist and Conservationist Kate Thompson. Read on to learn more about these inspirational young women.

ERICA CIRINO

Science Writer and Artist

Erica Cirino is a science writer and artist covering stories about wildlife and the environment, specializing in biology, conservation and policy. Her writings, photography and mixed media artworks explore the idea of the human connection to nature, especially to wild creatures.

Erica is spending much of her time witnessing, researching, and writing about the global plastic pollution crisis. In 2016 and ‘17 she sailed twice across the Pacific Ocean from Los Angeles to Honolulu through the famous “Great Pacific Garbage Patch.” In 2017 she sailed from Honolulu to Nuku Hiva, Marquesas, through the nearly plastic-free equatorial countercurrent. On board a 54-foot steel sloop with the Danish nonprofit Plastic Change, she witnessed and documented—in writing, photography and film—the organization’s scientific work, ocean plastic, marine wildlife and life at sea.

Her stories about the expeditions appear in *Scientific American*, *Oceans Deeply*, *The Revelator* and *VICE*. Erica has given several radio interviews about plastic pollution and other ocean topics, including a segment on NPR station WCAI-Woods Hole and on BBC World News, on live television, as well as to audiences across the United States.

In 2018 Erica began working on a book about her sailing expeditions and other travels tracking the global plastic pollution crisis. She also began working as a guest researcher at Roskilde University in Denmark, studying human attitudes, knowledge and awareness relating to the world’s plastic pollution crisis. She will use her lab data and field material to answer key questions about plastic pollution in her book.

Erica hopes her writings, artworks and presentations inspire effective social and political action on plastic pollution and other environmental and human issues for the benefit of ecological habitats worldwide.

► Erica Cirino sailing the South Pacific, from Honolulu, Hawaii, to Nuku Hiva, Marquesas, French Polynesia, to witness plastic pollution research at sea. Photo: Rasmus Hytting.





▲ Kate Thompson in Tanzania, drawing local wildlife with youngsters at the Amani Children's Home, an orphanage which she directs. Photo courtesy: Kate Thompson.

Kate Thompson

Anthropologist and Conservationist

Katharine (Kate) Thompson is an anthropologist and conservationist, a published scientific illustrator, and a doctoral candidate in Anthropological Sciences at Stony Brook University. She communicates science through art while her research aims to resolve human-wildlife conflict and provide humanitarian aid.

Kate conducts her research in villages within the dry forests and salt-water floodplains of Western Madagascar. There she works to understand the social, cultural and economic factors that drive rural people to poach animals, both for profit and subsistence. Kate believes that providing a voice for marginalized native populations is a vital part of conservation both in Madagascar and around the world. Her work is part conservation biology and part advocacy. Her research allows her to understand the priorities of local people and wildlife populations; her art helps her communicate this information to wider audiences, from Malagasy villagers to American millennials.

Additionally, Kate is the founder and executive director of the Amani Foundation, which runs Amani Children's Home in Mto wa Mbu in northern Tanzania. Home to nearly 50 children, this award-winning children's home serves as an extension of the social welfare department and a community resource center. Last year, as a Safina Center "Kalpana Chawla Launchpad Fellow," Kate began an educational program blending science lessons with art to teach children about local ecosystems and their own role in conservation. These educational programs are today being carried out by Tanzanian wildlife management volunteers, whom she trained for the role. Kate also established the first public library in Mto wa Mbu and developed a "traveling projector program" that brought science documentaries and educational films—mostly about local wildlife—to remote Maasai villages.

Kate will continue to use illustration to make nature education accessible across language and educational barriers. She plans to refine her abilities as an illustrator and work with local translators to design art and identification guides that inform, inspire, and instill an appreciation for wildlife and the will to conserve it.

YEAR IN PICTURES



◀ Safina Center Fellow Ian Urbina dives in a two-person submarine to the Antarctic seafloor to learn more about the wildlife that lives there and the effects of industrial fishing on this relatively pristine ocean habitat. Photo courtesy: Ian Urbina.

▶ Carl Safina with former Safina Center Fellow Shawn Heinrichs at the opening night of Shawn's gallery show "Light on Shadow" at the Southampton Arts Center, on Long Island, New York. Artwork: "Geos" by Shawn Heinrichs. Photo: Erica Cirino.



◀ Safina Center Fellow Ben Mirin recording the sounds of wildlife on his home turf in Brooklyn, New York. Photo: Elyssa Goodman.



◀ Erica Cirino sails Danish research vessel *Christianshavn* from Honolulu, Hawaii, to Nuku Hiva, Marquesas, French Polynesia. From December 2017 to January 2018, Cirino sailed for a second time with Danish nonprofit Plastic Change to bear witness to plastic pollution and research in the Pacific Ocean.
Photo: Rasmus Hytting.

▼ Safina Center Fellow Robin Huffman and a young volunteer clean up after painting a mural at Ape Action Africa primate sanctuary in Cameroon. Photo courtesy: Robin Huffman.



▲ "Hardly anything makes me smile bigger than a 5th-grader with a love for nature," says Safina Center Fellow Hob Osterlund. Hob sits with Lauren, a budding naturalist visiting Kauai from Idaho with her parents. Photo courtesy: Hob Osterlund.

CARL SAFINA'S WORK

In 2018, Carl Safina began his 8th book, about animal culture. He went to Dominica to study sperm whales, to Peru to study macaws, and to Uganda to study chimpanzees. Carl has been asked by his publisher to edit his last book, *Beyond Words*, into two short books for young adult readers. He also wrote articles about animal sentience, the crucial importance of biological conservation, the widespread endangerment of species worldwide (invited by the *New York Times*) and the painful topic of whether fish feel pain (invited by *The Guardian*; yes, they do), and he lectured widely. Carl was named finalist for the Indianapolis Prize—the world's largest prize in wildlife conservation—and won the Italian Merck Prize for literature.



◀ Pascal of the Sonso chimpanzee community in Uganda uses a leaf-sponge to drink from a stream. Carl visited Pascal and the rest of the Sonso chimps as part of research for his coming book about how animals learn to be animals. Photo: Carl Safina.

▶ At the first-ever March for the Ocean, held on June 9, 2018, in Washington, D.C., Carl stands with (from left) ocean conservationist and educator Fabien Cousteau and march organizer David Helvarg of the Blue Frontier Campaign. Photo courtesy: Carl Safina.



THE POWER FOREST

by Carl Safina



▲ Scarlet macaws in Peru. Photo: Carl Safina.

In the course of writing a book about what free-living animals learn from each other, I find myself on the Tambopata River in south-east Peru. The nearest town is Puerto Maldonado but from there the trip is all upriver. Wheeled vehicles are useless in this forest, and there are none. The surrounding forest has been officially protected with designations of national reserve and national park. Perhaps the strangest thing is that while it takes very special skills for humans to exist in the Amazon rainforest, my trip into the forest is amazingly comfortable. I'm here to hang out with scientists of the Tambopata Macaw Project at the Tambopata Research Center, a special privilege. My logistics are all being facilitated by the expert eco-tourism company Rainforest Expeditions, which is why my trip upriver is so easy.

Our first night, we stop at a tourist lodge called Refugio Amazonas. The next day we visit a Harpy Eagle nest with a big chick. I get lucky enough to see mama, too, when she delivers a monkey to her babe.

From there it is upriver to the Research Center. There I have the enormous privilege of hanging out with researchers Don Brightsmith and Gaby Vigo, spending many hours watching wild macaws at their nests and visiting the "clay licks" from which they derive the sodium they require.

(Continue reading on next page...)



◀ Macaws at clay lick in Peruvian Amazon. Photo: Carl Safina.



▲ Carl with giant fig tree with buttress roots in Peruvian Amazon. Photo: Don Brightsmith.

The forest is wholly overwhelming. From ground to canopy, the impression is of a wall of green. Through the ferns on the ground rise saplings and centenarians. Every vertical level is occupied. Trees vary enormously. There are hundreds of species of trees, some with straight dark trunks, spiny trunks, blotchy trunks; some are variegated; some mossy, viney, some bare. Some trees drop prop roots to the ground and others splay head-high buttress roots that emanate from the base of the trees like garden walls.

Occasionally a troop of Peccaries trundles by, or an Agouti, while the trees are rustled by Howlers, Titis, Tamarins, Capuchins, Spider monkeys and Squirrel monkeys.

But most of my time and attention are devoted to the Macaws I've come for. They light the emerald jungle with their flaming bodies.

Seeing *flocks* of Macaws helped me remember how big the natural world is supposed to be. And how beautiful it is—where it remains.

If this is not magic enough, the Morpho butterflies provide an added shock of beauty, looking like dried leaves when folded in prayerful rest, then weaving their electric blue through the sunshafts and shadows.

Overall it's a miraculous glimpse of the original world. May it stay protected from chainsaws and bullets. May we find a way to let it be—this beautiful home of millions of beings—as it has been for millions of years. Because this is where the living world gets its power, and catches its breath.

This story was originally published in Literati Magazine on January 8, 2018.



▲ Morpho butterfly in Peruvian Amazon. Photo: Carl Safina.

OUR FELLOWS PROGRAM



▲ Robin Huffman with painting of "Diva," a moustached guenon. Photo: Andrew Lепley.

ROBIN HUFFMAN

Artist and primate advocate Robin Huffman splits her time between New York City and Africa. She paints large portraits of primates, most of whom she has personally cared for at sanctuaries, in order to share their stories and their plight. Her representational style celebrates the subjects' innate beauty and diversity, and she portrays them in a way that exudes their individuality. The large scale of her works boldly invites direct engagement. A huge intelligent face gazing back at the viewer, evocative of dignity or pathos or love, can be a startling and emotional experience. Robin's collateral includes photographs, videos and even the voices of the apes and monkeys she knows so well. Sharing the intimacy of her relationship with her rare wild subjects through her array of materials offers viewers visceral and often transformative access to these "other nations."

When not volunteering at sanctuaries, caring for orphans and painting, Robin shares her work and tells primates' stories to community and corporate groups and schools around the globe.

KATARZYNA NOWAK

Katarzyna Nowak, PhD, has studied the behavior and conservation of wild primates and elephants in Africa, and recently observed our human (primate) behavior on the streets of Washington D.C. as a 2016-2017 Science and Technology Policy Fellow with the American Association for the Advancement of Science (AAAS). Her research interests include the capacity of threatened species to adapt to change; improving human-wildlife coexistence using innovative approaches such as beehive fences; the role of flooded habitats especially mangroves in providing refuge to primates and other species; and the use of available evidence to inform wildlife conservation policies.

