

WRITING, WHEREVER YOU ARE FOR LUANNE RICE, NATURE, AND PLACE ARE SOURCES OF JOY, INSPIRATION, SORROW

by Erica Cirino, Writer, Artist and Social Media Coordinator



▲ Winter birding in Rhode Island Photo: Luanne Rice

"I was instantly stunned, captivated, and enraptured by Carl Safina's writing, his love and deep knowledge of nature, his sense of place, how he knows that particular patch of earth (and sea) down to his bones. He writes with a clear eye and tender heart for the place he obviously loves so well. If you traveled due north from Lazy Point, across Gardiner's Bay and Long Island Sound, you'd reach Old Lyme, Connecticut and the beach where I grew up, and I was struck by the similarity of ecology." – Luanne Rice

There are many writers who fuse a personal familiarity with, and love for, nature with captivating fictional plot lines exploring the human condition. But there's just one who has done so thirty-four times, across twenty-four languages, and the Safina Center is lucky enough to call her a Creative Affiliate. Meet, Luanne Rice.

A native of Old Lyme, Connecticut, Luanne was captivated by the coast of the Long Island Sound from a young age. In late 1960s she remembers filming pollution in the Sound-oil slicks, dead fish, toxic waste pipes, ships' bilge, and more-for a middle-school project. In college, Luanne sailed to the Caribbean to study humpback whales. Later, as a young writer, she published her first story about the Sound's crabbing culture.



▲ Luanne has volunteered in the Southern California desert, supplying water to people crossing the border during the hot summer months. Photo: Luanne Rice

"I grew up loving nature; I can't remember a time when it wasn't my greatest joy, inspiration, and sometimes sorrow," Luanne says.

Perhaps that is why she finds the living world an important element to include in her books, which often focus on broken families, immigration, emotional abuse and other difficult topics. Nature contains multitudes, and, being a part of nature, so do we as humans.

"I write a lot about families, especially sisters," says Luanne. "Dark secrets inside pretty houses, ordinary people on the edge of something completely unexpected."



▲ View from Luanne's desk, just past sunset. Photo: Luanne Rice

Luanne's characters often struggle with complex mental health issues. For example, in one of Luanne's recent young-adult novels, The Beautiful Lost (2017), the young female main character, Maia, struggles with depression. Luanne says Maia came from her own life, as the novelist too has dealt with depression-to such an extent that she had to drop out of college to cope with it. Luanne recently worked with McLean Hospital's "Deconstructing Stigma" project, in which she told her story, along with many others, to help those with mental health disorders feel less alone.

Woven in with the themes of traumas and struggle is nature-something else all people have in common. In The Beautiful Lost, Luanne slips in a subtle homage to Carl Safina . Luanne's young character Maia runs away to find her mother—a whale researcher on the Saguenay Fjord in Quebec. On her way, she finds refuge in libraries, and in one of them she discovers Carl's Eye of the Albatross: Visions of Hope and Survival (2002). Maia dives into Carl's book-she loves learning about Amelia, the albatross at the center of his book, and how adult albatrosses fly thousands of miles to feed their chicks.

"I love Carl's compassion," Luanne says. "In so many of his books he connects humans and creatures-Beyond Words: What Animals Think and Feel is the perfect example. I feel very happy to introduce my readers—those who haven't already read him—to his extraordinary work."

When on the road giving book tours, Luanne says she makes it a point to connect to other people through humanity's collective love of nature.



▲ The marsh outside Luanne's Connecticut home, which is inhabited and visited by a diverse number of different wildlife species all throughout the year. Luanne says some frequent fliers include red-winged blackbirds, great blue herons and osprey, in addition to white-tailed deer, a bobcat, blue crabs and striped bass (in river, past the cove). Photo: Luanne Rice



▲ Emelina and Orion. Photo: Luanne Rice

"I find that no matter where I go, or whatever demographic fills the audience, everyone relates to specifics to their own childhood memories of wild places," says Luanne. "To the natural beauty around them. I believe—or at least I hope—it encourages a desire to protect the environment."

Luanne spends much time writing, often at home on the Connecticut coast, overlooking a marsh "both serene and filled with activity," thanks to the presence of "ospreys nesting on a platform in the cove, redwinged blackbirds clinging to tall grasses, swaying in the breeze, and, in September, the hundreds of thousands of tree swallows staging on Goose Island for their migration south."

Luanne's writing assistants are four indoor cats: Emelina, Orion, Ivy and Patrick. They like to sleep in baskets, on her desk or on top of piles of manuscripts. "When I hear them chattering I know hummingbirds are at the feeders or turkeys are crossing the terrace," Luanne says.

Luanne's next book, an adult novel titled Last Day, is due out in early 2020. In it, Luanne tells the story of a murdered young mother and how the mother's death affects both family and community. She says her new book is inspired in part by a crime that touched her own life, and is set, like many of her books, in Hubbard's Point, a fictional beach town on the Connecticut shoreline. To learn more about Luanne's coming novel, Last Day, and preorder your copy, visit: https://www.amazon.com/dp/1542016355

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FRONT COVER PHOTO Carl Safina with hawksbill turtle off Belize. Photo: Ana Sofia Guerra

THIS PAGE Gray wolf, Yellowstone National Park. Photo: Carl Safina

BACK COVER

(Top) Laysan albatross pair meets after five years at sea. These albatrosses, nicknamed "Mango" and "Kaloakulua," were stars of the 2014 "Tross Cam," which was streamed live online by millions of people around the world. Photo: Hob Osterlund

(Bottom) Safina Center Fellow Katarzyna Nowak inspects the western shores of the Windy Arm of Tagish Lake for mountain goat signs in packrafts loaned by Kokopelli. Photo: Atsushi Sugimoto

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.

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WHO WE ARE, WHAT WE DO, AND WHY

by Dr. Carl Safina, Safina Center Founder & President

The Safina Center is the creative end of all the not-for-profit groups focused on nature and the environment. We are a compact yet mighty think-tank, made up of a small group of hand-picked thought-leaders and opinion shapers.

We are science-oriented and fact-based. But we are not here just to give you the facts. Yes, many of us publish in news journals and appear on news broadcasts. Some of us break new stories to the public, such as Ian Urbina's New York Times work on Asian people abducted into forced slavery on fishing boats. Or Erica Cirino's reporting on the severity of plastic pollution.

But you could get "just the facts" from various news platforms. You wouldn't need a Safina Center. Our work cannot help but be deeply informative, but it is not designed to convey information; it is designed to reach you emotionally, make your skin tingle, make you sad and joyous, make you feel the miracle of the living world and—mainly—move you in love and with empathic concern to help fight for what is at stake as the human population continues to swell and the battles for nature intensify.

We are writers, photographers, film makers, artists; we are witnesses and story-tellers. Everyone who becomes part of The Safina Center is specifically chosen for unique excellence. Other organizations create a job, advertise, receive applications, interview, and hire. We do none of those things. We dial in on people so exceptional that their work brings them to our attention above the crowd. Then, we invite them to join us. That means we are composed only of extraordinary people who can neither be advertised for, nor replaced. Then, we don't tell them what to do; we help them do what they uniquely do. And with our young "Launchpad Fellows," we help exceptional new talent launch what we know will be exceptional careers.

Our work, widely disseminated through mainline publishers and major distributors, consistently wins awards and gets noticed, shared, and used. There are many other very good environmental and conservation organizations. But none of them is like The Safina Center. We are unique. We are an idea. An idea whose time—is now.

That's why you're here.

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

Cal Safin



▲ Carl Safina with scarlet macaw chick in the Tambopota River region of Peru for a coming book on how animals learn to be animals. Photo: Ines Duran



ACHIEVEMENTS OF 2019

SAFINA CENTER FELLOWS – In 2019 Ian Urbina published a book, titled *The Outlaw Ocean: Journeys Across the Last Untamed Frontier*, about his ground-breaking reporting on high seas crime; Paul Greenberg wrote *New York Times* op-eds about how Trump's support of Pebble Mine could destroy Bristol Bay and how to spend less time on our smartphones; Robin Huffman gave presentations about volunteering as a caregiver for abused and orphaned primates in Africa and why she paints their portraits; Katarzyna Nowak improved an online platform designed to give the public access to female scientists; Hob Osterlund debuted an award-winning film about the life of a young Laysan albatross; David Rothenberg premiered his film on making music with Berlin's nightingales; and Ben Mirin won awards for conservation films about endangered frogs and Madagascar's wildlife.

SAFINA CENTER "KALPANA CHAWLA 'LAUNCHPAD' FELLOWS" – Molly Adams advocated for bird-friendly building legislation in New York City; Erica Cirino worked on a book about plastic pollution and her global travels covering the story; Cheyenne Cunningham began a law degree focused in ocean policy; Jessica Perelman won a million-dollar grant to study a potential deep-sea mining area using drones; and Kate Thompson wrapped up her graduate research on wildlife poaching, bushmeat and human health in Madagascar.

CARL SAFINA – Carl finished writing his next book, *Becoming Wild: How Animal Cultures Raise Families, Create Beauty, and Achieve Peace.*

THE SAFINA CENTER – We enhanced the "Take Action" section of our website, making it easier than ever before for you to get involved in important conservation efforts relating to land, freshwater, sea, wildlife, environmental policy, and climate. We're on Facebook, Instagram, Twitter, Tumblr and Medium, and we are constantly sharing the latest environmental news, as well as updates and works produced by our Fellows, Staff and Creative Affiliates.



▲ Killer whale off the coast of Iceland. Photo: Erica Cirino

"KALPANA CHAWLA 'LAUNCHPAD' FELLOWSHIP"

PROGRAM RECAP

Since its creation in 2017, the Safina Center's "Kalpana Chawla 'Launchpad' Fellowship" has kick-started the conservation careers of five highly promising young women demonstrating extraordinary venture-level talent. This fellowship is named after the late Kalpana Chawla, a dynamic nature-loving astronaut who perished aboard the Columbia Space Shuttle in 2003. She took off on an ambitious and change-making path in life, and we seek to honor her memory by inspiring other young women to do the same. Read more about Kalpana on page 25.

In 2019, the Safina Center extended fellowship nominations to:



MOLLY ADAMS BIRDER, ARTIST AND CONSERVATIONIST

Molly strives to connect people to conservation of the natural world through education, outreach and advocacy. Through the Feminist Bird Club, a group friendly to the LGBTQIA+ community, which she founded in 2016, Molly actively promotes diversity and equity in the birding community while fundraising for human rights organizations. She also works as New York City Audubon's Advocacy and Outreach Manager, specifically seeking supporters to help collectively advocate for bird-friendly building legislation at the federal, state and city levels. In 2019, Molly held Feminist Bird Club walks throughout New York City, and also helped develop new chapters of the Feminist Bird Club globally, from the Netherlands to Toronto.

■With piping plover chick. Photo: Jen Kepler



ERICA CIRINO WRITER, ARTIST AND WILDLIFE REHABILITATOR

Erica covers stories about wildlife and the environment, specializing in biology, conservation and policy for popular media outlets such as VICE, Scientific American and The Atlantic. Her writings, photography and mixed media artworks explore the idea of the human connection to nature, especially to wild creatures. In 2019, Erica closed on a deal for a book and audiobook about microplastic pollution and her global expeditions covering the story with Island Press and Dreamscape, respectively. In her book Erica takes readers with her to the Pacific Garbage Patch and beyond to meet the people trying to fully grasp the scope of the problem-and what can be done to help.

■ Sailing the South Pacific to document plastic pollution. Photo: Rasmus Hytting



CHEYENNE CUNNINGHAM OCEAN LAW AND POLICY SPECIALIST

Cheyenne, a recent graduate from Coastal Carolina University, has legal interests in ecosystem-based management of fisheries, oil and gas, deep sea mining and commerce. In 2019 Cheyenne laid the foundation for her legal ambitions by excelling on her LSAT exam and applying to eight law schools. She was accepted into three law schools, with scholarships, including two of her top choices. Cheyenne decided to commit to Charleston Law School and begin JD program, and in the fall of 2020 will begin a dualdegree program with Coastal Carolina University to obtain her Master of Science in Coastal Marine and Wetland Studies.