She is now developing a citizen science project that will use citizen photography to address questions about possible changes in the timing of coat shedding in an iconic North American species – the Rocky Mountain goat, which ranges from Colorado to the Yukon. One goal of this project is to test the extent to which we can look back in time and track change using photographs from visitors, staff, and volunteers of National Parks in U.S. and Canada; another is to raise both public awareness and scientific knowledge of climatic warming; finally, the team aims to document adaptation in an alpine mammal including through shifts in its phenology in response to thermal change.

She's currently based on the Front Range in northern Colorado, where she was a Visiting Scientist at Colorado State University.



▲ Katarzyna Nowak. Photo courtesy: Katarzyna Nowak.

IAN URBINA

Ian Urbina is a Washington-based investigative reporter for *The New York Times*. His writings cover topics from domestic and foreign policy to commentary on everyday life, and have appeared in the *Los Angeles Times*, *The Guardian*, and *Harper's*.

In 2015, his "The Outlaw Ocean" series caught international attention when it ran in *The New York Times*. The series reveals the crime and violence that occurs in international waters, from slavery, to oil dumping, to murder with impunity. For this series he won various journalism awards, including the George Polk Award for Foreign Reporting. As a Safina Center Fellow, Urbina will use his reporting materials from this series to undertake a speaking tour, presenting to three key groups: the corporate community, universities, and artists. Urbina hopes his Outlaw Oceans Speaking Tour spurs action in the U.S. and abroad to better protect the oceans for the sake of marine life and the people who work at sea.



▲ Ian Urbina. Photo courtesy: Ian Urbina.

PAUL GREENBERG – WRITER IN RESIDENCE

In 2018, *New York Times* best-selling author Paul Greenberg published his latest book, *The Omega Principle: Seafood and the Quest for a Long Life and a Healthier Planet*. His book is an investigation into the history, science and business behind omega-3 fatty acids, the so-called “miracle compound” with a story mixed with human health and the future of planet Earth. Paul’s new book has been widely reviewed and discussed in various media outlets—from print to podcast to radio—including *NPR*, *The Washington Post*, *Fresh Air with Terry Gross*, *The Vineyard Gazette*, *The Guardian* and more.

Paul wrote stories about fishing, oceans and human health for *The New York Times* and *Hakai Magazine*, among other publications. Following the publication of his book, he kicked off a speaking tour that brought him to 10 venues across the United States.

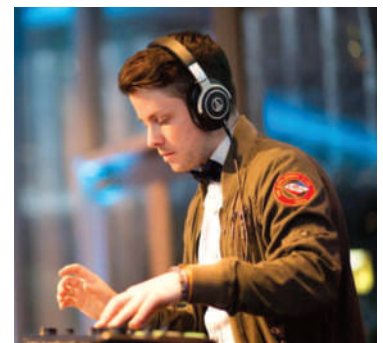


▲ Paul Greenberg.
Photo: Justin Schein.

BEN MIRIN

Sound artist, educator and National Geographic Explorer Ben Mirin went on wildlife sound-recording expeditions across the world, from Honduras to the Galápagos to the Philippines to the shores of Maine and beyond. This year Ben worked with the Cornell Lab of Ornithology to create and launch *BeastBox*, an interactive online game that combines music and the science of animal communication. *BeastBox* reached about 40,000 users in its first month. Ben has applied for additional funding to take this game on the road and develop music-based curriculums for middle school classrooms. He has already worked with a middle school teacher in Wisconsin, and hosted two online conferences with roughly 40 teachers from the area to test four lesson plans, and discussed ways to adapt them to different types of students.

This summer Ben began taking courses in animal behavior through Cornell University at the Shoals Marine Laboratory in Maine. He hopes these studies will help him expand his skills as a researcher, designing and executing specific studies about how wild animals vocalize.



▲ Ben Mirin performing at National Geographic. Photo: Taylor Mickal.

HOB OSTERLUND

Hob Osterlund spent this year finishing a short film called “*Kalama’s Journey*” which chronicles the life of Kalama, an albatross with same-sex parents who hatched, grew up and fledged from Kauai this year. She continues her work as Kauai Coordinator for the Cornell Lab of Ornithology Bird Cam project, which wrapped up its fifth season recording and broadcasting the lives of Laysan albatross online, in real time, this summer. Tens of thousands of viewers in more than 190 countries have been able to share the joys of watching Laysan albatrosses live on the online “Tross Cam.”

Hob’s first book, *Holy Moli: Albatross and Other Ancestors*, entered its third printing this year and continues to sell. She holds frequent book talks and signings at Kauai’s Kilauea Point National Wildlife Refuge.

In addition to her writing, speaking and film work, Hob spends much time photographing Laysan albatross and other native wildlife on Kauai to share online with people all over the world. She also performs hands-on conservation projects, monitoring and documenting albatrosses’ band numbers on private properties across Kauai. She works closely with the State of Hawaii Department of Land and Natural Resources and U.S. Navy to facilitate albatross egg translocations when necessary, and on predator-control projects.



▲ Hob Osterlund with Laysan albatross on Kauai.
Photo: Melissa Groo.



▲ Eric Gilman.
Photo courtesy: Eric Gilman.

ERIC GILMAN - FISHERIES SCIENTIST

Eric Gilman studies open-ocean commercial fishing, both its ecological effects and the governance and management needed to stop depletion. His main research areas focus on how open-ocean fishing affects wild populations, how to cut incidental catches of fish and seabirds in longline fisheries, how to reduce waste, and the mortality caused by lost nets. Currently Eric is working with experts to define a standard against which to assess the ecological effects of coastal drift gillnet and pelagic longline fisheries. The experts will also create fisheries management support tools—including new ecological risk standards and a manual on how to handle and release unintentionally caught at-risk wildlife. Eric will oversee pilot projects to determine the efficacy of the new bycatch standards and support tools.

Eric frequently advises international and U.S. management agencies and non-governmental organizations as diverse as The Nature Conservancy, Luen Thai Fishing Venture and the United Nations' Food and Agriculture Organization. He is an associate professor at Hawaii Pacific University, and owner and principal of Pelagic Fisheries Research Services. He helps seafood companies source sustainable tuna products.

OUR CREATIVE AFFILIATES



JANE ALEXANDER

Actress and Author
Photo courtesy: Jane Alexander.



DAVID DE ROTHSCHILD

Environmentalist and Adventurer
Photo courtesy: David De Rothschild.



LINDA LEAR

Biographer of Rachel Carson & Beatrix Potter, and environmental historian
Photo courtesy: Linda Lear.



LORI MARINO

Neurobiologist and Non-human Rights Campaigner
Photo courtesy: Lori Marino.



KATHLEEN DEAN MOORE

Environmental Philosopher and Writer
Photo courtesy: Kathleen Dean Moore.



LUANNE RICE

Novelist
Photo courtesy: Luanne Rice.



ISABELLA ROSSELLINI

Actress, Author and Creator of the "Green Porno" series
Photo courtesy: Isabella Rossellini.



DAVID ROTHENBERG

Musician and Philosopher
Photo courtesy: David Rothenberg.



PAUL WINTER

Musician and Musical Adventurer
Photo courtesy: Paul Winter.

LOST IN TIME ON THE GALÁPAGOS ISLANDS

by Ben Mirin

When father Tomas Berlanga first happened upon The Galapagos Islands in 1535, he was immediately ready to leave. His ship had been blown off course on his way from Panama to Peru, and when the ocean deposited him on these strange shores there was very little apparent food or water. Taking in the islands' barren volcanic rock and sun beaten hills for the first time, he wrote, "I have discovered Hell on earth."

Three hundred years later, Charles Darwin was equally unimpressed, writing that "nothing is less inviting than the first appearance of these islands." Another 183 years later, I still found it shocking. This was the land of world famous wildlife such as giant tortoises, Blue-footed Boobies, and of course the famous Darwin's Finches whose beaks gave us our first real-time glimpse of evolution by natural selection. It was February 2018, the rainy season. But even walking in the occasional rain didn't dampen my astonishment at how empty much of the landscape seemed to be.

My traveling arrangements were a little more evolved than those of travelers in centuries' past. I was to sail among seven of these islands aboard the National Geographic Islander, a cruise ship operated by Lindblad Expeditions. I was in the company of approximately forty other passengers and likely twice as many crew. Our itinerary would take us from our port in San Cristóbal to Española, Floreana, Santa Cruz and Santa Fé, Bartolomé, and Genovesa. Fortunately, I had managed to contact our expedition leaders in advance of the trip, and was given clearance to bring my sound recording equipment.

Like naturalists before me, I was blown away by how close our group could get to wildlife. But through the filter of bioacoustics, I was able to develop a deeper appreciation for the sometimes subtle varieties of species that occurred among the islands. Each landing brought opportunities to capture voices that had evolved to survive not just on this archipelago, but within a single island's ecosystem. I found it especially challenging to distinguish the sounds of Darwin's famous finches, which often look and sound alike, and are even known to learn each other's songs. This often happens when one species of finch takes over another's nest, and raises its chicks alongside those of the other.

While capturing these sounds I caught the attention of my fellow travelers and of the Lindblad staff. Julio Rodriguez, one of the staff and a former classmate of mine at Carleton College, even made a short film about my work documenting bird songs throughout our trip.

In total, our trip lasted eight days. At times it was difficult to capture pristine recordings because of the presence of other boats or visitors to the islands. But in those moments, I always remembered how those footsteps, those boats, and those planes were signs of a thriving ecotourism industry that helped sustain one of the most impressively maintained national parks I've ever had the pleasure to visit.

This story was originally posted to the Safina Center Blog on September 3, 2018.

Watch a video of Ben recording birdsong on the Galápagos Islands on YouTube: <https://bit.ly/2NXiphQ>



◀ Ben Mirin recording natural sounds on the lava flows of Isla Santiago, in the Galápagos Islands. Photo: Nick Mirin.

WHY WE DO WHAT WE DO

THE SWEET SUCCESS STORY OF STORMY AND RADAR

by Hob Osterlund

Laysan albatross nesting season begins in November each year. Although it's autumn, it feels like spring to those of us who monitor the mōlī. Mates reunite, rushing and gushing after months of separation. Nest sites get chosen, eggs get laid. It feels like a resurrection, a promise kept, an improbable dream come true.



▲Two-week-old Laysan albatross chick under “mombrella.” Photo: Hob Osterlund.

Seldom was this truer than seeing the arrival of a bird called Stormy a few months ago. We had known her since she hatched in 2012, but will always remember her best because of a tragedy.

That year, just as the nesting season was coming to a close, the mōlī chicks were near the end of their transformation from fuzzy footballs to peerless pilots. Some jumped into the sky, trusting something good would come of it. Some waited for brisk trades and were lifted like prophecies. Each traveled as both noun and verb. “Fly” on the wind was not just what they would “do” the rest of their long lives; it would also be their address, their ancestor, their altar. They were destined to stay aloft, more than ninety percent of their lives, on the two universal wings of life: self-effort and grace.

Sadly, several chicks did not survive. One Friday in late June, two unleashed dogs burst into a colony, barking and breaking necks. Eight babes died on the scene. Five more were injured, and in a sense they became orphans. Not because their parents were dead, but because they were dead to their parents. They would be gone, taken for care, and their parents would be unable to find them.



▲ Stormy and Radar courting, spring, 2017. Photo: Hob Osterlund.

It was a horrific scene. Because we got there shortly after the dogs, and because the rehab team at Save Our Shearwaters was willing to accept the birds, a few of the injured chicks were still alive a week later. Despite their wounds, despite their reputation for poor survival in captivity, despite physical and psychological shock, despite traumatic separation from everything they knew, despite the fact that they would not likely see their parents again for many years, four of the chicks lived. Only one of the five died, his brain damaged from a head bite. The others gained weight. Several weeks later they were released onto a federal refuge. All four fledged. Stormy was among them.

Fledging is a key measure of success; nothing, however, matters more than returning—which typically takes three to five years. Were the birds strong enough to survive at sea? Smart enough to forage for food? Able to find their way home again?

Stormy was spotted on Kauai for the first time in January, 2016. She was robust and gregarious, a “walker” who initiated lively courtship dances and intimate preening sessions. We were thrilled to see her again in the winter of 2017 and later that fall, when the current nesting season was opening.

One day in December Stormy was spotted sitting quietly on the ground, eyes closed, as if in a trance. Turned out she was incubating an egg. Since most mōli begin nesting between eight and nine years of age, it was surprising to see such a young bird—not yet six years old—already pursuing parenthood.

But would she get relieved of her duties? Young parents notoriously fail at their first nesting attempts because it takes time to learn the patterns and intricacies of chick-rearing. The answer is yes, she did indeed. Her mate showed up right on time. He too was a first-timer, an eight-year-old bird well known to us. Because of his friendly inquisitive nature, he had been named Radar (as in M*A*S*H.) Both birds had chosen mates wisely.

In early February Stormy and Radar became first-time parents. They are dutiful, precocious and doting. Their chick will soon be named by an Hawaiian Kumu. We could not be prouder of the family. If we ever find ourselves wondering why we work so hard doing what we do, or whether what we do makes a difference, we will not need to look further than Stormy and Radar.

Dedicated to Kim Steutermann Rogers, Jeanine Meyers and Tracy Anderson.

This story was originally published to the Safina Center Blog on February 23, 2018.

ABUSED AND ABANDONED PRIMATES WE MUST GIVE THEM A VOICE

by Robin Huffman



▲ Left: Rocky the chimpanzee, and Right: Frodo the mandrill. Photos: Robin Huffman.

Volunteering at primate sanctuaries caring for the monkeys and apes I paint is a very large part of what informs my portraits. I often spend months with them, seven days a week, cleaning their cages and habitats, laundering swaddling cloths and hammocks; selecting, preparing and serving their food and drink, offering bottles of milk hourly through the night; gathering fresh leaves, branches and other forest treasures; spending hours observing them and figuring out safe and intriguing enrichment options to keep these highly intelligent and emotional beings surviving and thriving.

It is always with mixed feelings when I see a primate brought to a sanctuary, knowing that once these orphans arrive, they will be as safe and as cared for as the sanctuaries can possibly manage, but at the same time angered and mourning the often tragic circumstances that caused them to need to be rescued in the first place.

Here is how I often think of it: We don't know their stories. We know what the people who bring them TELL us. But that is often not the truth. And some come to the sanctuary with no history at all, dropped off secretly. The only thing we know about them then is their physical and emotional condition, their illnesses and wounds, physical and psychological.

Why did Bertie the chimp's owners cut his ears off?

Why was Patates the female baboon kept in a welded metal drum for 10 years?

Why was Legolas the vervet monkey housed in a cage so small for so long that he's deformed?

They look straight at us. They see us. But do we see them? Everything in their world was taken from them by humans, and the rest of their lives will be unnatural. They have lived through unspeakable events. Even so, we often sense they forgive us.

We know their stories from the point they arrive at the sanctuary. And then we can tell their stories. We MUST tell their stories. We must be their voice in the world.

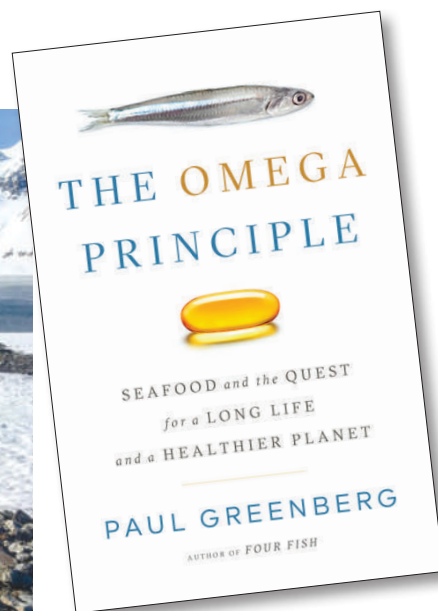
This story was originally posted to The Safina Center Blog on April 19, 2018.

OMEGA PRINCIPLE

by Erica Cirino

► Paul in Svalbard, Norway, where he spoke about fish, fishing and his books aboard a Nat Geo/Lindblad Expeditions Cruise in May.

Photo courtesy: Paul Greenberg.



Doctors and nutritionists have long recommended omega-3 fatty acids as part of the key to good health and a long life, as well as a faster-firing brain and a stronger heart. As a result, omega-3s have become one of America's top-selling dietary supplements, turning them into a multi-billion dollar business. But are omega-3s really the panacea for the body and mind that health advocates promise? Paul Greenberg spent a year eating fish high in omega-3s at every meal and investigating the economic, political and health implications of omega-3s—relating to both humans and the environment. The outcome of his year of intense research is a new book, titled *The Omega Principle: Seafood and the Quest for a Long Life and Healthier Planet*, published by Penguin Random House on July 10, 2018.

The Omega Principle takes a critical look at the so-called "reduction" industry of small fish high in omega-3 fatty acids, such as anchovies, which are boiled down and ground up to supplement human diets or feed pets and farmed animals. Meanwhile, the wild animals who rely on these animals for survival—a huge number of species, from blue whales to penguins—are losing a critical food source as enormous quantities of these small fish are hauled from the sea.

Are omega-3s really so healthy? Do we need to supplement our diet with omega-3s? What implications does hauling small fish from the sea have on the entire marine ecosystem? These are just some of the many questions James Beard Award-winning author Paul Greenberg addresses in *The Omega Principle*, his third book about oceans and seafood. You can find *The Omega Principle* in bookstores across the United States, and also online.

Praise for *The Omega Principle*

"Popular writers often extol the benefits of omega-3s. Greenberg reviews the shaky evidence and delivers a penetrating analysis of its science, business, and future. . . . Greenberg also includes specifics of a healthy, life-extending diet; it requires omega-3s—but not in pill form. . . . An expert review of the human exploitation of marine life."—*Kirkus Reviews*

"Paul Greenberg's book ranges widely and with great gusto—from fisheries halfway across the globe to academic conferences on metabolism and longevity—to tell the story of supplements, dietary fads, quackery, and the future of human health. This is an important, entertaining, and wonderfully crafted work."—Siddhartha Mukherjee, author, scientist and doctor

"It takes no small measure of writing skill to make a book about fatty acids gripping. To be honest, I have never been drawn to the subject and tend to avoid people who use the phrase "omega 3." And yet Paul Greenberg has written a book on the subject that is engaging and important, a book that is a pleasure and should be read."—Mark Kurlansky, journalist

"The Omega Principle encapsulates all the complexity and intricacies of our broken food system with the story of one (seemingly) simple supplement. Paul Greenberg takes us on another brilliant deep dive with an entirely new lens. This book demands our attention."—Dan Barber, chef, restaurant owner and author

"Paul Greenberg goes searching for the secret to longevity, and what he learns is, in many ways, more interesting. The Omega Principle should be read by anyone who cares about human health or the health of the planet, which is to say everyone."—Elizabeth Kolbert, journalist and author

LITTLE GOATHERD MOUNTAIN

by Katarzyna Nowak

We weren't going far into Kluane National Park, a vast protected area in southwestern Yukon Territory, Canada. And yet, it still felt like immersion into a wilderness that inspires awe, respect, and also trepidation – on the road in were fresh bear and wolf tracks. South of Serpentine Creek in the Alsek Valley, and nestled between mountain ranges, we set up camp at the narrowest point of the Dezadeash River. This is the place where rafting trips embark to reach Lowell Glacier and Goatherd Mountain or go all the way out to sea at Dry Bay, Alaska.

We were not packrafting far but instead basing ourselves in the Valley for about a week. My task was to find active mountain goat areas and trails and deploy remote cameras that would capture images of animals shedding their winter coats or, at this point in summer, in post-molt stage. I had been granted entry into Kluane for this study on July 1, following the restricted goat-kidding period, May 15 to July 1. It was July 1. Joining me to generously lend a much-needed hand was Whitehorse-based photographer and guide, Atsushi Sugimoto.

Our first two days were admittedly tough – we followed an alluvial fan, downriver from our camp, upwards, reaching approximately 1,100 meters above a striking waterfall but it was treacherous climbing. We had neither ropes nor other climbing gear and there were not enough reliable holds. Even the larger rocks could not be trusted and the wall we were on was crumbling under us. Frustrated and tired out, we turned back around before managing to reach the desired ridge above the falls. Our descent took at least twice as long as our ascent.

Once finally down on the relatively more solid ground of the fan, we took in the waterfall for a while. We then proceeded southwards toward a side fan and up slopes but the best we found amid aspen saplings and blooming prickly wild rose were some old goat pellets and no obvious trails or shed hair. We just weren't managing to get high enough. Days earlier, I had been told by a lynx researcher working in the park that the mountain goats are "very alpine in Kluane", and no doubt, they were showing me their full mountain goat potential. "You tell me this only now," said Atsushi, but still in good spirits.

That evening, Atsushi and I watched with astonishment as four individuals scaled the rugged cliff-faces near the top of the mountain facing camp. The next day, we dragged our rafts up river – and up wind – to a point below where we had watched them. But disappointingly we abandoned crossing after trying to wait out the alternating wind and rainstorms – the valley proved temperamental that day and we were still too tired from the day before to face choppy water and rapidly changing climbing conditions.



◀ A waterfall in Alsek Valley at the top of a geological formation called an alluvial fan. Photo: Atsushi Sugimoto.