◄ Instructing at a scuba certification course. Photo: Cheyenne Cunningham

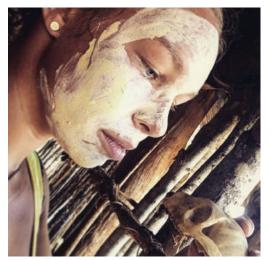
LAUNCHPAD FELLOWS



JESSIE PERELMAN DEEP-SEA BIOLOGIST AND SCIENCE WRITER

Jessie is pursuing her PhD in the Biological Oceanography Doctoral Program at the University of Hawaii where she is a member of the Deep-Sea Fish Ecology Lab. Her research in 2019 focused on better understanding the biology and behaviors of animals living in the middle ocean layers, as well as exploring deep ocean habitats. Her research expeditions took her off the coast of Hawaii, New Zealand and other deep-water zones around the world. Jessie is the 2019 recipient of the "Saildrone Award," which provides 30 days of drone-powered ocean data collection free of charge (equivalent to at-sea research time worth a million dollars) for a project that would establish baseline data on deep-sea conditions in a possible mining zone in the Pacific Ocean. In 2019, Jessie gave many educational presentations about her research and the incredible animals living in the deep sea to young students and the public throughout Hawaii.

◀ Inside the Hawaii Undersea Research Laboratory. Photo: Max Cremer



KATE THOMPSON MEDICAL ANTHROPOLOGIST AND CONSERVATIONIST

Kate is wrapping up her PhD thesis on wildlife poaching, bushmeat and human health in Madagascar. In 2019, she completed her fieldwork in a small Malagasy village near Kirindy Mitea National Park by interviewing locals about their eating habits and identifying the bones of wild animals in their trash piles using a field guide to native wildlife, which she created and illustrated. Kate believes that addressing the needs of local populations—in terms of food security, access to medical and educational institutions, as well as safe and reliable employment—is vital to advancing conservation efforts, both in Madagascar and around the world. In 2019 she was awarded Stony Brook University's PhD Works Professional Development Award for her medical anthropology and conservation research to enhance her career and professional skills while advancing diversity, equity and inclusion in her field.

◀ Identifying wild animal bones in a Malagasy village. Photo: Kate Thompson

SUPPORTING THE NEXT GENERATION'S BRIGHTEST MINDS

The Safina Center uses money from the Kalpana Chawla Scholarship Fund to support bright young people working to solve conservation issues. In 2017 the Safina Center developed the Safina Center "Kalpana Chawla Launchpad Fellowship" program to kick-start young venture-level talent, helping launch the early thrust of their careers and create an affiliation of like-minded kindred spirits.

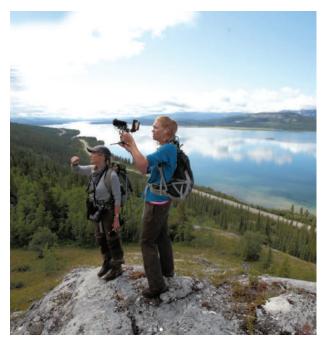
The Kalpana Chawla Scholarship Fund is named in honor of Kalpana Chawla, the dynamic, nature-loving astronaut who perished aboard the Columbia Space Shuttle in 2003. She chose to bring Carl Safina's *Song for the Blue Ocean* as one of the few personal belongings to accompany her in space. A year after her death, her family and friends established the Kalpana Chawla Scholarship at the Safina Center.

The Safina Center is honored to commemorate Kalpana's adventurous, courageous spirit by supporting inspiring young conservationists. To donate to the Safina Center's Kalpana Chawla Scholarship Fund, contact Mayra at admin@safinacenter.org.

▶ Kalpana in Bryce National Park, Utah, in 1990 when she was 29 years old. Photo: Cynthia Tuthill



YEAR IN PICTURES



▲ Katarzyna Nowak shows CBC North journalist Meagan Deuling a typical day studying mountain goats in the southern Yukon, on Mount White. Photo: Atsushi Sugimoto



▲ Hob Osterlund at the Kilauea Point National Wildlife Refuge, where this year she held more than a dozen events. Photo: Hob Osterlund



▲ Erica Cirino travels to Myanmar to learn about how the country's citizens use and dispose of plastic items. Her reporting on this and other expeditions related to plastic pollution will appear in her first book on the subject, to be published in 2021. Photo: Erica Cirino



▲ Paul Greenberg at the Hudson River Museum with artist Maya Lin's piece, "Map of Memory, Hudson River." Paul's writing is quoted in Maya's work. Photo: Paul Greenberg

YEAR IN PICTURES



■ A print of Robin Huffman's painting of a newly identified monkey species called the lesula is presented by primatologist Kate Detwiler to conservation hero Jane Goodall at a primate conference at Florida Atlantic University. Photo: Jefferey Tholl

▶ Safina Center Fellow Ian Urbina reports about slavery on fishing boats in the Philippines' Sibuyan Sea. His global reporting on high-seas crime was published his first book, published this year, titled *The Outlaw Ocean*. For more on Ian's new book, see page 17. Photo: Hannah Reyes Morales





◄ Jessie Perelman teaches young people about her research
on the unusual animals living in the deep sea at Hawaii's largest STEM event, the Onizuka Day of Exploration, in Honolulu.
Photo: Jessie Perelman



▲ Kate identifies bones and shells of wildlife commonly killed and eaten in a small Malagasy village as part of her PhD research to better understand the effects of hunting on both human and nonhuman populations in Madagascar. Photo: Kate Thompson

CARL SAFINA'S WORK

In 2019, Carl Safina completed his 9th book, *Becoming Wild*, about how animals learn to be animals. The first of Carl's two-part young-adult adaptation of his best-selling book *Beyond Words: What Elephants and Whales Think and Feel.* was published this year, titled *Beyond Words.* Carl wrote important opinion articles in *The New York Times* about the Trump Administration's cuts to the Endangered Species Act and support of the Pebble Mine project, which threatens the future for humans and wildlife living in Bristol Bay, Alaska. He was invited to give presentations about *Beyond Words* and his work as an ecologist and author throughout the U.S. and to Brazil and Portugal. Additionally, Carl moderated a World Oceans Week panel on fishing and slavery at sea linked to the documentary film "Ghost Fleet" featuring Thai activist Patima Tungpuchayakul (who has freed more than 5,000 slaves from fishing boats in Southeast Asia), escaped sea slaves Chairat Ratchapaksi and Tun Lin, and filmmakers Shannon Service and Jon Bowermaster, at the Explorers Club in New York City. He was featured in a TED Radio Hour episode on how and why scientists are now acknowledging qualities once thought to be exclusive to humans—such as empathy and grief—in non-human animals.



■ With former sea slaves Chairat Ratchapaksi and Tun Lin (left and left center) and Patima Tungpuchayakul of the Labor Protection Network at a screening of "Ghost Fleet" at the Explorers Club in New York City. Photo: Carl Safina

▶ At Biology Week at the Luísa Pinho Sartori Institute in Rio de Janeiro, Brazil, with students and staff. Luísa was a very talented student who came to the U.S. to study at Duke University and was tragically killed in an automobile crash a decade ago, at age 20. Her memory is well served by this institute, carrying on the conservation work she was passionate about.

Photo: Carl Safina



TRUMP'S POISON PILL FOR ALASKA SALMON

by Carl Safina and Joel Reynolds (NRDC)



▲ Bristol Bay, Alaska. Photo: Ryan Peterson

When you see it you realize, it's not a small place. Forty thousand square miles. A broad tableau of emerald bogs and evergreen forests, the watershed tilting toward Alaska's Bristol Bay shimmers with rivers and feeder streams whose waters reflect sky and clouds, all rimmed by distant mountains. In those glistening arteries, miracles happen. This system generates and sustains the largest remaining salmon fishery on Earth.

In the most important land-use decision in North America in our time, an essentially eternal supply of food is pitted against an essentially eternal supply of poison. In Donald Trump's Environmental Protection Agency — poison wins. The Obama Administration took four years to understand the global importance of the Bristol Bay, Alaska, watershed, and recognize the unique recklessness of creating a huge open-pit mining operation here. Consistent with Donald Trump's blasé attitude toward toxic contamination, Trump's EPA relegated that careful Obama-era review to the dumpster. If Trump and Pebble Mine win, we all lose.

The Bristol Bay watershed now generates a tenth of all wild salmon and fully half the world's sockeye salmon. Five species: the sweet, scarlet sockeyes; hard-charging kings; silver coho; humpbacked pinks; stolid chums. And much more, because Bristol Bay salmon knit together a vast land- and seascape whose value portfolio is scarcely hinted at by the phrase "half the world's wild sockeye."

Over sixty million wild salmon surged into Bristol Bay in 2018, converging from a thousand miles distant, driven instinctively toward faintly remembered scents of the region's many rivers. Twice in 2017, fishermen caught over one million fish in a day. Records were shattered. Several overloaded boats actually sank. The fish support 14,000 jobs and annually generate \$1.5 billion. Some of them land right on our tables.

Every year, all of this just happens. No one puts anything in. It's there for the taking, and could last another few thousand years. Nowhere else in the modern world does the landscape grant so much food, such riches. Harmlessly, beautifully. With such eternal grace.

You'd think everyone would realize this place is sacred. For Native people it literally is. For other fishermen, their families and communities, it's simply the greatest place in the world.

And when you understand all that, you realize — it's really not a big place at all. It's vulnerable. But all that's needed is to not destroy it.

Enter: those who would. A Canadian mining company called Northern Dynasty Minerals has for more than a decade planned to gouge a gigantic open-pit gold and copper mine into the headwaters of the region, where the rain first begins to conjure its salmon-making magic. This mining project would essentially put the rivers on a centuries-long poison drip, one that would far outlast the mining activities. Left as is, the rivers, the salmon, the fishing, and the food would far outlast the mining.

Thus the Pebble Mine project is a death-wish. That's why 65 percent of Alaskans oppose it, why recreational fishermen and tourist lodges detest it, why the region's largest native development corporation refuses it, and why commercial fishing communities' opposition is near-total and dead-set.



A Bristol Bay salmon fisherman. Photo: Wild Salmon Center

In recent years this monster seemed fatally wounded. The EPA's years of detailed study, peer-reviewed science, and public comment concluded with the agency's determination that the mine's billions of tons of toxic-contaminated waste could not be reliably contained, especially over the centuries it would remain poisonous to water and wildlife; that the risks to seafood safety and salmon populations were "catastrophic;" that the generative value of the watershed exceeded the value of the mines that would destroy it. EPA proposed significant restrictions on the mine. Northern Dynasty's corporate partners abandoned the project and the company's stock value plunged 90 percent.

That was then. It's a different White House now.

Trump's EPA has reversed course on the Pebble Mine and dropped the proposed restrictions.

Never mind the Clean Water Act, the agency's own science, Alaska natives, fishermen, communities, and our food.

And, over a chorus of objection, the U.S. Army Corps of Engineers is advancing Northern Dynasty's permit application at lightning speed, with project approval expected before the end of Trump's first term. (Essay continued on the following page....)



▲ Grizzly bear and sockeye salmon. Photo: Ken Morrish

Salmon perform a surpassing alchemy, gathering and changing the thin nutrients of the ocean into delicious red flesh and then delivering themselves to us. Those that get past the nets bring the nourishment of the sea uphill against gravity to feed eagles and bears and to fertilize the forests that shade the streams that make more salmon that support communities who feed us.