▲ Shed mountain goat hair in the mineral lick. Photo: Atsushi Sugimoto.

On day 3, after a chilly night, the day was clear. We crossed the river again, climbed a steep slope only about 100 meters or so above the shoreline (at about 600 meters above sea level) and upon arriving, we landed, fortuitously, on a major goat trail. I was ecstatic and surprised. From here, lady luck was with us. Networks of mountain goat trails awaited with vegetation laden with shed hair, mineral dig and lick sites, a well-used water point, and sleeping alcoves shading goats from wind and elements. We spent that day and all of the next deploying the remote cameras; our clothes were covered in goat hair from navigating their routes.

The Alsek Valley's goats indeed proved very alpine – at least in summer and during the day – staying high at more than 1,500 meters especially as, in July, there's fresh vegetation high up. But I am hopeful that they might surprise us and descend lower down in the habitat during the night, when it's cooler, to drink, consume minerals and/or plants unavailable higher up such as the abundant prickly rose. This place in Kluane – which I'm dubbing "Little Goatherd Mountain" – is spectacular and holds great potential for a focal mountain goat study given all the interesting activity and decent access for backcountry camping. I could easily spend an entire summer here.

Other highlights happened at camp itself: a young brown bear swam across the Dezadeash River to our camp, shook off water from its coat upon reaching the bank, and proceeded on its way. Nightly, when the water was at its most calm, a muskrat would swim back and forth right by camp. Each morning, a spotted sandpiper shrieked its high-pitched call. There were fresh wolf tracks nightly or almost nightly too – including adults and young individuals – and, I believe, it is not out of the realm of possibility that mountain goats are a prey species of wolves at this location. At least one more trip (I hope two) into the Valley will be made to fetch the cameras and learn a bit more about this "Little" Goatherd.

This expedition was part of the Mountain Goat Molt Project, supported by the Wildlife Conservation Society, Y2Y Conservation Initiative, in addition to the Safina Center. Contribute your mountain goat photos to the project here: <https://bit.ly/2QljbUt>

Thanks to Atsushi Sugimoto for his assistance in the field and photography.

Thank you also to Dr. Carmen Wong of Parks Canada for advising to prioritize this area for mountain goat research, and to Micheal Jim and Monica Krieger from the Champagne and Aishihik First Nations for their permission and enthusiasm.

Don Reid offered indispensable support – and a ride in and out of the valley.

This story was originally published to the Safina Center Blog on July 13, 2018.

CELEBRATING SOLSTICES WITH SOUND

by Erica Cirino

"Wide-minded and big-hearted, Paul was the first jazz musician to be invited into the White House (by the Kennedys), first to be sent worldwide by the State Department as a cultural emissary of true American greatness, the first to bring exotic rhythms and melodies such as Brazilian bossa nova into American music, and the first to record with animal callings. Fearlessly fusing his work with musical riches of other cultures, Paul invented what we now call World Music. He has never ceased in his explorations, nor in applying music to social causes. A true giant." – Carl Safina

"It is an honor to be a Safina Center Creative Affiliate. And I feel that music itself is being honored, being invited to be part of this community of scientists and dedicated warriors for the natural world. I'm grateful for this opportunity to learn from these colleagues." – Paul Winter



▲ Paul Winter. Photo: Rhonda Dorsett.

In most parts of the world, the passage of a year corresponds with constantly changing seasons. When spring segues into summer, and fall into winter, special seasonal changes occur—the solstices. Solstices are the extremes, the longest and shortest days of the year. Safina Center Creative Affiliate Paul Winter has been celebrating these special times of year with elaborate concerts held at the Cathedral of St. John the Divine in New York City for decades; 23 years of summer celebrations and 39 years of winter celebrations. I talked to Paul about the genesis of his annual concerts and what each solstice means to him.

Erica Cirino: Why did you begin celebrating the solstices with music at St. John the Divine?

Paul Winter: The Paul Winter Consort and I were invited to be artists-in-residence at the Cathedral in 1980 by the Dean, the Very Reverend James Parks Morton. The Dean had a vision of creating a bridge between spirituality and ecology. He had heard the pieces we had done inspired by the voices of wolves, whales and other creatures, as well as our album celebrating the Grand Canyon. That fall, of 1980, I was wondering what the most universal milestone of the year we could celebrate with a concert in the Cathedral would be. Our mandate there was totally secular. It occurred to me that Winter Solstice was something which embraced all peoples (at least in the Northern Hemisphere), regardless of their cultural or religious background. So we presented that December our first Winter Solstice Celebration, and it was so well received that we did it the next year, and we were off and running then with this event which has become a tradition now for almost four decades.

EC: How many people attend these concerts on each solstice?

PW: The attendance at our series of four Winter Solstice Concerts each year is usually 7,000 to 8,000. The Summer Solstice Celebration is a much more intimate event with 500 to 700 people usually.

EC: How would you describe the musical sound at each of these celebrations?

PW: The Winter Solstice is a large theatrical production, with over 60 performers. The music spans the spectrum from dynamic African to contemplative solo and ensemble pieces by the Consort, and the rousing gospel singing of Theresa Thomason. In the recent Summer Solstice we had soprano, sax, cello, piano, pipe organ, Theresa's singing, and the Bulgarian genre of the Pletenitsa Balkan Choir. This event begins in total darkness, so the music of the first half of the concert is more contemplative, but then the energy grows along with the slow crescendo of the light as we ride the sound into the dawn.

EC: How are your concerts linked to the idea of the stewardship of nature?

PW: With our pieces that are inspired by and which feature the voices of various nonhuman creatures, we hope to awaken in listeners an appreciation of the beauty and soul of these fellow members of the family of life. In the Winter Solstice event, at the end of our piece "Wolf Eyes," we invite the audience to howl with us, in celebration of the New Year. I often refer to a quote from Dostoevsky: "Beauty will save the world." And also then to another quote, in response to this, to my long-time friend, the late poet Yevgeny Yevtushenko: "Yes, but who will save beauty?" I feel that's our job as musicians. It will be the awakening of hearts which will inspire involvement in the preservation of the natural world; not the dissemination of information. Yes, we need the information; it's vital; but the mind is a forgetting machine. And all of us who care are deluged with so much information we can't process it all. But the heart remembers; and the body remembers things it experiences.

To learn more about the Paul Winter's Summer and Winter Solstice Celebrations, visit: <http://solsticeconcert.com/>

WHEN IN ROME

CARL SAFINA WINS PREMIO MERCK LITERARY PRIZE

Carl Safina traveled to Rome, Italy, to accept the major Italian literary prize Premio Merck, for *Al di là Delle Parole*, the Italian edition of his book *Beyond Words; What Animals Think and Feel*. The Italian edition, translated by Isabella C. Brun, was published by Adelphi Edizioni.

"The *Premio Letterario Merck* aims to foster positive cross-pollination of scientific and humanistic culture. While we are routinely in contact with the tangible results of scientific research, science is often seen as something distant, a subject for the elite few" Antonio Messina, Managing Director of Merck Serono SpA Italy has said. "This raises the question of making scientific knowledge accessible to all, growing interest in the general public so that people wonder about the complex themes that underpin development, growth and changes in our society."

Merck currently awards or promotes five literary prizes, including *Premio Letterario Merck*, worldwide. Merck sponsors the *Johann Heinrich Merck Award*, which "builds bridges between literature and empathetic understanding," in Germany. In Japan, the *Merck Kakehashi Prize* awards writing that helps bridge various cultures. Merck also gives awards in India (the Merck Tagore Award) and Russia, where Merck grants a literature award in cooperation with the Goethe Institut.

"I was pleasantly surprised that my book *Beyond Words* won a major award in Europe," said Safina. "But I was equally pleased to hear how tickled and excited my wonderful Italian publisher, Adelphi, was. They treated me and my wife Patricia to a wonderful VIP week in The Eternal City and we love them for all the hard work they did to welcome us and to promote the book. Grazie, Adelphi, and grazie, Merck!"



▲ Left: At the Vatican. In Rome, Carl was especially drawn to art involving animals. Right: Carl accepts the 2018 *Premio Letterario Merck*.
Photos: Patricia Paladines.

SUPPORTED POLICIES

POLICY CAMPAIGNS

Outside coalitions often ask us to support a wide range of environmental issues. Here are policy efforts we were involved in during 2018.

Sustainable Fisheries and Ocean Policies

- Recommended that the National Oceanic and Atmospheric Administration require commercial fishing gear to have weak hooks that cannot hold giant Bluefin tuna in areas closed to fishing for them.
- Encouraged California to adopt amendments to the Fisheries Omnibus Bill of 2018, to implement new policies meant to reduce marine wildlife bycatch and entanglements in commercial fishing gear.
- Urged the New England Fishery Management Council to adopt catch controls and a year-round buffer zone extending 50 miles offshore for the protection of Atlantic herring.
- Opposed bill H.R. 200, which would undermine the recovery of fish in US waters and return to an era of depletion.

Energy

- Urged the U.S. government to involve local communities when making decisions about offshore energy exploration and development in America's national marine sanctuaries and to protect these communities and economies that rely on them.

Environmental Protection/Pollution

- Requested an increase in government funding for National Marine Sanctuaries.
- Encouraged support for funding for the Marine Mammal Commission.
- Recommended the U.S. Army Corps of Engineers halt the permitting process for the construction of Pebble Mine in Bristol Bay.
- Asked the White House Council on Environmental Quality to strengthen, rather than weaken, the National Environmental Policy Act (NEPA).



▲ In 2018 the Safina Center joined policy efforts designed to conserve and protect myriad marine species, including animals like this humpback whale off Montauk, New York.
Photo: Carl Safina.



▲ Bluefin tuna, approximately 800 pounds (360 kg).
Photo: Carl Safina.

SUSTAINABLE SEAFOOD PROGRAM

by Erica Cirino



▲ Photo courtesy: Gabe Andrews.



We provide chefs, retailers, and restaurateurs with science-based guidance to responsible, wild-caught seafood. We partner with the Monterey Bay Aquarium's Seafood Watch program. Together we advise Whole Foods Markets across Canada, the United Kingdom and the United States. Look for our Safina Center logo at their seafood counters. We applaud Whole Foods' dedication to stocking its shelves with sustainable seafood.

Our program also comments on various policy proposals, good and bad. This year they've included:

- Pebble Mine: The Trump Administration is trying to fast-track licensing of a gigantic mining operation proposed for head waters of Bristol Bay, Alaska. (The Obama Administration denied licensing.) If approved, the mining project would destroy the world's largest remaining runs of salmon and the world's largest sockeye salmon fishery.
- Atlantic Bluefin tuna: The U.S. government is now considering relaxing regulations that protect these depleted fish in one of their only known spawning grounds: the Gulf of Mexico. We oppose the changes.
- Marine National Monuments: We advocated for establishment and protection of new Monuments and Sanctuaries.

In July, we welcomed Gabe Andrews as our new Sustainable Seafood Program Director. We look forward to helping make healthy, safe and sustainable seafood available for all in the years ahead. Gabe Andrews' passion centers on the dynamic space where aquatic and terrestrial worlds mingle; and it's taken him to the shorelines of the Chesapeake Bay, barrier islands of Georgia, and the Pacific beaches of Costa Rica. Much of his work has focused on sea turtle and diamondback terrapin conservation, but he also has experience in environmental education and endangered species protection. He graduated with a B.S. in Biology at Ohio University and earned his M.S. degree from the University of Vermont's Field Naturalist and Ecological Planning program.

After working with the Safina Center previously as a Seafood Analyst, Gabe is excited to move into this role to manage the Center's Sustainable Seafood Program and continue its partnership with Whole Foods Market and Monterey Bay Aquarium Seafood Watch. Along the way, Gabe says he looks forward to engaging with ocean-related policy, collaborating with other NGOs and expanding the reach of the Safina Center's Sustainable Seafood Program initiatives.

Outside of work, you might find Gabe paddling, trail-running with his dogs, or delivering a perfectly timed pun. Gabe is an amateur beekeeper, and recently adopted an obsession for collecting seeds and tinkering in the garden.

MILESTONES AND FIRSTS

From our founding in 2003 to now, we've compiled this list of awards, honors and other "firsts."

2018

Carl Safina is named one of "the great American preservation writers" in a Washington Post op-ed by writer Kim Heacox.

Carl Safina wins the Italian Merck Prize for literature.

Safina Center Fellow Paul Greenberg publishes his third book, *The Omega Principle: Seafood and the Quest for a Long Life and a Healthier Planet* on July 10, 2018.

Safina Center Fellow Robin Huffman's painting "Ayla" is one of 173 out of 1,200 entries selected for showing in the David Shepherd Wildlife Foundation's Wildlife Artist of the Year Exhibit in the U.K.

Carl Safina's TED Talk, "What are animals thinking and feeling," based on *Beyond Words*, has been viewed 2.1 million times since it was released online in October 2015.

Carl Safina is named a finalist for the Indianapolis Prize for Wildlife Conservation.

2017

The Safina Center establishes the Safina Center "Kalpana Chawla Launchpad" Fellowship to honor the memory of the late astronaut Kalpana Chawla.

The inaugural Safina Center "Kalpana Chawla Fellowship" is awarded to science writer and artist Erica Cirino and humanitarian and conservationist Kate Thompson.

Safina Center "Kalpana Chawla Launchpad" Fellow Erica Cirino wins CUNY Resilience Fellowship for science journalists.

Safina Center Creative Affiliate Lori Marino establishes The Whale Sanctuary Project and Carl Safina joins its board.

Safina Center Fellow Ben Mirin gives a TED Talk at the TEDNYC Idea Search 2017.

Safina Center Fellow and Writer in Residence Paul Greenberg's *PBS Frontline* documentary "The Fish on My Plate" premieres online and on television.

Safina Center Fellow Chris Jordan's film "Albatross" premieres at the Telluride Film Festival.

Shawn Heinrichs and John Weller help establish a new Marine Protected Area in Raja Ampat, Indonesia.

2016

Carl Safina's seventh book, *Beyond Words: What Animals Think and Feel*, releases in paperback with much media attention on July 12, 2016. It hits #8 on *The New York Times* Best Sellers List in the "Animals" category and receives many positive reviews. He signs books and gives talks on *Beyond Words* all across the U.S., at universities, book stores, conservation centers and conferences.

Carl Safina's TED Talk, "What are animals thinking and feeling," based on *Beyond Words*, is viewed more than 1.7 million times.

Carl Safina explores the Arctic with Greenpeace to bear witness to the effects of overfishing and climate change. He publishes blogs about what he sees and experiences live from Svalbard, Norway.

Safina Center Fellow Hob Osterlund releases her first book, a memoir, titled *Holy Moli: Albatross and Other Ancestors*, on May 5, 2016, and goes on an international book tour across the Pacific and Pacific Northwest region of North America.

Safina Center Fellow Shawn Heinrichs helps film and coordinate the first-ever televised public service campaign to reduce the consumption of shark fin soup in China.

Safina Center Fellow John Weller wins the 2016 International Understanding Through Photography Award, presented by the Photographic Society of America for his work on the Ross Sea and its contribution to international understanding of the sea and its ecological importance.

2015

Carl Safina's seventh book, *Beyond Words: What Animals Think and Feel*, releases to rave reviews July 14, 2015. It is #2 on *The New York Times* Best Sellers List, "Animals" category, and #1 in Amazon's Best, "Animals and Cognition" and "Animal Behavior" categories.

Excerpts and interviews from *Beyond Words* appear on PBS, NPR, *The New York Times* and in dozens of online magazines from *TIME* to *National Geographic*.

Safina Center Fellow, John Weller and his partner Shawn Heinrichs complete their film *Guardians of Raja Ampat* (Indonesia) and show it on a grand outdoor screen in 12 key villages.

Safina Center Fellow Dr. Ellen Prager's new book, *The Shark Rider*, is released on May 1st.

Fellow Paul Greenberg releases his best-selling book, *American Catch: The Fight For Our Local Seafood*.

Safina Center Fellows, Dr. Demian Chapman and Debra Abercrombie complete many Shark Fin ID Workshops in countries around the world including Hong Kong, Mainland China, India and South Africa.

Carl Safina, Senator Edward Markey, offshore drilling experts and scientists hold press conference in Washington DC to address lingering effects of the 2010 BP oil disaster.

Carl Safina is finalist for the 2016 Indianapolis Prize and Lilly Medal, a biennial prize in global wildlife conservation.

2014

Blue Ocean Institute changes its name to The Safina Center.

Safina Center Fellow, Paul Greenberg publishes his second book *American Catch: The Fight For Our Local Seafood*, to critical acclaim.

The Safina Center logo appears in 370 Whole Foods Market stores in the U.S. in recognition of our advisory relationship.

Safina Center Fellows, Paul Greenberg and Demian Chapman are both named Pew Fellows in Marine Conservation.

Safina Center Fellow Dr. Ellen Prager publishes *The Shark Whisperer*, her first book in a new fiction series for middle grades, Tristan Hunt and the Sea Guardians.

2013

First full series of Saving the Ocean with Carl Safina broadcasts on PBS to 90 million households in the U.S. and Canada. (Episodes available for free 24/7 on PBS.org.)

Carl Safina is finalist for the 2014 Indianapolis Prize.

Carl Safina is lead scientist on the GYRE expedition on plastic pollution to the southwest coast of Alaska.

Stony Brook University establishes the Carl Safina Endowed Research Chair for Nature and Humanity.

Carl Safina receives an Honorary Doctorate from Drexel University.

Carl Safina is named Inaugural Andrew W. Mellon Distinguished Fellow in Environmental Studies by Colby College.

Rutgers University presents Carl Safina with a Distinguished Alumni Award in Biology.

Fellows, Dr. Demian Chapman & Debra Abercrombie hold Shark Fin Identification Workshops in Honduras, Belize, Costa Rica, Senegal, Sri Lanka, Hong Kong, USA, Thailand, United Arab Emirates, Yemen, Egypt, Oman, Brazil and Fiji.

We are recognized by Intelligent Philanthropy for our commitment to transparency.

2012

The View from Lazy Point, A Natural Year in an Unnatural World wins 2012 Orion Magazine Book Award.

We complete 10 episodes of Saving the Ocean with Carl Safina for PBS television.

We release, "MERCURY: Sources in the Environment, Health Effects and Politics."

A Sea in Flames: The Deepwater Horizon Oil Blowout is named to Top Ten List by the Project on Government Oversight.

Carl Safina receives Ocean Hero Award from *Diver* magazine.

2011

Carl Safina's fifth book, *The View from Lazy Point; A Natural Year in an Unnatural World*, releases on January 4, 2011, to rave reviews.

Carl Safina's sixth book, *A Sea in Flames; The Deepwater Horizon Oil Blowout*, releases on April 19, 2011, to excellent reviews.

Both books are selected for The New York Times Book Review's "Editor's Choice."

Carl Safina wins James Beard Award for Journalism.

Carl Safina is nominated for the 2012 Indianapolis Prize.

Carl Safina is named among "Twenty-Five Visionaries Who Are Changing the World" by Utne Reader.

First two episodes of Saving the Ocean with Carl Safina air on more than 100 PBS television stations across the U.S.

2010

Carl Safina's first children's book *Nina Delmar: The Great Whale Rescue* releases in paperback in January.

Carl Safina testifies before Congress regarding the Deepwater Horizon Gulf of Mexico oil well blowout.

We establish partnership with Whole Foods Market to provide seafood rankings in stores.

We launch collaboration with The Gelfond Fund for Mercury Related Research & Outreach at Stony Brook University.

Carl Safina becomes co-chair of The Alan Alda Center for Communicating Science at Stony Brook University.

Carl Safina wins Sylvia Earle Award presented at the Blue Ocean Film Festival.

Carl Safina wins Guggenheim Fellowship in Natural Sciences Science Writing.

Carl Safina wins Lifetime Achievement Award from the International Wildlife Film Festival.

MILESTONES AND FIRSTS

2009

The New York Times publishes Carl Safina's op-ed "Darwinism Must Die So That Evolution May Live."

FishPhone App receives a "Best in Green" award by Ideal Bite, a green-living website.

We launch Green Chefs/Blue Ocean program, an online sustainable seafood course for chefs and culinary students.

2008

Environmental Defense Fund names Carl Safina's first book, *Song for the Blue Ocean; Encounters Along the World's Coasts and Beneath the Seas* "One of 12 Most Influential Environmental Books of All Time."

We distribute our 2.5 millionth ocean-friendly seafood guide.

2007

We form the Friendship Collaborative with Ken Wilson, Senior Pastor of Vineyard Churches of Ann Arbor, MI, to further dialogue between scientists and evangelical Christian leaders.

Carl Safina and producer John Angier develop new PBS television series, *Saving the Ocean with Carl Safina*.

Blue Ocean Institute partners with Stony Brook University's School of Marine and Atmospheric Sciences to collaborate science communication.

2006

The New York Times Book Review selects Carl Safina's book *Voyage of the Turtle* as an "Editors' Choice."

Carl Safina gives invited talk at the World Economic Forum in Davos, Switzerland on the status and future of fisheries and the oceans.

U.S. poet-laureate Billy Collins helps launch Blue Ocean Institute's Sea Stories literary project with his poem "Coastline."