Salmon offer us their resilience, but warn us of their fragility. Salmon live most of their lives as oceanic animals hundreds of miles from coastlines, but each generation depends on clean rivers in unspoiled landscapes. Having learned to exploit the sea, they still shelter their young from the dangers of the open ocean by hiding them in rivers. This winning strategy, we have turned into their Achilles' Heel.

In the last century, we destroyed the largest salmon complex in the world, the Columbia River system. And today dams, warming, logging, and polluted runoff are continuing to kill and debilitate salmon from the south northward. British Columbia's salmon farms idiotically breed Atlantic salmon that infest young native salmon with lethal parasites. The resident killer whales of the Pacific Northwest, too, are starving because of salmon destruction.

All that has been lost to the south remains fully functioning in the Bristol Bay watershed. Now threatened by Donald Trump and Pebble.

This is a battle the Trump Administration must be made to lose. The Pebble Mine sacrifices too much — economically, socially, culturally, and ecologically. Unnecessarily. Our responsibility to our fellow Americans, and coming generations, demands that the mine project be stopped, and the rivers and salmon maintained, un-ruined.

This story was originally published to Medium.com on March 2, 2019.

(Note: In 2019 the Safina Center launched a major campaign rallying the support of the public to speak out against the Pebble Mine project by submitting public comments to the U.S. Army Corps of Engineers. While the Trump Administration continues to show its support of the project, its ultimate fate at this point is unclear. What is clear is that the public comments protesting the mine have slowed its approval, buying time to stop the mine, once and for all.)

OUR FELLOWS PROGRAM



▲ With painting of baby olive baboon, Sunshine. Photo: Robin Huffman



▲ Photo: Justin Schein.



▲ At the New York Wild Film Festival. Photo: Peter Domorak



▲ Setting camera traps to capture photos of mountain goats in the Yukon's Alsek Valley. Photo: Atsushi Sugimoto

ROBIN HUFFMAN - PAINTER AND PRIMATE/WILDLIFE ADVOCATE

In 2019 Robin split most of her time between New York City and Africa. She painted portraits of orphaned and abused primates, most of whom she has personally cared for at African primate sanctuaries, in order to share their stories with global audiences. When she wasn't caring for primates or painting, Robin shared her work and primates' stories to communities, corporate groups and schools. This year she also coordinated and helped host several fundraisers throughout New York and California for Ape Action Africa, one of the primate sanctuaries she volunteers with.

PAUL GREENBERG - AUTHOR AND WRITER IN RESIDENCE

This year Paul continued traveling the world to give presentations about his 2018 book, *The Omega Principle: Seafood and the Quest for a Long Life and a Healthier Planet.* He also co-instructed an international college course called "Food, Forests and Fisheries" in Romania and Greece, with Northeastern University. Paul wrote two important *New York Times* op-eds about Pebble Mine and healthy things to do instead of spending time on our smartphones. That second op-ed is linked to Paul's upcoming book *iQuit: 50 Things to Do iNstead*, which he wrote this year.

BEN MIRIN - SOUND ARTIST AND EXPLORER

Ben spent this year producing and screening various films he's been involved in making, such as "Sounds of Survival" (about recording the vocalizations of an endangered frog species in Honduras before they go extinct), "Grandpa's Reef" (a virtual reality film about a threatened reef in the Philippines), "Remixing Madagascar" (a musical film featuring the sounds of native Malagasy wildlife) and "Moving Lines" (about rancher–wildlife conflict resolution). Several of these films won awards. This year Ben began a graduate program in bioacoustics—or the study of the sounds of nature—at Cornell University's Bird Lab. There he researches why some songbirds are considered more vocally fit than others, by humans and other birds. Ben also spent time developing a science curriculum based on his acoustic research and led sound-recording expeditions for students across the U.S.

KATARZYNA NOWAK - CONSERVATION BIOLOGIST

Katarzyna spent much of 2019 managing a citizen science project that uses photographs of mountain goats taken by Yukon residents and visitors to address questions about possible changes in the timing of the goats' coat shedding due to a warming climate. Her goals include testing the extent to which scientists can look back in time and track change using photographs not necessarily taken by scientists; raising both public awareness and scientific knowledge of climatic warming; and documenting how mountain goats are possibly biologically adapting to a warming climate by shedding their coats earlier. Katarzyna investigated wildlife crime and reported a story on the subject for *National Geographic*, in addition to publishing scientific papers on primates and mountain goats. This year Katarzyna also helped further develop and manage the Request A Woman Scientist database, an online platform that connects the public with femaleidentifying experts across a wide range of scientific fields, and took over the platform's Twitter account.

To UT

▲ Hob and *Holy Moli*. Photo: Melissa Groo



A Performing with recorded whale song on World Oceans Day in Berlin. Photo: Erica Cirino



▲ In Indonesian waters reporting on high-seas crime. Photo: Fabio Nascimento

HOB OSTERLUND - WRITER, PHOTOGRAPHER AND CONSERVATIONIST

In early 2019 Hob wrapped up a documentary film called "Kalama's Journey" which chronicles the life of a young Laysan albatross who hatched on Kauai to two female parents. Her film went on to win a Telly Award in the "Nature" category and the Oregon Documentary Film Festival's "Best Cinematography" award. Hob held more than a dozen talks and signings for her book *Holy Moli: Albatross and Other Ancestors* at the Kilauea Point National Wildlife Refuge on Kauai, in Hawaii, and gave a keynote for "The Biggest Week in American Birding" in Ohio. She continued several albatross conservation projects across Hawaii, in addition to photographing albatrosses and other native Hawaiian wildlife. She shared her photos widely on social media.

DAVID ROTHENBERG - CLARINETIST AND PHILOSOPHER

In 2019 David focused on the launch of his new three-part film, book and musical project called "Nightingales in Berlin." Naturally, he held many premiere events in the project's namesake German city, screening his film; performing music from the film; reading excerpts from his book; and taking Berliners and visitors on nighttime walks in the city's parks to meet the nightingales of Berlin. David took his project to other parts of Germany, in addition to the U.S. and Estonia. Additionally, he sailed around Hawaii to play music with humpback whales, participated in a collaborative art-in-nature project in Norway and presented collaborative musical performances with avant garde musician Elliott Sharp in Europe and the U.S..

IAN URBINA - INVESTIGATIVE REPORTER

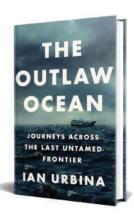
In 2019 Ian published a book about his experiences reporting on high-seas crime for *The New York Times*, which goes by the same name as his newspaper series: *The Outlaw Ocean*. Ian, a Pulitzer Prize winner, launched his book's publication with a media campaign and held *Outlaw Ocean* book talks and signings in the U.S. and abroad. This year Ian was inaugurated as a contributing writer to *The Atlantic*, and published stories there on topics related to his book.

PRAISE FOR THE OUTLAW OCEAN

"Not just a stunning read, this book is a gripping chronicle of the watery Wild West and it shows us....how we all pay a price for this mayhem and mistreatment." - John Kerry, former Secretary of State and founder of the Our Ocean Conference

"These chapters are vibrant as individual stories, but as a collection they're transcendent, rendering a complex portrait of an unseen and disturbing world. Urbina pursues a depth of reporting that's rare because of the guts and diligence it requires.... The result is not just a fascinating read, but a truly important document...a master class in journalism." – New York Times Book Review

"The Outlaw Ocean is an outstanding example of investigative journalism, illuminating some of the darkest corners of a world we often don't think about....what he found ranges from horrible to shocking and from unfair to unbelievable....a magnificent read....proof that outstanding writing is still one of the best tools we have to get to know the world we live in." – NPR Book Review



OUR CREATIVE AFFILIATES

The Safina Center's Creative Affiliates are circle of highly accomplished and exceptionally creative people who share and amplify one another's messages and work. Creative Affiliates receive no funding from our Center; this is a public acknowledgement of friendship, support, and resonance. They are:



JANE ALEXANDER
Actress and Author
Photo: Jane Alexander



DAVID DE ROTHSCHILD Environmentalist and Adventurer Photo: David De Rothschild



LINDA LEAR
Biographer of Rachel Carson
& Beatrix Potter, and
environmental historian
Photo: Linda Lear



LORI MARINO Neurobiologist & Non-human Rights Campaigner Photo courtesy: Lori Marino



KATHLEEN DEAN MOORE Environmental Philosopher and Writer Photo: Kathleen Dean Moore



LUANNE RICE Novelist Photo: Luanne Rice



ISABELLA ROSSELLINI Model, Actress, Filmmaker and Creator of "LINK LINK CIRCUS" Photo: Isabella Rossellini



PAUL WINTER
Musician and Musical Adventurer
Photo: Paul Winter

PICTURING THE MODERN NATURALIST

by Molly Adams

Historically, the classic image of a naturalist involves a field journal, binoculars and collecting tools and certainly not an iPhone. iNaturalist is shifting the way that community science functions and embracing technology and social media for biodiversity research.

In April, the Feminist Bird Club participated in the City Nature Challenge, a worldwide competition to see which city can enter the most observations and most species seen using iNaturalist over four spring days. For us, this was an excellent opportunity for the group to get to know other species besides birds, but globally this has been an effort to get groups and individuals outside and engaging with nature in their local urban environments while contributing data to biodiversity science.

Overall, 159 cities took part in the challenge resulting in over 900,000 observations made, more than 31,000 species documented, and 35,126 people participating. New York City came in 13th place, with 25,855 observations, 1,635 species, and 483 observers.

Our walk was led by Jen Kepler, volunteer coordinator at the New York Aquarium. With an over 10 year career in zoos and education, Kepler has spent much of her life trying out new, fun ways to engage people with the natural world. We were also joined by the NYC coordinator Dr. Kelly O'Donnell of Macaulay Honors College and Chris Kreussling the Brooklyn Borough captain. Participants, along with guides, were given a brief introduction to iNaturalist and encouraged to document the species that they could and couldn't identify throughout the morning.



▲ Killdeer chick. Photo: Molly Adams



A Birding at the Marine Park Salt Marsh in Brooklyn. Photo: Molly Adams

Our group submitted upwards of fifty submissions documenting over thirty species of plants, insects, fish, birds and more. As someone who primarily can only identify bird species, this tool was very useful for learning more about the plants that I would typically ignore. While most participants on the walk were most excited to spot the killdeer chicks, by favorite observations of the day was cedar-apple rust, something I had never seen before.

Another notable observation on iNaturalist was of a double-crested cormorant eating a flounder captured by Jen Kepler. After uploading the photo, users were able to suggest that her Summer Flounder submission was most likely a Winter Flounder based on the eye placement seen in the photograph.

"Technology" as a wafting, general term has often been at blame for our disconnection to the natural world. To an extent, especially regarding the technology that continues to fuel our forced dependence on modern Capitalism, I agree, however it is hopeful that many organizations that prioritize conservation and science, including iNaturalist and eBird, are using technological tools for good. I look forward to using iNaturalist more in order to expand my knowledge of flora and fauna in my local, urban environment.

This story was originally posted to The Safina Center Blog on June 25, 2019.

DISPATCH FROM HAWAII

MAKING MUSIC LIVE WITH WHALES

by David Rothenberg



▲ Listening to whales off the coast of Hawaii. Photo: Olivia Wyatt

The underwater sonic world of humpback whales remains a mystery to human ears. In the fifty years since we discovered that this one species of cetacean sings long, structured, melodic and organized songs, we still do not know how the whales produce such booming music, or why. Though all humpbacks make sound, only the males sing these long, structured arias, so science has assumed it has evolved to attract the attention of female whales. Yet in these many decades that we have been listening and watching, no human has ever seen a female whale show any interest in this phenomenon. And yet the male whales sometimes sing their precise, repeating songs for up to twenty-four hours at a time.

I think of these puzzling facts as I am back out in Hawaii once more to play my clarinet live with these great singers of the sea. This is probably the seventh time I've gone out to do this, and it is always interesting, and I never stay long enough. One should really spend about one month going out every day to practice with these musical whales, with enough woodshedding, we might start to understand each other.