Carl Safina awarded George B. Rabb Medal from Chicago Zoological Society's Brookfield Zoo.

2005

Carl Safina receives an Honorary Doctorate from State University of New York.

Carl Safina co-authors "U.S. Ocean Fish Recovery; Staying the Course," an op-ed published in *Science* magazine.

2004

Mercédès Lee gives an invited talk at the World Bank, bringing global attention to ocean conservation and the importance of seafood sustainability as a food security concern.

2003

MacArthur fellow Dr. Carl Safina and Mercédès Lee launch the Blue Ocean Institute (now The Safina Center).

Carrie Brownstein, Mercédès Lee and Carl Safina's publish the first fully transparent methodology for sustainable seafood ranking, "Harnessing Consumer Power for Ocean Conservation" in *Conservation Magazine*.

Carl Safina's book *Eye of the Albatross; Visions of Hope and Survival* receives John Burroughs Writer's Medal. It also wins "Year's Best Book for Communicating Science" by National Academies of Science, Medicine and Technology.

Carl Safina writes the foreword for a new edition of *The Sea Around Us* by Rachel Carson.

Carl Safina receives Rutgers University George H. Cook Distinguished Alumnus Award as Most Distinguished Alumnus in 50-year history of the Ecology and Evolution Graduate Program.



▲ On "The Omega Principle" book tour at Patagonia Ballard in California. Photo courtesy: Paul Greenberg.

PRAISE FOR CARL AND THE SAFINA CENTER

"Your book Eye of the Albatross changed my life. So exquisitely written—it brought tears to my eyes and really struck me to my core and I now want to make a difference." —Katherine B.

"When I was an undergraduate, your work absolutely opened my eyes to the power of books to communicate ideas and to help people know and care about the oceans and the world around us. So, I guess, you're partly to thank/blame(!) for my book Eye of the Shoal being written." —Helen Scales, PhD, writer and marine biologist

"Your book Beyond Words changed my life. It totally changed my perspectives of the world. I laughed, cried, and even wept my way through the chapters. It was wonderful." —Charity

"Thank you for the wonderfully insightful, deeply personal writings you have gifted to the world." —Gregory

"Beyond Words left me in constant awe. So many authors take hundreds of pages to say a point or two; your work made it absolutely clear how deeply involved in this research you've been and how many different experiences and data points you've collected. As a reader, that was incredibly inspiring Thank you." —Jenny H.

"Thanks for your recent essay on the importance of conserving species. I forwarded it to my 70 or so US Fish and Wildlife Service employees under the header 'Why we do what we do.' During these muddy times, it is refreshing and inspiring to read clear-eyed statements of truth." —Name withheld



▲ Carl Safina with, from left: (back row) Mayra Marino, Katarzyna Nowak, Ian Urbina, Paul Greenberg, (front row) Erica Cirino and Kate Thompson. Photo courtesy: The Safina Center.

"Carl—proud to know you, and the world is lucky to have you. The extinction piece (battle cry) is just magnificent. It's the full Carl gift basket—sheer intellect, breadth of knowledge, moral outrage, and courage, and exquisitely sensitive and deep love of nature." —Vicki Croke, NPR writer and author of Elephant Company.

"I never met Gandhi, King, Mandela, your friend Matthiessen, Wilson, or Abbey, but they have shaped my view of the world and direction in life. I think you are that kind of author. I consider you one of the greatest writers and thinkers of our time, and you have had such a profound role in shaping my career path." —Joseph

"Although I completed all the requirements for entry to medical school, during my senior year I came across Beyond Words. It was the first time I questioned my career path. Your stories opened my eyes and incited a desire to work with animals." —Raquel S.

MAKING WAVES

We don't just write, we are written about. Here is a sampling of articles that featured or mentioned our work this year, followed by our own writing, speaking, shows, and appearances:

Media Coverage of Our Work

Fishy fish pills. Irineo Cabrerros. *Slate*. August 2, 2018.

Page-turners for year-long learners. Clara Thaysen. *The Varsity*. July 10, 2018.

Carl Safina in Italia per Premio Merck. *Bresciaoggi*. July 10, 2018.

"The Omega Principle" author Paul Greenberg on the Next Fresh Air. Mark Prell. *KRCB*. July 9, 2018.

What's on MPR News? 7/9/18. Bob Collins. *MPR News*. July 9, 2018.

Per un umanesimo animale. Nicola Gardini. *Il Sole 24 Ore*. July 9, 2018.

Ciascun animale è un individuo: Le bestie pensano, amano, soffrono. Carl Safina. *Corriere Della Sera*. July 7, 2018.

Vineyard bookshelf: *The Omega Principle*. Steve Donoghue. *The Vineyard Gazette*. July 5, 2018.

Feathered cousins: Human connections to raptors. Elizabeth Stewart-Severy. *Aspen Public Radio*. June 29, 2018.

Variability in Peru fishery, PR hit for krill continue to tinge omega-3s sustainability picture. Hank Schultz. *NutrallIngredients-USA*. June 19, 2018.

Are omega-3s good for your brain? Markham Heid. *TIME Health*. June 20, 2018.

Premio Letterario Merck. Carl Safina vince la 16ª edizione. *Quotidiano Sanità*. June 15, 2018.

AP Investigation: Buying local fish? It may not be true. *7 News Boston*. June 14, 2018.

Anthony Bourdain taught us the power of sharing a meal and leaving biases at the door. David Festa. *Environmental Defense Fund Blog*. June 13, 2018.

Pink, SeaWorld battle over killer whale captivity. Kory Grow. *Rolling Stone*. June 13, 2018.

From pigeons to seabirds and sharks, Carl Safina shares the stories of natural world. Sarah Bowman. *Indy Star*. June 9, 2018.

Indianapolis Prize: Carl Safina. John Stehr. *WTHR*. May 30, 2018.

Walk with us, Ryan Zinke, and see the folly in what you've done. Kim Heacox. *The Washington Post*. May 23, 2018.

Saving the world with metaphor: Toward an ecological poetics. Robert D. Newman. *Los Angeles Review of Books*. May 23, 2018.

Letters: Two views on wind farm debate by Beth Young. *East End Beacon*. May 22, 2018.

Critics dominate at East Hampton town hearing on wind farm. Michael Wright. *27East.com*. May 22, 2018.

A divided community speaks at wind farm hearing. Beth Young. *East End Beacon*. May 20, 2018.

The dirty secret of Taiwan's fishing industry. James X. Morris. *The Diplomat*. May 18, 2018.

Wind farm proposal draws supporters and critics in East Hampton. Vera Chinese. *Newsday*. May 17, 2018.

Plastic bag laws winning over customers. Robyn Bellospirito. *Huntington Now*. May 3, 2018.

Weakening Wilderness Act is antithetical to principle of landmark law. Michael Dax. *Mountain Journal*. April 12, 2018.

Environmental writer Paul Greenberg to speak about 'The Omega Principle.' *Yale News*. March 27, 2018.

Ben Mirin beatboxes with bird calls. Daniel A. Gross. *PRI*. March 22, 2018.

The art of Noise by Studio 360. *Slate*. March 22, 2018.

Laysan albatross nesting season well underway. Jessica Else. *The Garden Island*. March 10, 2018.

Commentary: US changes its mind on trophy hunting again. Adam Cruise. *Sunday Times*. March 8, 2018.

Book deals, week of February 26, 2018: Safina closes double at Macmillan. Rachel Deahl. *Publishers Weekly*. February 23, 2018.

DJ and ornithologists create wildlife music game. Erik Hoffner. *Mongabay*. February 21, 2018.

Scientists, wildlife DJ, hip-hop archivists create 'Beast Box.' Hugh Powell. *Cornell Chronicle*. February 20, 2018.

SoMAS professors condemn offshore drilling at NYS Assembly hearing. Rebecca Liebson. *The Statesman*. February 18, 2018.

Long Islanders voice opposition to Trump's offshore drilling plan. Mark Harrington. *Newsday*. February 14, 2018.

Spotlight on women in science. *Scientific American*. February 14, 2018.

Philadelphia's new spot for fresh fish is...in a school? Avi Wolfman-Arent. *WHYY*. February 12, 2018.

Finalists for Indianapolis Prize 2018 conservation award revealed. WTHR.com Staff. *WTHR*. February 6, 2018.

Monkeys and musk ox – Indy Zoo names six finalists for leading animal conservation award. Sarah Bowman. *Indy Times*. February 6, 2018.

Guest opinion: On the ocean. Chelsea Huddleston. *Dana Point Times*. February 2, 2018.

Feed innovation: The multi-billion dollar effort to drive aquaculture growth. Matthew Craze. *Undercurrent News*. January 29, 2018.

Return of the moli. Jessica Else. *The Garden Island*. January 25, 2018.

Why humans need to rethink their place in the animal kingdom. Simon Barnes. *New Statesman*. January 7, 2018.

Trump's move to allow more offshore drilling is bad news for sportsmen. Monte Burke. *Forbes*. January 7, 2018.

Gourmet secrets: A fish called bhetki. Karen Anand. *Hindustan Times*. January 6, 2018.

CARL SAFINA – Books

Beyond Words; What Animals Think and Feel. 12 international translations: China, Korea, Poland, Lithuania, France, Germany (print and audio), Italy, Portugal, Romania, Russia, Spain and the UK.

Beyond Words; What Animals Think and Feel. Adaptation for young readers, to come out as a two-book series.

CARL SAFINA - Media

Trump's offshore drilling plan is simply a terrible idea. *The Hill*. March 6, 2018.

The power forest. *EcoWatch*. January 11, 2018.

CARL SAFINA – Scientific letters

Earle, S., Safina, C., et al. Ocean deoxygenation: Time for action. *Science*. March 30, 2018.

CARL SAFINA – Radio Interviews

KTEP. ACT Radio: Carl Safina. July 8, 2018.

CARL SAFINA – Lectures, Keynotes, and Public Talks

- “Beyond Words” lecture. Organization of Biological Field Stations. Miami, FL.
- Award recipient. Veterinarians International Wild at Heart Benefit. Bridgehampton, NY.
- Award recipient. Premio Merck Literary Prize. Rome, Italy.
- Speaker: The Genius of Animals. 14th Annual Aspen Ideas Festival. Aspen, CO.
- Science Throwdown: Sea vs. Land. American Museum of Natural History, New York, NY.
- Award recipient. Livingston Ripley Waterfowl Conservancy Benefit Litchfield, CT.
- Speaker. Parley Talks: Materials revolution. Explorers Club, New York, NY.
- Speaker. Screening of “Bluefin.” Explorers Club, New York, NY.
- Speaker and marcher. March for the Ocean (M4O). Washington, DC.
- Meet and greet and book signing at “Cooks, Books and Corks.” Times Beacon Record Fundraiser. East Setauket, NY.
- Keynote. 3rd Dairy Cattle Welfare Symposium. Scottsdale, AZ.
- Earth Day discussion after screening of “Mission Blue” at the Hamptons Take 2 Documentary Film Festival. Bay Street Theatre, Sag Harbor, NY.
- Pathways to Planetary Health Symposium. Garrison Institute, Garrison, NY.
- “Beyond Words” lecture. Taft School, Watertown, CT.
- Talk with Adam Nicolson, author of “The Seabird’s Cry.” Canio’s Books, Sag Harbor, NY.
- Meet the author. Friends of Flax Pond, Stony Brook, NY.
- “Beyond Words” lecture. Stony Brook University. Stony Brook, NY.
- Talk with Adam Nicolson, author of “The Seabird’s Cry.” 192 Books, New York, NY.

Safina Center Blogs

- Little Goatherd Mountain. Katarzyna Nowak. July 9, 2018.
- Moli friends in Monterey: The story of Makana and Alika. Hob Osterlund. June 28, 2018.
- These elusive alpinists drink at night – Part I. Katarzyna Nowak. June 21, 2018.
- Reindeer, ice and snow. Paul Greenberg. June 20, 2018.
- Waves of beauty and pain: A look at plastic pollution’s toll on marine wildlife. Erica Cirino. June 18, 2018.
- The (Arctic) Circle of Life. Paul Greenberg. June 1, 2018.
- Bears and Ice. Paul Greenberg. May 30, 2018.
- Fish on Fridays. Paul Greenberg. May 21, 2018.
- A science symposium—for women. Katarzyna Nowak. May 1, 2018.
- Trash art with kids: A gateway to understanding plastic pollution. Erica Cirino. April 27, 2018.
- Of mice and moli. Hob Osterlund. April 21, 2018.
- Bluefin tuna regs now on the table: Help protect these amazing fish. Shelley Dearhart (former Safina Center Sustainable Seafood Program Director). April 19, 2018.
- Abused and abandoned primates: We must give them a voice. Robin Huffman. April 19, 2018.
- A deep dive into uncharted Antarctic waters reveals the need for conservation. Ian Urbina. April 5, 2018.
- Goodbye plastic Easter eggs. Kate Thompson. March 15, 2018.

- Oceans in balance. Shawn Heinrichs (Safina Center Fellow Alum). March 10, 2018.
- African apes in need are a part of conservation art. Robin Huffman. March 9, 2018.
- Scientific illustration and inspiration: Creating a field guide of bones. Kate Thompson. March 7, 2018.
- Plastic pollution: A message from nature, an opportunity for art. Erica Cirino. March 1, 2018.
- Why we do what we do: The sweet success story of stormy and radar. Hob Osterlund. February 23, 2018.
- Co-existence with giants. Katarzyna Nowak. February 7, 2018.
- Long Island is now a new island, thanks to fewer plastic bags. Erica Cirino. February 5, 2018.
- A bumper crop o’truss. Hob Osterlund. January 11, 2018.
- Lox redux. Paul Greenberg. January 10, 2018.

PAUL GREENBERG – Book

The Omega Principle: Seafood and the Quest for a Long Life and a Healthier Planet. Penguin Random House. July 10, 2018.

PAUL GREENBERG – Media

- After a century’s absence, a glimmer of possibility for a native New York salmon. *Food and Environment Reporting Network.* August 29, 2018.
- Where have all the weakfish gone? *Vineyard Gazette.* August 16, 2018.
- How to get America on the Mediterranean Diet. *The New York Times.* July 19, 2018.
- This mine threatens America’s largest wild salmon run. *Mother Jones.* June 27, 2018.
- When ‘local’ seafood is anything but. *Medium.com.* June 14, 2018.
- The secretly sexy organism that might just save the planet. *Patagonia Provisions.* Spring 2018.

PAUL GREENBERG – Radio

- Omega-3s and sustainability. *WCAI-Woods Hole.* July 16, 2018.
- The science – and environmental hazards – behind fish oil supplements. *Fresh Air/NPR.* July 9, 2018.

PAUL GREENBERG – Talks and Book Tour

- “The Omega Principle” Book Tour: New York, NY; Washington, DC; Seattle, WA; San Francisco, CA; Palo Alto, CA; Boston, MA; Coral Gables, FL; Vineyard Haven, MA.
- “Sustainability of Seafood in Asia” lecture. Nippon Foundation, Tokyo, Japan.
- “The Omega Principle” lecture. Yale U. School of Forestry. New Haven, CT.
- “The Omega Principle” lecture. The Angler’s Club of New York. New York, NY.
- Lectures on ocean books. National Geographic/Lindblad Expeditions’ cruise to Svalbard, Norway.

KATARZYNA NOWAK – Scientific Work

- Helped set up “Request a Woman Scientist” Database online.
- Led “Mountain Goat Molting Project” with Joel Berger in the Yukon.

KATARZYNA NOWAK – Presentation

- Presenter. 2nd Women in Science Symposium at Colorado State University. Fort Collins, CO.

KATARZYNA NOWAK – Media

Bitter fruits. *The American Scholar*. March 27, 2018.

How to find a woman scientist. *Scientific American*. February 12, 2018.

Commentary: Respecting our elders should never grow old. *The Salt Lake Tribune*. February 3, 2018.

HOB OSTERLUND – Conservation Work

Cornell Lab of Ornithology “TrossCam.”

Photography of Kauai’s albatrosses and other native wildlife. Kauai Albatross Network.

HOB OSTERLUND – Public Talks

Regular speaker: “Holy Moli.” Kilauea Point National Wildlife Refuge. Kauai, Hawaii.

HOB OSTERLUND – Radio

BirdCallsRadio and Podcast.

BEN MIRIN – Media

Created BeastBox, online educational music game, with the Cornell Lab of Ornithology.

Online and in-person workshops with teachers to develop BeastBox into music-based curriculums for middle school classrooms.

BEN MIRIN – Conservation Work

Took graduate courses in ornithology and animal behavior through Cornell University and the Shoals Marine Laboratory.

Honduras, recording endangered frog noises.

Catalina State Park, Sonoran Desert, recorded wildlife sounds.

The Philippines, recording reef sounds for a virtual reality film.

Galapagos Islands, recording finch and mockingbird calls.

IAN URBINA – Conservation Work

International trips and research on fisheries and ocean crime.

IAN URBINA – Talks

“Palau vs. the Poachers” lecture. Parley Talks. Explorers Club, New York, NY.

ROBIN HUFFMAN – Conservation Work

Volunteer at Ape Action Africa primate sanctuary in Cameroon.

ROBIN HUFFMAN – Artworks

“Ayla” painting featured in David Shepherd Wildlife Foundation’s Wildlife Artist of the Year Exhibit. London, UK.

ERIC GILMAN – Presentations

Bycatch Working Group, Inter-American Tropical Tuna Commission. La Jolla, CA.

UN Food and Agriculture Organization Regional Office for Asia and the Pacific Luncheon Seminar. Bangkok, Thailand.

Seafood Industry Workshop: Bycatch Assessment and Management for Longline Fisheries. Bangkok, Thailand.

ERICA CIRINO – Media

Dozens of stories for: *Proto*, *Hakai Magazine*, *American Bird Conservancy Magazine*, *National Geographic Blog*, *Oceans Deeply*, *Scientific American*, *The Atlantic*, *The Revelator*, *VICE*, *Santa Cruz Waves* and others

Hawaii to ban certain sunscreens harmful to coral reefs. Live segment. BBC World News Television.

ERICA CIRINO – Lectures, Public Talks and Art Shows and Workshops

Dozens of lectures on plastic pollution, science and solutions across the United States. Art show at East Northport Public Library and Old Town Arts and Crafts Guild, Long Island, NY.

“Trashed Nests, Poisoned Bellies and Entangled Wings: A Bird’s Eye View of Plastic Pollution” lecture. Three lectures to National Audubon Society chapters across Long Island, New York.

“Tales of a Wildlife Rehabilitator” lecture. Bayport - Blue Point Public Library, Bayport - Blue Point, NY.

“Night of the Living Museum” plastic pollution art workshop and lecture. Cold Spring Harbor High School, Cold Spring Harbor, NY.

International Ocean Film Festival speaker. San Francisco, CA.

Children’s plastic pollution art workshops. Old Town Arts and Crafts Guild and South Huntington School District, Long Island, NY.

KATE THOMPSON – Conservation Work and Accomplishments

Continued preparation for field work in Madagascar studying illegal hunting and consumption of native animals.

Continued infrastructure improvements on the Amani Children’s Home in Tanzania, added to library, and prepared for future research projects.

A MESSAGE FROM SAFINA CENTER CHAIRMAN, B. ERIC GRAHAM

“With planet Earth now in the midst of a biodiversity crisis, the natural world and its beings are at great risk of being lost forever. The Safina Center not only recognizes the factors contributing to species loss—climate change, habitat loss, pollution, exploitation and more—but takes and encourages you to take serious actions to address them with compassion and love for all beings. No matter how many challenges nature is up against, the Safina Center holds onto hope that its beauty will inspire you to keep moving forward in the face of pain.”



◀ Photo courtesy: B. Eric Graham.

About Eric: Eric is an entrepreneur who is committed to bringing energy efficiency and renewable energy systems to market. Eric has launched and helped many leading clean energy tech companies bring their technologies to market including EnerNOC, Fraunhofer CSE, Next Step Living and Building 36/Alarm.com.