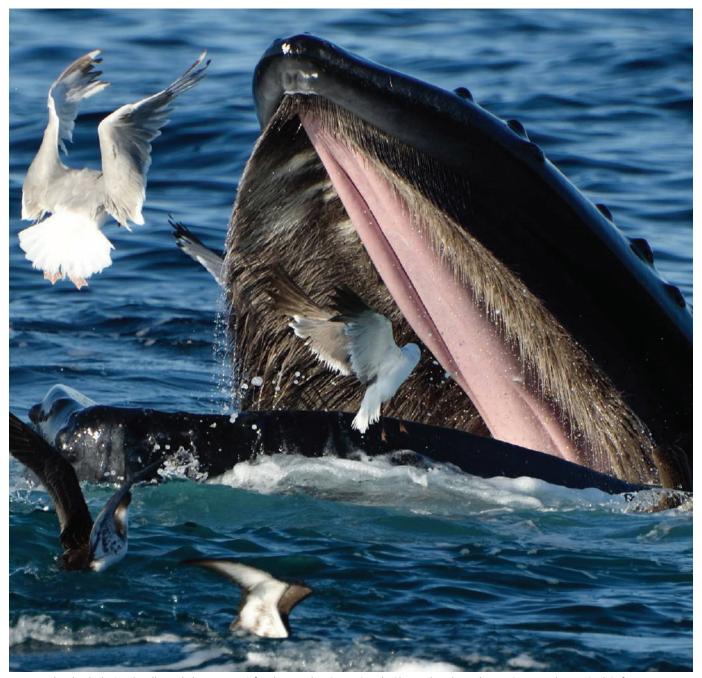
Listening through an underwater microphone, called a hydrophone, the great Pacific Ocean is anything but a silent world. Waves lap against the boat, shrimp crackle, dolphins creak, and December through April the chorus of humpback whales is everywhere. You can easily hear them from up to twenty miles away, and the phrases of one whale upon the others clearly overlap, like the parts of a canon in five to ten voices, scattered under the surface, none singing too close to any other.

One clarinet is just a small extra voice in the mix, trying to find its place.

I am often asked, 'how does it feel to play along with a whale?' and I suspect that I never give this question a good enough answer. I don't even want to put this sensation into words. The music itself is the answer, or—the feeling comes through our group all listening, a group of people, groups of whales. This time I have five good friends along with me, each with their own hydrophones and headphones, dedicated to just this task of making music with whales. Not swimming with whales, not studying whales, not chasing whales. Just inventing a music no one species could make alone.

You listen to this year's duet, tell me what you feel. (Listen at: https://bit.ly/2zexnav)

The music is invented out of a feeling between us. We now know humpback whale brains contain spindle neurons, a type of cell found only in animals capable of higher emotional states. Their music may depict their deep feelings



▲ Humpback whale (and gulls and shearwaters) feeding in the Great South Channel in the Atlantic Ocean. Photo: Carl Safina

as much as ours. They also may have difficulty answering the question, "what does it feel like to make such majestic music that resounds far under the sea?" The female whales don't visibly respond to this male display but people, male and female alike, are often moved to tears when they first hear a great whale sing.

If you do dive underwater close to a singing whale, you may hear the song, fainter than through the microphone, but vibrating in the water all the same. Makes me wonder another strange fact: if all you have to do is dive in the water among whales to hear them sing, how come no one ever heard this song before the technological time that revealed it to the world?

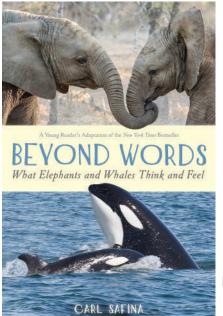
That is another deep-sea mystery. It is as if we never thought to listen for something before we knew it was there. We must believe before nature reveals itself to us. There is no music in nature until you imagine it.

This story was originally posted to The Safina Center Blog on March 2, 2019.

NEW YEAR, NEW BOOKS

A SPOTLIGHT ON SAFINA CENTER TITLES RELEASED THIS YEAR:

The first book in a new Young-Adult series by Carl Safina



This year Carl published the first book in a two-part Young-Adult (YA) adaptation of his New York Times bestselling book for adults, Beyond Words: What Animals Think and Feel. This first book in the series is titled Beyond Words: What Elephants and Whales Think and Feel. It's written to give young readers (ages 10 to 14) a close-up look at the inner lives of African elephants and killer whales so they can see how these magnificent nonhuman animals are both similar to and different from the people they know.

Carl's book quickly rose to the top of Amazon's best-seller charts after its publication in April, and was named one of the online bookseller's top 20 children's books of 2019.



▲ Carl in Uganda where he observed free-living chimps for his 2020 book Becoming Wild. Photo: Carl Safina

Praise for Beyond Words; What Elephants and Whales Think and Feel

"A must for middle-grade animal lovers." – Kirkus Reviews, starred review

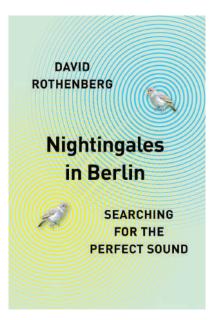
"This excellent, documentary-style account will captivate budding animal behavioral scientists." - School Library Journal, starred review

David Rothenberg's musical journey in Berlin



▲ David playing his clarinet to accompany the singing of Berlin's nightingales. Photo: Ville Tanttu / Still from the film "Nightingales in Berlin"

Nightingales are songbirds long celebrated in human myths, songs and stories for the emotional, complex and diverse sounds they create. David set out with his clarinet to join nightingales in their creation of nighttime cacophony. He chose to do this in Berlin, Germany, a bustling city home to many nightingale colonies where the birds must sing ever louder in order to be heard over the human din. David writes about his experiences joining Berlin's nightingales in song in this book, which was published in May. Its publication coincided with the premiere of a complementary film by the same title; in addition to several musical bird walks in which members of the public joined David to listen to him play his clarinet along with singing nightingales live on the streets and in the parks of Berlin.

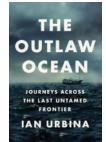


Praise for Nightingales in Berlin: Searching for the Perfect Sound

"....David Rothenberg's marvelous work reveals the living music around and within us.... A must-read invitation to deeper wonder and creativity." - David George Haskell, author of The Forest Unseen: A Year's Watch in Nature

"....Lush with literary allusions, Rothenberg's enlightening and inspiring nightingale immersion attunes us to 'the vast richness of natural soundscapes' and the glory of life itself." - Booklist

Ian Urbina's hard-hitting journalistic exposé of high-seas crime



Ian published a book about his reporting expeditions covering stories about high-seas crime-many of which have appeared in *The New York* Times-this August. Titled The Outlaw Ocean: Journeys Across the Last Untamed Frontier, lan's book spans 40 months, 251,000 miles, 85 plane rides, 40 cities, every continent, more than 12,000 nautical miles, across all five oceans and 20 other seas. Its publication was met with critical acclaim.

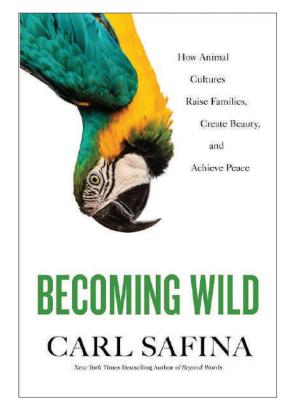




OUR BOOKS IN THE MAKING

Becoming Wild: How Animal Cultures Raise Families, Create Beauty, and Achieve Peace by Carl Safina is scheduled for publication in hardcover by Henry Holt and Co. on April 14, 2020. Carl's latest book takes a close look at three nonhuman species—sperm whales, scarlet macaws and chimpanzees and the various cultures they have developed as individual animals within different species. Through his observations of various freeliving nonhuman animals, Carl investigates what it is that drives nonhuman animals to raise their young using specific techniques, and how these creatures develop a definition of beauty and attempt to make peace amongst themselves as a group. Carl's book helps inform the answer to one of humanity's most urgent questions: Who are we here with?

iQuit: 50 Things to Do iNstead by Paul Greenberg was acquired by Chronicle Books with a publication date expected in fall 2020. Paul's coming book explores 50 things to do instead of spending time in front of our smartphone screens. Some themes Greenberg explores in his book include the ubiquity of the smartphone and how it's shaped modern human behavior and culture. Paul also quantifies statistics about screen time and actual time "lost" by staring at a smartphone screen, so that we might rethink our technological habits and relationships with our screens.





Poisonous Seas: How the Ocean Is Swallowing Our Microplastic Pollution Problem by Erica Cirino was aquired by Island Press and Dreamscape Audio in 2019, with an anticipated publication date in 2021. In her first book Erica takes readers along with her on sailing expeditions across the Great Pacific Garbage Patch and beyond to uncover the scope of Earth's microplastic pollution crisis. Erica's journeys reveal why the oceans are a repository for humanity's ever-growing collection of plastic trash and the small but dangerous "microplastic" particles plastic items break up into, and what must be done to slow the stream of garbage into the sea to prevent the complete destruction of marine ecosystems.

◆ Documenting plastic in the Salish Sea, British Columbia. Photo: Jenifer Chiodo



▲ Sperm whale breaching off the island of Dominica, in the Caribbean. Carl's observations of sperm whales are featured in his forthcoming book, *Becoming Wild*. Photo: Carl Safina

MY FRIEND, KALPANA: CYNTHIA TUTHILL REMEMBERS AN INCREDIBLE AND **INSPIRING HIGH-FLYING WOMAN**

by Erica Cirino

"Hope, each day, a new brilliant idea is born – that enriches your life to the extent of defining it - as if it is renewed." - written by Kalpana Chawla, in a birthday card to her friend Cynthia Tuthill, sent from Florida before taking off on the Columbia Space Shuttle's tragic final mission in January 2003.

Safina Center supporter Cynthia Tuthill has always loved traveling, especially Photo: Cynthia Tuthill through the skies in hobby airplanes. Perhaps it's no surprise, then, that she happened to cross paths with another high-flying female explorer: the late Kalpana Chawla, who would go on to become an astronaut and the first woman of Indian descent to go to space.

Cynthia says her friendship with Kalpana began in Palo Alto, California, in the mid-1980s, thanks to a flight instructor who connected the two women. "'I think you'll like her,' is what the instructor said," says Cynthia. "And so I contacted Kalpana, and we went flying together ... and yes, I did like her. In fact, I had found a soul mate." From then on, the two friends would go on to explore the world together—flying planes, hiking, climbing, singing, reading, birding and watching the stars.

The friends shared a mutual appreciation of the world around them, and for each other. Cynthia remembers Kalpana as tenacious. "She just would NOT give up," Cynthia says. "In all our time together, she was never lackadaisical about anything; once she made a decision she stuck to it, no matter how difficult." This included training intensely to become an astronaut, working to get her Indian parents' blessings for her chosen career path in the U.S., and studying for years to earn a bachelors degree, two masters and a PhD—all in engineering. That Kalpana was one of very few women studying engineering did not deter her from following her dreams.

Cynthia adds that, "Kalpana was an incredibly dedicated environmentalist and everything she did or spoke about



Atop Mission Peak in Fremont. Photo: Cynthia Tuthill

was aligned with that idea. She never wasted resources; she picked up trash wherever she walked; she constantly explained to people the importance of conservation."

Cynthia says she and Kalpana were avid readers. Kalpana also happened to be a big fan of Carl Safina's writing and is responsible for hooking Cynthia on his writings. In 2002, Cynthia says Kalpana gave her a copy of Carl's first book, Song for the Blue Ocean: Encounters Along the World's Coasts and Beneath the Seas. Cynthia says she and Kalpana would schedule phone dates to discuss Carl's writing. "It's such a pleasure now, to look back at the notes and underlining I made in the book together with Kalpana's insights," she adds.

Unfortunately, after decades of rich friendship and shortly after introducing Cynthia to Carl's writings, Kalpana perished aboard the Columbia in its February 1, 2003, disaster whereupon the space shuttle disintegrated on re-entry into Earth's atmosphere. Tragically, Kalpana perished along with the six other astronauts onboard. Something that did survive, however, are charred pages of a copy of Song for the Blue Ocean, which Kalpana brought with her to space.



▲ Cynthia (right) and Kalpana (left) with a sailplane in California.

PROFILE

"Astronauts may only carry limited personal items, as you can imagine, and it was therefore quite touching that Kalpana chose to bring along her copy of Carl's book," Cynthia says. So she got in touch with Carl to tell him about the devastating loss of her friend. Cynthia remembers Carl "answered that he was honored to be included in this 'circle of love.' WOW. On his next trip to California I invited him to stay with my husband James Orr and I at our home...which was the beginning of another very treasured friendship.

"I have supported the Safina Center since its inception, as I met Carl just as he was forming this fabulous organization," says Cynthia. "My husband and I have donated each year as much as we can, and Kalpana's sister Sunita also started supporting the Center; we hope to inspire others to do so as well."

To honor Kalpana's driven spirit and dedication to the natural world, the Safina Center established its "Kalpana Chawla 'Launchpad' Fellowship in 2017. The Fellowship program is designed to launch promising young people into meaningful careers in conservation. So far, it's helped support five young women in their early conservation careers: Molly Adams, Cheyenne Cunningham, Erica Cirino, Jessie Perelman and Kate Thompson. (For more on the 2019 Safina Center "Kalpana Chawla 'Launchpad' Fellows," see page 7.)

Cynthia says that Kalpana would be incredibly honored to know the Safina Center had established a fellowship program in her name. "She had stars in her eyes just talking about her hero Carl Safina; to imagine that she could in some small way be helpful to his work would have been an exceptional privilege."

If she is to dispel any advice to the Safina Center's youngest fellows, Cynthia says it is: "Never give up! We are fortunate to have been born in a time with such difficult challenges, as this means we have the opportunity to effect great change."



▲ South Luangwa Park, Zambia, 2014. Photo: James Orr

SUPPORTED POLICIES



■ In 2019, the Safina Center wrote letters and made phone calls to lawmakers supporting policies that best protect the natural environment and benefit the lives of all beings on Earth, from pollinating insects to people. Photo: Erica Cirino

Every year the Safina Center works to influence policies and rules that affect wildlife, the environment and the way we treat the oceans. Here are policy efforts we were involved in during 2019:

SUSTAINABLE FISHERIES AND OCEANS

- Opposed "sustainable" Marine Stewardship Council certification of Atlantic menhaden (bunker), small fish that are a primary food source for whales, seabirds, and other fish.
- Suggested the National Marine Fisheries Service adopt science-based fishing rules for bluefin tuna, which would best help the species to continue to recover from decades of overfishing.
- Urged the New England Marine Fisheries Council to implement science-based, precautionary policies on fishing for herring in the Atlantic Ocean that would best allow herring to continue to recover from decades of overfishing there.

ENVIRONMENTAL PROTECTION

- Opposed the construction of Pebble Mine near Bristol Bay, Alaska, and led a media campaign urging the public to submit comments in opposition of the project.
- Urged New York State Governor Cuomo to sign a bill that would ban all uses of pesticide chlorpyrifos throughout the state, which could make New York the first in the U.S. to ban use of this dangerous chemical.
- Urged Suffolk County, New York, lawmakers to pass a resolution banning the intentional release of plastic balloons.

WILDLIFE CONSERVATION AND WELFARE

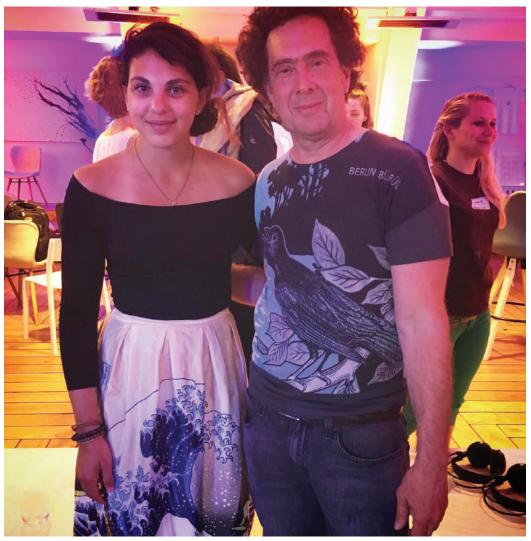
- Contacted Washington State Governor Jay Inslee calling for the prioritization of protecting the highly endangered Southern Resident killer whale population by reducing pollution, redirecting ship traffic and removing dams.
- Pushed for New York State to ban all neonicotinoid pesticides, which are known to be dangerous to bees and other pollinators.
- Signed onto a letter drafted by the Center for Biological Diversity and Defenders of Wildlife urging the U.S. Government to increase funding to support enforcement and positive development of the U.S. Endangered Species Act.
- Signed onto a letter drafted by Lori Marino of the Whale Sanctuary Project urging Russian President Vladimir Putin to allow for the safe release of nearly 100 young whales cruelly held in captivity for eventual lives as entertainers.
- Urged the Trump Administration keep gray wolves on the Endangered Species List, instead of removing them.

THE SAFINA CENTER CELEBRATES WORLD OCEANS DAY IN BERLIN

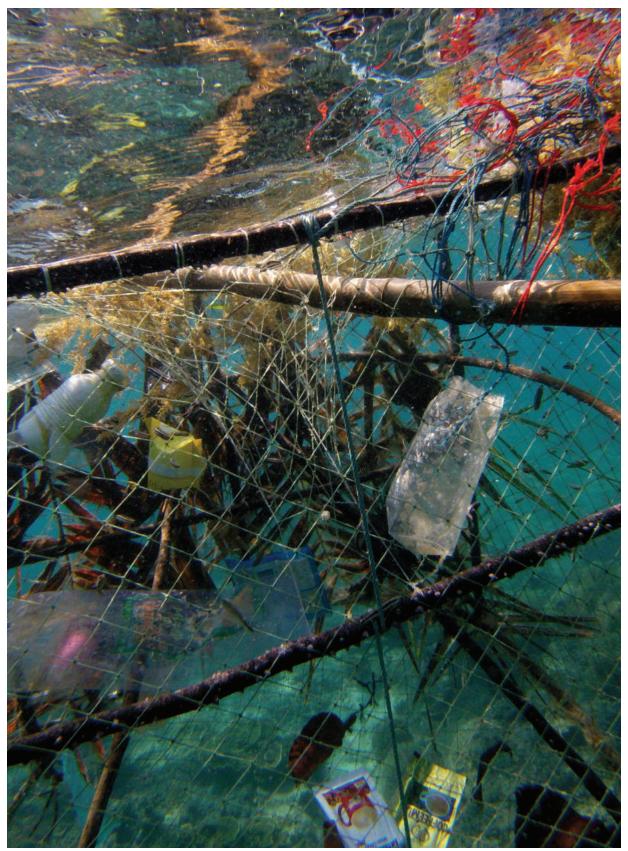
This June 8, Erica Cirino and David Rothenberg traveled to Berlin, Germany, to celebrate World Oceans Day with Berlin ocean conservation organization *Ocean*. *Now!* The event's main focus was plastic pollution and to gather support for legislation that would ban the production and sale of products containing microbeads (small bits of plastic commnly found in health and beauty products) throughout Germany. The event's organizers invited scientists, German citizens, activist groups, journalists, corporate executives and artists to sign a letter calling for such a ban, addressed to German Minister of Environment, Svenja Schulze.

David, who was already in Berlin to debut his latest project, *Nightingales in Berlin*, played his clarinet along with his recordings of humpback whales to an audience awestruck by the fusion of human and nonhuman music melding into one song. Erica, who traveled to Berlin that weekend from her research post in Copenhagen, Denmark, documented the evening on her camera, and met with *Ocean. Now!* founder Meike Shützek afterwards to give her plastic pollution science, policy campaign and outreach recommendations.

The Safina Center honors the interconnectedness of the natural world and therefore recognizes the need to address complex ecological problems, such as plastic pollution in the oceans, on a global scale.



▲ At the Ocean. Now! World Oceans Day event in Berlin. Photo: Meike Schützek



▲ A fishing trap filled with plastic garbage off the coast of Myanmar documented by Erica Cirino as part of her ongoing coverage of the plastic pollution crisis. Photo: Erica Cirino

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

2019

Carl Safina publishes the first book in a two-part adaptation of his bestselling book *Beyond Words* for young adults, titled *Beyond Words: What Elephants and Whales Think and Feel.*

Carl Safina gives the final interview on TED Radio Hour's "Anthropomorphic" episode, about the inner lives of nonhuman animals.

David Rothenberg launches his book, film and music project *Nightingales in Berlin: Searching for the Perfect Sound* in Berlin, Germany, in May 2019, garnering international media attention.

Hob Osterlund's 2018 documentary film about the life of a young albatross, "Kalama's Journey," wins a Telly Award in the "Nature" category and a "Best Cinematography" Award at the Oregon Documentary Film Festival.

Ian Urbina publishes his book *The Outlaw Ocean: Journeys Across the Last Untamed Frontier* on August 20, 2019, receiving critical acclaim from book reviewers including former Secretary of State John Kerry, and launching into an international book tour.

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, and a flurry of media attention, including an interview on "Fresh Air" with Terry Gross, follows.

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.

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" premiers online and on television.

Safina Center Fellow Chris Jordan's film "Albatross" premiers 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.

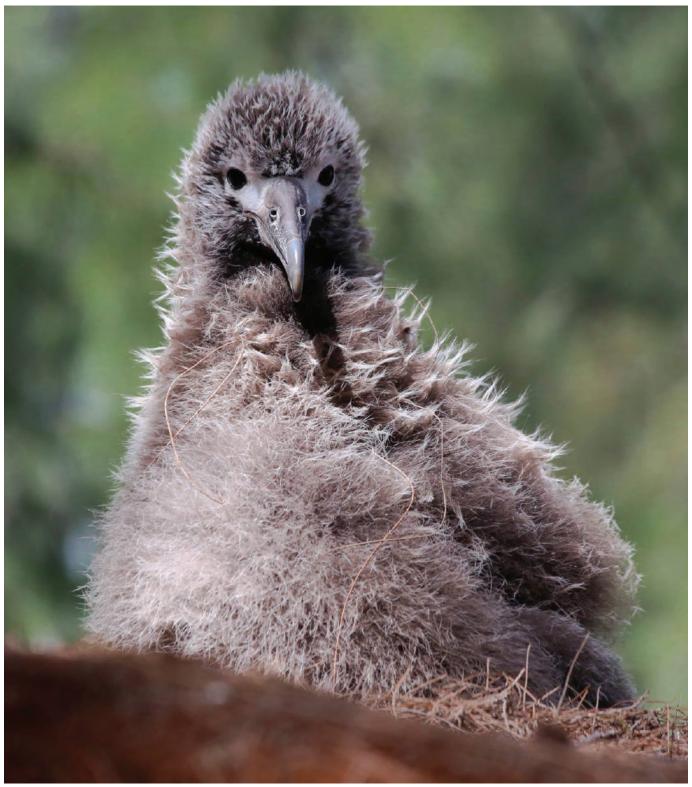
Carl Safina's TED Talk, "What are animals thinking and feeling," based on *Beyond Words*, is viewed more than 1.7 million times.

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 films and coordinates the first-ever televised public service campaign to reduce shark fin soup consumption 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 its ecological importance.

Carl Safina is named finalist for the 2016 Indianapolis Prize.