The Safina Center Summary Statement on Financial Position

May 31, 2018

Assets

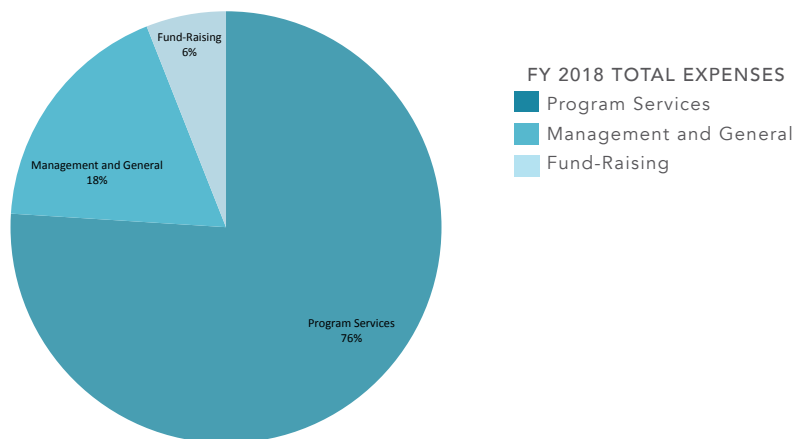
Cash and Interest-Bearing Deposits	\$415,804
Investments	\$581,226
Contributions and Pledges Receivable	\$100,084
Other Assets	\$465,286
TOTAL ASSETS	\$1,562,400

Liabilities

Accrued Expenses	\$26,305
Fiscal Sponsorship	\$4,547
TOTAL LIABILITIES	\$30,852

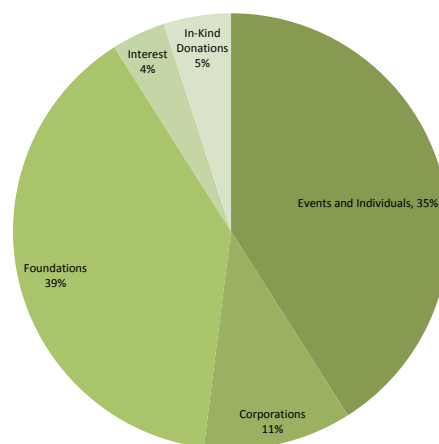
Net Assets

Unrestricted	\$1,154,638
Temporarily Restricted	\$296,910
Permanently Restricted	\$80,000
Total Net Assets	\$1,531,548
TOTAL LIABILITIES AND NET ASSETS	\$1,562,400

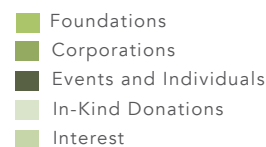


The Safina Center Summary Statement of Activities

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
PUBLIC SUPPORT AND REVENUE:				
Public support:				
Contributions	320,722	241,610	-	562,332
Government Grant	5,000	-	-	5,000
Revenue	103,756	-	2,148	105,904
Net Assets Released From Restrictions	163,822	(160,674)	(2,148)	-
TOTAL PUBLIC SUPPORT & REVENUE	592,300	80,936	-	673,236
EXPENSES:				
Program Services	327,266	-	-	327,266
Supporting Services:				
Management and General	77,230	-	-	77,230
Fund-raising	25,340	-	-	25,340
Total Supporting Services	102,570	-	-	102,570
TOTAL EXPENSES	429,836	-	-	429,836
Increase In Net Assets Before Other Increases	162,464	80,936	-	243,400
Other Increases:				
Unrealized Gain on Investments	29,397	-	-	29,397
Increase in Net Assets	191,861	80,936	-	272,797
Net Assets, Beginning of Year:	962,777	215,974	80,000	1,258,751
Net Assets, End of Year	\$1,154,638	\$296,910	\$80,000	\$1,531,548



FY 2018 OPERATING REVENUE



The Safina Center's complete audited financial statement may be obtained by writing to:
 Mayra Mariño, Business Manager
 The Safina Center
 80 North Country Road
 Setauket, NY 11733

THANK YOU, OUR GENEROUS SUPPORTERS!

Please accept our profound gratitude. Your financial contributions helped us accomplish an incredible depth and quality of work in 2018. Again, we thank you for all of your ongoing support!

Up to \$1,000

Richard Abbott
Judith Abrams
Jane Alexander
Eric & Nancy Badkin Antlitz
Averill Babson
Marilyn and John Paul Badkin
Janice Badkin Elze
Nancy Ann Balto
Duncan Beck
Judy Bergsma
Kirk and Patty Betteley
Jackie Black and Melanie Stiasny
Barbara Block
Elise Boeger
Waveney and Malcolm Bowman
Carrie Brownstein
Chris Brunch
Crystal Bunch
Tom and Lee Caggiano
Chris Carrieri
David Chase
Sarah Chasis
Pamela Childers
Jim Chubb
John Colbert
"Chubby Raccoon"
John M. and Linda Clark
Marlene Cole
David and Margaret Conover
Scott Cunningham
Eugenia Davis
John and Judy Day
Nancy and John Debellas
Sandra and Peter Desimone
Robert Dezafrá
Susan Dierker
Robert DiGiovanni
Patrice Domeischel
Anne Doubilet
John Durante
Sylvia Earle
Ruth and Peter Emblin
Robert and Linda Fein
Victoria Fishlock
The Freedom Rebellion
Francesca Freedman
Sandra and Rav Freidel
Ernie and Sophie French
Blake Gendron
Alex Gilchrist
Marshall Gilchrist

Eric Gilman
Arthur Gingert
Michael Gochfeld and Joanna Burger
Paula Gordon and Bill Russell
April Gornik
Jesse Grantham
John Grim and Mary Tucker
Nina Griswold
Lee Gruzen
Amy Gulick
Chuya Guo
Paul Hagen
Rose Marie Harper
Ann and Wayne Haskell
Hasselback Family
Marea Eleni Hatziolos
Eric Hemion
Mary Heeney and Louis Dietz
Deborah Heuckeroth
Maureen Hinkle
Steven and Lise Hintze
Bryan Horan
Randy Host
Lyla Hunt
Heidi Hutner
Nancy Hwa
"J K & A"
Rainer Judd
Lauren Kahn
Jeff and Maria Kelber
Kenneth Stein Violins
Joyce King
Dr. Adel B. Korkor
Carol Kramer
Martina Leonard
Jeffrey Levinton
Thomas Lovejoy
Robert Lugibihl
Pamela Lynch
Susan Magdanz
Michael Marino
John Martin
Debi Martini
Mike and Jodi Maas
Molly Suzanne Matlock
Mayanoki LLC
Anne McElroy
David and Marilyn McLaughlin
Kenneth McPartland
Scott McPhee
Steven Mentz
Josephine Merck
Leslie Meredith

Joel Milton
Peter Minnick
Ben Mirin
Joan Miyazaki and Jeffrey Levinton
Jaonlee Montefusco
Joan Mullin
Tom and Sally Murphy
Jean Naggar
Gail Olson
Fred Osborn
Hob Osterlund
Edward and Seliesa Pembleton
Chuck Perretti
Doug Perrine
Jane Pratt
Patricia Rathmann
Fran Recht
Andrew Reich
Robert Reuter
Joel Reynolds
Luanne Rice
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► Killer whales in Southeast Alaska. Carl visited the whales as part of research for his new book on how animals learn to be animals. Photo: Carl Safina.



4 WAYS TO CONTRIBUTE TO THE SAFINA CENTER

“Direct compassion and heart-filled work toward the living creatures of this planet.” —DR. ERIC GILCHRIST

In 2011, we established an endowment fund to honor the memory of our dear friend and board member, Dr. Eric Gilchrist. His steady support for The Safina Center has continued beyond his passing through a bequest that now serves as the seed for our endowment.

His generosity continues to inspire us.

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by phone: 631-675-1984

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The Safina Center is a 501(c) 3 nonprofit organization based on Long Island, NY



The Safina Center

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Author and scientist Dr. Carl Safina founded The Safina Center in 2003. The Safina Center is a 501(c)3 nonprofit organization. Dr. Safina is also affiliated with Stony Brook University’s School of Marine and Atmospheric Sciences.

PETER AND KEN STEIN: RE-GROWING AN OYSTER CULTURE IN NYC

by Erica Cirino

"It's not just about growing a few oysters. Oyster reefs were major ecological living structures until they started being destroyed in the 1800s, and they are among the most devastated habitats worldwide today. Perhaps someday farmed oysters will be successfully used to rebuild reefs. Meanwhile, anything and anyone who makes oysters more viable and more abundant, as the Steins do—I'm all for. Farmed oysters (and other farmed bivalves such as mussels) are the best animals that we can eat. They're cruelty-free, they're nutrient rich, and they improve water quality. Bravo Ken and Peter!" – Carl Safina

"I love the water. Carl often speaks about how the average person's mental grasp for and understanding of the natural world ends at the water line. I think that's what makes it so fascinating and interesting. Carl has a unique talent for illuminating that for people."

– Peter Stein

NYC's seafood culture was built on oysters: People sold oysters grown in New York Harbor on the streets as treats and in restaurants as fine delicacies. But by the time the 20th century rolled around, waters in and around the city were too polluted to support the industry. The oyster beds were closed.

Today, New York's waters are getting cleaner and oysters are making a comeback. Longtime Safina Center supporters Peter and Ken Stein, a father and son duo who work with the Goldie Anna Charitable Trust, have recently joined in the movement to return the city to its seafood roots by growing oysters nearby, off the East End of Long Island as Peeko Oysters, part of their seafood corporation, Stein Seafoods, LLC. I spoke to Peter, who founded the business in 2016, about what it's like to be a New York oysterman today.

Erica Cirino: Why did you start Peeko Oysters?

Peter Stein: I was interested in where our food comes from and as I was in between jobs at the time, I started researching. I learned about aquaponics, hydroponics, aeroponics...all very exciting stuff going on for how we produce food and feed people healthfully. In that research I learned more about aquaculture and as I had a lifelong connection to the North Fork of Long Island, I started asking people in that community about aquaculture. Through a winding road of questions, conversations and introductions, I ended up purchasing some bottomland in Little Peconic Bay, and from there I started to assemble my farm and my business.

We provide farm tours for people to learn about the oyster farming process, shuck oysters at events where we get to interact with the public to tell them about local and sustainable seafood, and partner with chefs to produce events where locally sourced food is featured and highlighted. Further, the industry as a whole is creating "green" jobs. I would be remiss if I didn't add that a driving motivation to start Stein Seafoods LLC is that I can produce



▲ Peter (left) and his father Ken, deliver Peeko oysters throughout New York City. Photo: Alexandra Shapiro.

delicious food that also happens to be extremely beneficial to the health of our waterways.

EC: What are some of the benefits of oyster farming?

PS: Farming oysters helps to clean the bays, creates sanctuaries for juvenile fish, and provides a platform for educating people about sustainable and traceable seafood.

EC: Oyster farming is having a resurgence in New York. What makes your oysters different than other Long Island oysters?

PS: Peekos are fantastic oysters! We have received highly complimentary reviews from some of the top chefs in NYC. We deliver directly to restaurants, which makes the chain of custody simple and direct—whereas a lot of seafood, even "local" seafood, changes hands several times before making its way to a restaurant or consumer. We are committed to only bringing 3-inch oysters to market, whereas you will see many other growers bringing small, sub-3-inch oysters to market.

EC: What's in store for the future?

PS: We will soon be expanding to grow additional aquacultured species such as scallops and kelp, as well as a shellfish processing center on a commercial dock. I think there's a lot that can be done with oysters and aquaculture, though it will take some patient investment, hard work and capital.



▲ Peter Stein. Photo: Lonnie Duka.



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80 North Country Road
Setauket, NY 11733
www.safinacenter.org
admin@safinacenter.org