▲ Kalama, the Laysan albatross star of Hob Osterlund's winning documentary film "Kalama's Journey," during her days as a chick on Kauai, Hawaii. Photo: Hob Osterlund

2015

Carl Safina's seventh book, *Beyond Words: What Animals Think and Feel*, releases to rave reviews on 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.

Safina Center Fellow, John Weller and Shawn Heinrichs complete their call-to-action film "Guardians of Raja Ampat" and show it in 12 villages across Indonesia.

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.

Safina Center Fellow Dr. Ellen Prager's new book for children, *The Shark Rider*, part of her series *Tristan Hunt and the Sea Guardians*, is released on May 1, 2015.

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.

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."

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 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*, is published 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, garnering international media attention and critical acclaim.

Both of Safina's 2011 books are named *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.

2010

Carl Safina's first illustrated children's book *Nina Delmar:* The Great Whale Rescue is published on August 2, 2010.

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

The Safina Center establishes a partnership with Whole Foods Market to provide seafood rankings in stores as part of our Sustainable Seafood Program.

The Safina Center launches a collaboration with The Gelfond Fund for Mercury Related Research & Outreach at Stony Brook University to educate the public about mercury in seafood.

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

Carl Safina wins "Sylvia Earle Award" 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 for his writing and conservation work.

2009

The Safina Center's sustainable seafood FishPhone App receives a "Best in Green" award by Ideal Bite, a greenliving website.

The Safina Center launches its "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."

The Safina Center distributes 2.5 million ocean-friendly seafood guides across the United States.

2007

Carl Safina and producer John Angier develop Carl's first television series for PBS, called, "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

Carl Safina publishes his book Voyage of the Turtle: In Pursuit of the Earth's Last Dinosaur on May 30, 2006, and it nabs The New York Times Book Review's "Editors' Choice."

Carl Safina gives an 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 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," his first 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 2002 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.



◆ Hob Osterlund (second-to-left, second) row) with other members of Kauai Albatross Network, a conservation organization focused on protecting albatrosses on Kauai and other Hawaiian islands. In 2019, Hob's documentary on the life of a young Laysan albatross, "Kalama's Journey," won two film awards. Photo: Kauai Albatross Network

PRAISE FOR CARL AND THE SAFINA CENTER

A SELECTION OF KIND WORDS FROM FRIENDS AROUND THE WORLD

"Carl, this article is wonderful. You have thought and analyzed everything and make choices that are so well informed. This article is a real lesson to me, a kind of blueprint for how to behave and eat correctly. Thanks so much." -Isabella Rossellini, commenting on "What I Eat," an article published by Carl Safina in The Huffington Post.

"Erica, I just want to thank you for spreading the word about the importance of wildlife and keeping the environment clean. I felt really inspired after your talk! I took your advice and am hoping to start volunteering at a nature center this summer. I'm super excited about it, and I can't wait to start rehabilitating wildlife!" - Brittany

Hi Robin, it is so great to see what you are doing and to know how important it is to you. Those primates are so lucky to have you and for those who do not know, your artwork is stupendous." - Marilyn

"Molly, I was watching YouTube and I came across the Birds Of North America series, and watched the episode featuring the Feminist Bird Club. I was in awe. I used to think birding clubs were for older people (at least here it is the common rule) and super experts, but I wanted to start a club with my friends to hang out and watch birds. This is our first year; we participated in this year's global big year and there's a little interest from Mexican authorities in getting involved—so we are pretty excited with how this is working...Thank you for the inspiration and I hope we can collaborate in the future with you! Also the 80 percent of people interested here in this project are women. By the way, I'm from Merida, in the Yucatan Peninsula, home of the world's blue-crowned motmot! Sending you lots of love from Cardenales Birding Club!" - Arturo

"At this point I either Google things or I Carl them." – Ernie

"Carl...I have just finished watching your TED Talk on 'What animals are thinking and feeling?'.... As a nurse, and a person who teaches nurses, as well as a strong animal advo-



▲ Molly Adams with members of the Feminist Bird Club at Brooklyn Bird Club's Birdathon 2019. Photo: Molly Adams

cate, I have always tried to help others understand and be mindful of animals and their feelings. Your TED Talk says it all (and much more), in a beautifully illustrated and scientifically based presentation. I am now going to incorporate your TED Talk into the subject content for all undergraduate and post graduate critical care nurses as it relates to how they care for others though understanding, empathy and compassion.... Oceans of gratitude to you and your team." Suzy



A Robin Huffman at O.R. Tambo International Airport her way to Cameroon's Ape Action Africa Sanctuary, one of the places she volunteers caring for abused and orphaned primates. Photo: Robin Huffman

MAKING WAVES

The Safina Center works to inspire you to care about the natural world, so that you might take meaningful action for positive change. Our hard-hitting creative, scientific and political works and on-the-ground community events are recognized internationally for their change-making excellence.

Here's what we were up to in 2019:

CARL SAFINA - Book

Beyond Words: What Elephants and Whales Think and Feel. Roaring Book Press. April 23, 2019. (This book is part one of a twopart Young Adult adaptation of Carl's best-selling book Beyond Words: What Animals Think and Feel (2015).

Media

Those who come after us will either curse us-or thank us. CNN.

The new threat to endangered species? The Trump Administration. The New York Times.

When you teach a boy to fish. Human Parts/Medium.

This brutal creature is wiping out everything but itself. CNN.

The wrong mine for the wrong place, with Paul Greenberg, Mike Kurlansky and John Waldman. The New York Times.

Trump's poison pill for Alaska salmon, with Joe Reynolds. Medium.

A dead whale containing 90 pounds of plastic is a message in a bottle. CNN.

Radio Interviews

- "Anthropomorphic," with Barbara King, Denise Herzing and Frans de Waal. TED Radio Hour/NPR.
- "Pain is a subjective thing, or is it?" The Colin McEnroe Show/ Connecticut Public Radio.
- "Interview with Carl Safina." Green Radio Hour with Jon Bowermaster/Radio Kingston.
- "Words for the world, interview with Carl Safina." Meet the Ocean Podcast.

Talks

"Beyond Words; What Animals Think and Feel." Ecology and Evolution Department Lecture Series. Stony Brook University, Stony Brook, New York.

2nd Annual Cooks, Books and Corks Fundraising Event. TBR Media. Bates House, Setauket, New York.

- "The Future of the Planet." Francisco Manuel Dos Santos Foundation. Lisbon, Portugal.
- "Beyond Words and The View From Lazy Point." Block Island Maritime Institute. New Shoreham, Rhode Island.

A Discussion with Gaelin Rosenwaks. Montauk Film Festival. Montauk, New York.

"What Animals Think and Feel." Global Summer Institute Special Lecture Series. Stony Brook University, Stony Brook, New York.

13th Annual GET WILD Benefit. Evelyn Alexander Wildlife Refuge Center. Southampton, New York.

World Oceans Week "Ghost Fleet" Film Panel. The Explorers Club, New York, New York.

Special Lecture. Ethical Culture Fieldston School. Bronx, New York.

"Beyond Words; What Animals Think and Feel." BioSemana (Biology Week) sponsored by the Luísa Pinho Sartori Institute, Universidade Federal do Rio de Janeiro, Brazil.

Keynote Speech. Partners for a New Economy Conference. U.C. Irvine, Irvine, California.

Gather Round Discussion. Convention Center at Chico Hot Springs Resort, Pray, Montana.

Travels to Patagonia and the Antarctic. Travel Club, Emma S. Clark Memorial Library, Setauket-East Setauket, New York.

Lowcountry Evening for Wildlife with Sally Murphy. Friends of Coastal South Carolina, Citadel Beach Club, Isle of Palms, South

"Writing Beyond Words: Perspectives on Earth and Humanity." Porter Byrum Welcome Center Auditorium, Wake Forest University, Winston-Salem, North Carolina.

Safina Center Blogs

Molly Adams

Picturing the modern naturalist.

Take a look inside the cabinet of extinct and rare birds.

Frica Cirino

It's time to foster a new festival-waste ethic.

The leaders of Iceland's slow-travel movement.

Is Myanmar slowing the world's rising tide of plastic by reusing it?

Hello plastic, my old friend.

Cheyenne Cunningham

Hit the ground running.

Robin Huffman

The days of Sunshine: Raising an orphaned baboon in Africa, Part II.

The days of Sunshine: Raising an orphaned baboon in Africa.

My gorilla dreams in the colors of hope.

BP/AP: Before Primates and After Primates.

A touchy subject in primate caregiving.

Paul Greenberg

The little unicellular photosynthetic engine that could.

Shifting baselines in the ancient world.

Ben Mirin

Environmental Film Festival on Saturday, March 23, 2019.

Katarzyna Nowak

Revisiting history and the fate of the elephant: Excerpts from a 1992

What a warming world might mean for mountain goats in winter

Hob Osterlund

Back to life: When rats are gone, birds and plants thrive.

Home at last: Albatross star returns after five years at sea.

A new idea for curbing poaching in African elephant range is taking

"Kalama's Journey" soars to the shores of Lake Erie.

"Kalama's Journey" ready for lift-off.

Jessie Perelman

The depths around us: Embracing Hawaii's deep ocean with our



A Robin Huffman's painting of "Ayla," a baby vervet monkey she helped care for at a primate sanctuary in Africa has been selected for the 59th Annual Exhibition of the Society of Animal Artists, at The Briscoe Western Art Museum in San Antonio, Texas. Painting: Robin Huffman

What can fish skeletons teach us about life in the deep sea?

Deep-sea mining: Bringing the voice of science to the international stage.

David Rothenberg

Dispatch from David Rothenberg among the nightingales in Berlin.

Dispatch from Hawaii; making music live with whales.

Kate Thompson

Caring without exception.

Nature Rx.

Ian Urbina

One problem, many voices: Discussing climate change at the Bloomberg Vanity Fair Climate Exchange

Guest Bloggers

Farewell, little porpoise. Luke Ormand.

Right whale, wrong time. Gabe Andrews.

FELLOWS

PAUL GREENBERG - Media

Farmed fish is healthy now? As long as you're buying and cooking it smart. *Men's Health*.

Events and Courses

Food, forests and fisheries: Rewilding, recultivating and reimagining of Europe, in Romania and Greece, a college course. Northeastern University.

American Catch at Sunday at Seaport. McNally Jackson Independent Booksellers' Seaport Location, New York, New York.

The Improving Health of New York City's Marine Environment, An Earth Day Panel. 6 River Terrace, New York, New York.

Keynote. Choosing to Lead Conference. Savannah, Georgia.

The Omega Principle. Harvard University, Cambridge, Massachusetts.

ROBIN HUFFMAN – Conservation Work

Volunteer at Ape Action Africa primate sanctuary in Cameroon and supported the organization by coordinating and facilitating fundraising events.

Artworks

"Ayla," painting of a baby vervet monkey by Robin Huffman, selected for the 59th Annual Exhibition of the Society of Animal Artists. Briscoe Western Art Museum, San Antonio, Texas.

"Lesula" print by Robin Huffman gifted to renowned primate conservationist Jane Goodall by scientist Kate Detwiler at a Florida Atlantic University conference announcing the discovery of the lesula, a newly identified species.

Events

"The Gorilla Doctors" presentation. The Explorers Club, New York, New York.

World Oceans Week. The Explorers Club, New York, New York.
6th Annual WILD Film Festival. Explorers Club, New York, New York.
Fundraising reception for Ape Action Africa. Humanscale, New York, New York.

Presentation by Rachel Hogan, OBE. Explorers Club, New York, New York.

Cocktail reception for Ape Action Africa. Private residence, San Francisco, California.

Cocktail reception for Ape Action Africa. 111 Minna Gallery, San Francisco, California.

BEN MIRIN - Film Awards

- "Sounds of Survival": Finalist, 2019 Jackson Wild Media Awards
- "Remixing Madagascar": Finalist, 2019 New York WILD Film Festival

Education

Enrolled as a graduate student at the Cornell University Bird Lab, studying bird song.

National Science Foundation Graduate Research Program grantee.

Educational programs

In-the-field educational birdsong recording workshops with students across the U.S.

KATARZYNA NOWAK - Scientific Articles and Books

Request a woman scientist: A database for diversifying the public face of science. With Elizabeth McCullagh, Anne Pogoriler, Jessica L. Metcalf, Maryam Zaringhalam and Tamara J. Zelikova. *PLoS Biology*.

Mountain goat-Klondike Highway interactions in the Southern Yukon: Technical Report. Wildlife Conservation Society, Canada.

Conservation value of Africa's flooded habitats to non-human primates. With Fiona Maisels, Lynne R. Baker and Hugo Rainey. Primates in Flooded Habitats: Ecology and Conservation, pg. 341-346.

Editors' introduction: Ecology and conservation. With Adrian A. Barnett and Ikki Matsuda. *Primates in Flooded Habitats: Ecology and Conservation, pg. 1-1.*

Worldwide patterns in the ecology of mangrove-living monkeys and apes: Ecology and conservation. With Rebecca Coles. *Primates in Flooded Habitats: Ecology and Conservation, pg. 45-53.*

Primates of African mangroves: Ecology and conservation. With Josephine Head and Aoife Healy. *Primates in Flooded Habitats: Ecology and Conservation, pg 77-88.*

Presentation

Presentation of her Mountain Goat Molt Project. Glacier National Park, Montana.

Media

Guest post: Whistleblowers could help expose wildlife criminals in remote Alaska-Yukon. Whistleblowers Protection Blog.

What it takes to stem poaching at the Yukon-Alaska border. *National Geographic.*

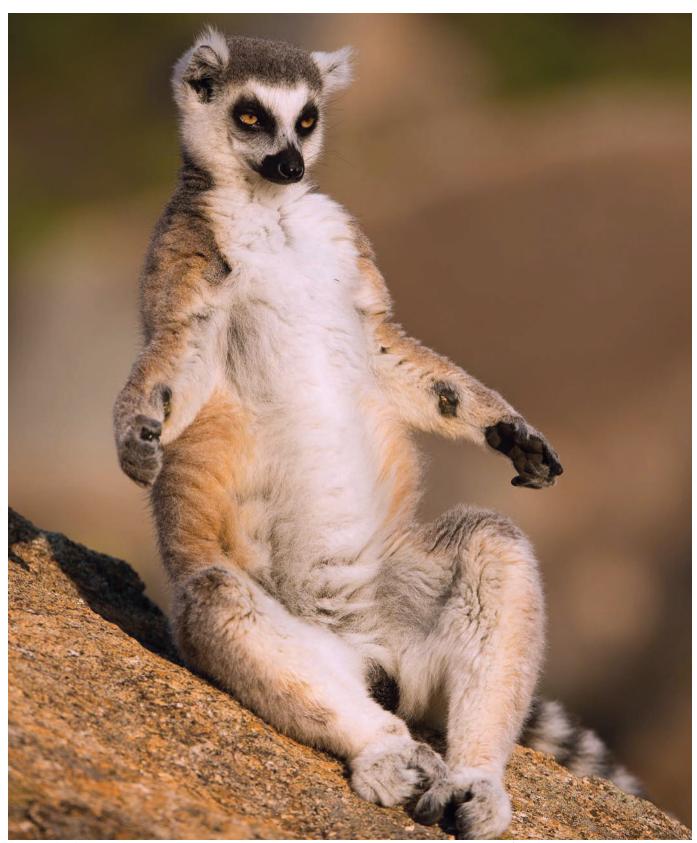
HOB OSTERLUND - Conservation Work

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

Talks

Keynote. Black Swamp Observatory's Biggest Week in Birding's 10th Anniversary. Maumee Bay Lodge, Oregon, Ohio.

Regular talks and book signings "Holy Mōlī'." Kilauea Point National Wildlife Refuge. Kauai, Hawaii.



A Ring-tailed lemur at the Anja Community Reserve in Madagascar. Ben Mirin recorded the sounds of this lemur and other Malagasy wildlife for his film "Remixing Madagascar," which won a finalist award at the New York WILD Film Festival in 2019. Photo: Ben Mirin

Albatross through the eyes of Hawaiian culture with Hawaii expert Kumu Sabra Kauka. Kauai, Hawaii.

Film Awards

- "Kalama's Journey: One Mōlī's Story Among Millions": Telly Award in Nature and Wildlife
- "Kalama's Journey: One Mōlī's Story Among Millions": Best Cinematography Award, Oregon Documentary Film Festival.

DAVID ROTHENBERG - Book

Nightingales in Berlin: Searching for the Perfect Sound. University of Chicago Press. April 19, 2019.

Film

"Nightingales in Berlin." Film by Ville Tanttu. Playart Productions, FN.

Music

- "And Vex the Nightingale," with Lucie Vítková. Terranova Music.
- "Berlin Bülbül," with Korhan Erel. Terranova Music.
- "Nightingale Cities." Terranova Music.
- "Nightingales in Berlin." Terranova Music.

Events

Concert with Robert Jürjendal. Tallinn, Estonia.

Nightingales in Berlin, film showing and discussion. Tallinn Arts Hall, Tallinn, Estonia.

David Rothenberg at Crystal Bridges Museum of American Art. Crystal Bridges, Arkansas.

Caramoor Takes Wing. Caramoor, Mt. Kisco, New York.

Nightingales in Berlin. Marin Art and Garden Center, Ross, California.

IrRational Music meets Nightingales in Berlin with Elliott Sharp. Tom's Place, Berkeley, California.

IrRational Music meets Nightingales in Berlin with Elliott Sharp. City Lights Books, San Francisco, California.

Haerwerk with Elliott Sharp and J.A. Wilhite. Oslo, Norway.

IrRational Music meets Nightingales in Berlin with Elliott Sharp and Jem Finer. Iklectik, London, England.

IrRational Music meets Nightingales in Berlin. Exploratorium, Berlin, Germany.

Nightingales in Berlin film screening with Lasse-Marc Riek and Ville Tanttu. CASINO Filmtheater, Aschaffenburg, Germany.

Nightingales in Berlin film screening. Sputnik, Berlin, Germany.

Nightingales in Berlin. Goethe University, Frankfurt, Germany.

Nightingale Seminar, Museum of Natural History, Berlin, Germany.

Nightingales in Berlin. Zabriskie Books, Kreuzberg, Berlin, Germany.

Nightingales in Berlin cinema premiere. Sputnik, Berlin, Germany.

Nightingales in Berlin film premiere, BUFA, Berlin, Germany.

Nightingales in Berlin Park Performance, Museum of Natural History, Berlin, Germany.

Nightingales in Berlin. Sammlung Hoffmann, Berlin, Germany.

Nightingales in Berlin. Pro QM Books, Mitte, Berlin, Germany.

Nightingales in Berlin and Rinde Eckert. Howland Center, Beacon, New York.

The Poetry Project, Bowery, New York, New York.

Wine, Cheese and Evening Birdsong. Greenwich Audubon, Greenwich, Connecticut.

IrRational Music meets Nightingales in Berlin with Elliott Sharp. 192 Books, New York, New York.

Nightingales in Berlin Book Launch. Explorers Club, New York, New York.

Nightingales in Berlin Book Presentation. NJIT, Newark, New Jersey.

Art Work Talk. The New School, New York, New York.

Concert. University of Illinois, Urbana, Illinois.

IAN URBINA - Book

The Outlaw Ocean: Journeys Across the Last Untamed Frontier. Penguin Random House. August 20, 2019.

Outlaw Ocean Talks

Town Hall Seattle, Seattle, Washington.

Google Community Space, San Francisco, California.

Estuary and Ocean Sciences Center, San Francisco State University, Tiburon, California.

Paris, France.

Libreria, London, England.

EarthX and EarthxFilm. Arcadia Earth, New York, New York.

The Aspen Institute. Washington, D.C.

101 Constitution Rooftop. Washington, D.C.

Politics and Prose, Washington, D.C.

Bloomberg Vanity Fair Climate Exchange, Bloomberg European HQ, London, England.

"KALPANA CHAWLA 'LAUNCHPAD' FELLOWS"

MOLLY ADAMS - Feminist Bird Club Events

Bird Walk with Rob Jett. Ridgewood Reservoir, Brooklyn, New York.

Feminist Bird Club and NYC Audubon Presentation for Lower East Side Girls Club. New York, New York.

Breeding Birds Walk with Shannon Curley, Freshkills Park, Staten Island, New York.

NYC Audubon Tern Festival Walk with Annie Barry. Nolan Park, New York, New York.

Institute for Queer Ecology and BOFFO Bird Walk. Fire Island Pines, Fire Island, New York.

Let's Go Birding Together Walk. Central Park, New York, New York.

Bird Walk with Akilah Lewis. Kissena Park, Queens, New York.

Horshoe Crab Festival. Jamaica Bay Wildlife Refuge, Queens, New York.

Spring Migration Walks with Jeffrey Ward. Central Park, New York, New York.

 $\ensuremath{\mathsf{NYC}}$ City Nature Challenge with Jen Kepler. Marine Park Salt Marsh, Brooklyn, New York.

Move Forward Staten Island Walk. Freshkills Park, Staten Island, New York.

Bird Walk with Martha Harbison. Central Park, New York, New York.

American Museum of Natural History Collections Tour with Paul Sweet. American Museum of Natural History, New York, New York.

Bird Walk with Jeffrey Ward. Pelham Bay Park, Bronx, New York.

ERICA CIRINO - Media

Nuclear power is not the answer in a time of climate change, with Heidi Hutner. Aeon.

Something to warble about. American Bird Conservancy (print).

Saving the reddish egret, a seasore setinel. American Bird Conservancy (online).

Could Trump's government shutdown cause outbreaks of wildlife disease? Ecowatch (reprinted with permission from The Revelator).

Where whales and plastic meet. Hakai Magazine.

Is this tiny copepod the key to sustainably producing omega-3s? Hakai Magazine.

Falling in love with French Polynesia. Santa Cruz Waves (print/online).

Our nonhuman kin are suffering – It's time to empathize. *TBR News Media*.

Killing as a government service. The Revelator.

Justice through citizen science: How 'chemical fingerprinting' could change public health. *The Revelator.*

Plastic pollution: Could we have solved the problem nearly 50 years ago? *The Revelator.*

What laws work best to cut plastic pollution? The Revelator.

Could Trump's government shutdown cause outbreaks of wildlife disease? *The Revelator.*

You're likely inhaling 11 tiny bits of plastic per hour. VICE.

Talks

- "Exploring the Pacific Ocean and Beyond in Pursuit of Plastic." Middle Country Public Library, Centereach, New York.
- "Exploring the Pacific Ocean and Beyond in Pursuit of Plastic." East Islip Public Library, East Islip, New York.
- "Tales of a Wildlife Rehabilitator." East Islip Public Library, East Islip, New York
- "Tales of a Wildlife Rehabilitator." Huntington Public Library, Huntington, New York.
- "Exploring the Pacific Ocean and Beyond in Pursuit of Plastic." Cold Spring Harbor Public Library, Cold Spring Harbor, New York.
- "Rethinking the Big, Bad Wolf." Bayport-Blue Point Public Library, Bayport-Blue Point, New York.
- "Exploring the Pacific Ocean and Beyond in Pursuit of Plastic." Comsewogue Public Library, Port Jefferson Station, New York.
 - ▶ Jessie Perelman (center) at the 25th Council Session of the International Seabed Authority in Kingston, Jamaica, with members of a delegation that promotes use of science to guide deep-ocean resource use. Photo: Jessie Perelman

- "Trashed Nests, Poisoned Bellies and Entangled Wings: A Bird's Eye View of Plastic Pollution." Connecticut Audubon at Audubon's Birdcraft Museum, Fairfield, Connecticut.
- "Tales of a Wildlife Rehabilitator." South Huntington Public Library, South Huntington, New York.
- "Un Oceano Di Plastica: Tesimonianza diretta dal fronte di una crisiecological globale" / "A Plastic Ocean: Direct witness from the front of a global crisis." Casa Neutral. Matera, Italy.

Radio

- "How marine life is changing." The Full Story, NPR-WSHU.
- "An environmental review." The Full Story, NPR-WSHU.

CHEYENNE CUNNINGHAM - Education

Enrolled in Charleston Law School's JD program (2019-2021)

Interview

Discussion about shark migration along the South Carolina coast with Coastal Carolina University's *The Chanticleer News*.

JESSIE PERELMAN - Research

Winner of Saildrone Award (\$1,000,000 value) for at-sea research.

New Zealand, with University of Hawaii.

Friday Harbor, with University of Hawaii.

Talks and Workshops

"Deep-sea biodiversity." Punahou School, Honolulu, Oahu, Hawaii.

Mauka to Makai 12th Annual Environmental Expo. Waikiki Aquarium, Honolulu, Oahu, Hawaii.

National Science Foundation Summer Bridge Class. Kapi'olani Community College, Honolulu, Oahu, Hawaii.

The Media Method, a workshop on science communication. University of Hawaii, 44th Annual Tester Symposium. Honolulu, Oahu, Hawaii.

25th Council Session of the International Seabed Authority, Kingston, Jamaica.

"The Deep Sea." Kamehameha Schools, Oahu, Hawaii.

KATE THOMPSON – Award

PhD Works Professional Development Award for her medical anthropology and conservation research at Stony Brook University.





▲ Osprey moonrise, Long Island, New York. Photo: Carl Safina

MEDIA COVERAGE OF OUR WORKS

When women run the world, by Purbita Saha. National Audubon Society.

Feminist birding with the northern flicker, hosted by Jason Ward and directed by Rob Meyer. Topic.

A feminist revolution in birding, by Olivia Gentile. Medium.

Shorebird festival celebrates avian life on the bay, by Peter C. Mastrosimone. Queens Chronicle.

The best Father's Day gifts for bird-watching dads, according to birders, by Dominique Pariso. The Strategist, New York Magazine.

Head to Berlin to hear nightingales sing, by Mark Cocker. The Spectator.

Jamming with nightingales. Outlook, BBC.

Caramoor invites the birds to take part in a songfest, by Anthony Tommasini. The New York Times.

Why nightingales are snubbing Berkeley Square for the Tiergarten, by Philip Oltermann. The Guardian.

Race and disease risk and Berlin's singing nightingales, by Sarah Crespi, Meagan Cantwell, and Valerie Thompson. Science.

NJIT's David Rothenberg honored for achievement in art and science, by Jesse Jenkins. NJIT.

A song like no other, by Marshall Helmberger. The Timberjay.

7 things to do with your kids in N.Y.C. this weekend. The New York Times.

Bird & bug musician David Rothenberg coming to Crystal Bridges. Crystal Bridges Museum of American Art.

Is the gourmet fish of the future frozen? by Josh Schonwald. The Spoon.

Presenting the 2018 Bitch 50, by Bitch HQ. Bitch Media.

Climate change really gets this researcher's goat, by Rebecca Heisman. The Revelator.

How scientists are fighting against gender bias in conference speaker lineups, by Katie Langin. Science.

How can we stop the collapse of nature? by Brian Kahn. Gizmodo.

Botswana brings back trophy hunting, by Ross Harvey. Ecologist.

The fishy science of Omega-3s, by Nicola Twilley. The Atlantic.

Trump's EPA may be about to screw over America's biggest wild salmon run, by Madison Pauly. Mother Jones.

Why serious cooks are in love with frozen food, by Sarah Karnasiewicz. The Wall Street Journal.

Do animals think and feel? by Glenn Jochum. SBU Press.

Eating our way to a sustainable future, by Alvin Powell. The Harvard Gazette.

Why restaurant demand for smaller fish fillets is bad news for oceans, by Alastair Bland. NPR's The Salt.

A MESSAGE FROM SAFINA CENTER CHAIRMAN, B. ERIC GRAHAM

"The signals are everywhere, From climate to extinction to deforestation to pollution to human overpopulation, we are living during a time of great ecological crises. The Safina Center presses ever forward to shed light on crises that require a sense of action and the full force of humanity to overcome. We have manufactured crises that only we can find ways to solve, for us, ourselves. Our Fellows and Staff create meaningful works that enhance our understanding, boost our compassion, and guide us to take tangible action. Moving humanity to make positive change and to inspire action like no other group or organization does today."



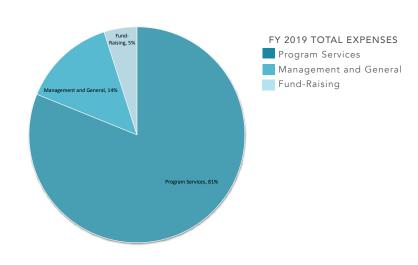
▲ Martha's Vineyard. Photo: B. Eric Graham.

About: Eric is committed to bringing real-estate technology to market, making buildings more efficient and effective for the people who occupy them. As CEO of CrowdComfort Eric works with F500 companies to improve communication around employees' workplace requests. By leveraging mobile apps and cloud analytics CrowdComfort increases employee productivity, safety & comfort to optimize building performance and efficiency, increasing employee satisfaction while reducing wasted energy, water, and other precious resources in our built environments.

The Safina Center Summary Statement on Financial Position

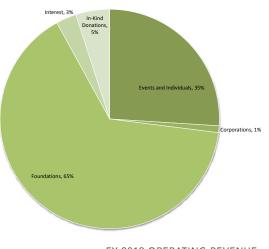
May 31, 2019

Assets	
Cash and Interest-Bearing Deposits	\$373,316
Investments	557,857
Contributions and Pledges Receivable	105,687
Other Assets	478,172
TOTAL ASSETS	\$1,515,032
Liabilities	
Accrued Expenses	\$26,473
TOTAL LIABILITIES	\$26,473
Net Assets	
Unrestricted	\$1,173,740
Restricted	314,819
Total Net Assets	1,488,559
TOTAL LIABILITIES AND NET ASSETS	\$1,515,032



The Safina Center Summary Statement of Activities

	Unrestricted	Restricted	Total
PUBLIC SUPPORT AND REVENUE:			
Public support: Contributions	\$275,494	\$201,750	\$477,244
Revenue	109,099	-	109,099
Net assets released from restrictions	263,841	(263,841)	
TOTAL PUBLIC SUPPORT & REVENUE	648,434	(62,091)	586,343
EXPENSES:			
Program Services	436,166	_	436,166
Supporting Services:			
Management and General	75,033	_	75,033
Fund-raising	26,505	_	26,505
Total Supporting Services	101,538	_	101,538
TOTAL EXPENSES	537,704	_	537,704
Increase in Net Assets Before Other Decreases	110,730	(62,091)	48,639
Other Decreases:			
Unrealized Loss on Investments	(91,628)	-	(91,628)
Increase (Decrease) in Net Assets	19,102	(62,091)	(42,989)
Net Assets, Beginning of Year	1,154,638	376,910	1,531,548
Net Assets, End of Year:	\$1,173,740	\$314,819	\$1,488,559





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 2019. Again, we thank you for all of your ongoing support!

Up to \$1,000

Richard Abbott

Judith Abrams Iane Alexander

Eric Allen

American Family Insurance Dreams Foundation

Eric & Nancy Badkin Antlitz

Marjorie Sale Arundel Fund

for the Earth

Linda and Doug Avery

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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 beguest that now serves as the seed for our endowment.

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The Safina Center is a 501(c) 3 Long Island, NY

▼ Scarlet macaws in the Tambopata River region of the Peruvian Amazon, where Carl Safina spent time observing free-living macaws for his coming book on nonhuman animal cultures. Photo: Carl Safina



▲ Scarlet macaws along Tambopata River, Peru. photo: Carl Safina



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▲ Common Terns. Napeague Bay, Long Island. Photo: Carl Safina

Author and ecologist 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.

THE SAFINA CENTER CALLS ON YOU TO TAKE ACTION

The Safina Center's goal is to inspire you to take action to make the world a better place for all beings who call it home. If you've been wondering where and how to get started, we invite you to visit our website's new "Take Action" pages, where you can stay up-to-date on the latest environmental issues and learn what you can do to help.

Here are the three big issues we asked you to engage with in 2019, and where they stand now-thanks to your active involvement!

BIG ISSUES

Climate - Experts on the Intergovernmental Panel on Climate Change say, "Scientific evidence for warming of the climate system is unequivocal." In other words, there is no doubt climate change is real, and it's happening quickly. Scientists say that global temperatures are expected to increase by 0.5 to 8.6 degrees Fahrenheit by 2100, with an estimated increase of at least 2.7 degrees Fahrenheit given current greenhouse gas emissions. This increase is expected to cause more frequent and intense heat waves, change weather patterns and threaten the survival of plant and animal species. We've compiled actions that help minimize your personal carbon footprint and push for meaningful action on climate globally.

Land and Wildlife - Initiatives to exploit fossil fuels, minerals, water, forests and other resources, as well as the expansion of cities and other developments are major sources of habitat loss for wildlife. Without a safe place to live, wildlife species will go extinct. Also threatening many wildlife species' chances for survival are hunting and harassment-people kill animals for food, recreation and economic purposes. And in some cases, animals are killed for no good reason at all. We've made a list of actions you can take to help preserve land and conserve wildlife species locally and worldwide.

Ocean - The oceans cover more than 70% of Earth's surface, and yet they're one of the least-understood habitats on the planet. And unfortunately, they're one of the most threatened-by things like climate change, overfishing, bycatch, plastic pollution, and more. More and greater efforts to protect the oceans and the life they contain are vital. The Safina Center regularly posts the latest ocean conservation initiatives and how you can best participate in making them a reality.

You can find the Safina Center's Take Action pages here: http://safinacenter.org/ take-action-on-environmental-issues/



▲ Sockeye salmon in Alaska. Photo: National Parks Service

HIGHLIGHTS

Pebble Mine - The Safina Center has been a vocal opponent of Pebble Mine, a mineral extraction operation planned for construction on Alaska's Bristol Bay. Bristol Bay is home to one of world's last great salmon runs, and in Alaska, salmon feed not only local people but wildlife and the very Earth itself. We asked you to send your public comments opposing this dirty and dangerous project to the U.S. Army Corps of Engineers, which is tasked with evaluating its safety and effects on the environment. Your efforts helped slow the mine's review process and forced the Army Corps to reevaluate the project. Currently the Trump Administration is pushing for the mine to be approved as the Army Corps continues to deliberate.

M44s - In 2019, across 13 states in the U.S., government workers deployed M44 cyanide bombs to kill predator animals in an effort to reduce interactions with humans. This, though science shows killing predator animals like coyotes & foxes actually leads to an increase in negative human-wildlife interactions. These small poison bombs have killed unsuspecting dogs and have harmed children. This year we asked you to write letters to your state representatives asking for a national ban on M44s. Your letters pushed Oregon to implement a statewide ban on M44s in Oregon, and later the U.S. Environmental Protection Agency to enact an interim ban on deploying M44s across the nation!

Gray wolves - This year, the U.S. Fish and Wildlife Service proposed removing the gray wolf from the Endangered Species List. Removing wolves from the list could reverse decades of conservation progress in repopulating gray wolves across the Lower 48 States: Gray wolf populations-severely depleted due to hunting, poaching and persecution by government officials looking to reduce wolf-human conflicts-have increased thanks to U.S. government protections enacted in the 1970s. We asked you to submit public comments opposing this "de-listing," and we now wait for the U.S. government's final decision on wolves' protection status.

