



Take An Ocean Journey To New
England's Unseen Ocean



Brian Skerry on Why Photography
Matters



Discover Ocean Treasures on
Cashes Ledge



Phil Hoff on Why CLF Always
Stands Up

CONSERVATION **MATTERS**

THE JOURNAL OF THE CONSERVATION LAW FOUNDATION | www.clf.org

COVER STORY

NEW ENGLAND OCEAN ODYSSEY:

A JOURNEY BENEATH NEW ENGLAND'S WAVES

— No 3 —
SUMMER
2012

NEW ENGLAND OCEAN ODYSSEY:

A journey beneath New England's waves

“By revealing this hidden ecosystem teeming with life through Brian Skerry’s watchful eyes, we hope to deepen New Englanders’ relationship with their ocean and their commitment to protect it. We think people will be amazed by the enormous beauty, diversity and majesty of New England’s ocean.”

— Priscilla Brooks, VP and Director, Ocean Conservation

Although it is one of the most extraordinary and biologically productive ecosystems in the world, New England’s deep, cold ocean remains a mystery to most. Now, Conservation Law Foundation (CLF) and renowned photojournalist Brian Skerry are partnering to reveal its mysteries through the New England Ocean Odyssey – a first-of-its-kind journey beneath New England’s waves.

New England’s ocean, including the Gulf of Maine, Georges Bank, and ocean waters south of Cape Cod and adjacent to Rhode Island, is the economic bedrock of New England’s coastal communities, supporting a wide variety of commercial and recreational activities. Unfortunately, many things are happening that threaten the vitality of New England’s ecosystems. Decades of pollution to our marine waterways, coastal habitat destruction, overfishing, and bottom trawling have led to the loss of important habitat and diminished biodiversity. Climate change and ocean acidification are affecting the productivity of our oceans in profound ways that we are only beginning to understand. These changes threaten the economic vitality of our coastal communities. While every New Englander would argue that our ocean is worth protecting, few can picture the magnificent animals, plants and features that make this ocean special. By revealing this hidden eco-



New England’s ocean contains majestic but often unseen creatures. New England Ocean Odyssey brings their astonishing beauty to your home.

system teeming with life through Brian Skerry’s watchful eyes, we hope to deepen New Englanders’ relationship with their ocean and their commitment to protect it. We think people will be amazed by the astonishing beauty, diversity, and majesty of New England’s ocean.

After three decades of exploring the world’s oceans, Uxbridge, Massachusetts resident Brian Skerry will return to his native New England to conduct a series of dives for CLF, exploring both coastal areas and deep sea habitats far offshore.

Through Skerry’s exclusive photographs and first-hand accounts of his diving expeditions, the New England Ocean Odyssey will provide a never-before-seen view of the amazing riches of New England’s ocean and bring attention to the very real issues facing it. Over the next five years, the New England Ocean Odyssey will explore many special places in the Gulf of Maine, including places far offshore. We hope you’ll join us on this journey.

Photos: Brian Skerry



BRIAN SKERRY

Brian Skerry's love of New England's ocean started when he was a little boy, playing at the water's edge on the beaches he visited within driving distance from his Uxbridge, Massachusetts home. His career has taken him far and wide. As a contract photographer for National Geographic Magazine since 1998, Brian has covered a wide range of stories, from the harp seal's struggle to survive in frozen waters to the alarming decrease in the world's fisheries. Skerry has also worked on assignment for or had images featured in magazines such as Sports Illustrated, US News and World Report, BBC Wildlife, GEO, Smithsonian, Esquire, Audubon, Men's Journal and in countless publications worldwide. His latest book, a 160-photo monograph entitled *Ocean Soul*, was published in 2011.

"I'm privileged to be able to provide a view into this underwater world that is so vital to humankind, yet so remote," Brian said. "New England's ocean is no exception. Dark, cold and deep, it is among the most mysterious reaches of our planet."

JOIN US

Have you ever wondered what's down there? If you dive or fish in New England, you know some of its natives: our sacred cod, the fierce-looking Atlantic wolffish, the endearing grey seals and the greatly endangered Northern right whales. But few have explored the depths of the Gulf of Maine, home to some of the world's most biodiverse underwater ecosystems, including Stellwagen Bank, Cashes Ledge, Jordan's Basin and Jeffreys Ledge. These special places and their inhabitants need to be seen to be believed—and that's the idea behind the New England Ocean Odyssey.

ATLANTIC WOLFFISH



With gaping jaws, an eel-like tail and sharp, jutting teeth, the Atlantic wolffish looks more like a feral canine than a marine fish. These fish – also known as sea wolves – possess an imposing presence, measuring up to 40 pounds and six feet in length. But though their appearance is frightening, Atlantic wolffish are benthic dwellers, living in the deepest part of the ocean and rarely moving far from their homes. To survive, wolffish use a naturally developed anti-freeze that flows in their blood – necessary for living at depths of up to 400 feet below the ocean surface. Their stationary habits, however, have put them at risk. Their numbers have plummeted due to overfishing and habitat destruction via seafloor trawling, dropping down to just 5% of their original population count in the space of thirty years. Without a concerted effort to protect their few remaining habitats, the Atlantic wolffish could face extinction in the near future. The remote nature of Cashes Ledge makes it one of the few ocean places in which the Atlantic wolffish can thrive. For these reasons, ocean habitat protection is critical to preserving the biological diversity of New England's seas.

**FOLLOW
NEOO
ONLINE**

To see more images, and to read more about NEOO, visit:
www.newenglandoceanodyssey.org



TREASURE ON CASHES LEDGE:

An Ocean Refuge in Need of Protection

“I’ve honestly never seen anything quite like this place; a truly unique ecosystem with acres of thick, healthy kelp.”

— Brian Skerry, renowned photojournalist and New England Ocean Odyssey Photographer

New England is as famous for its coastline as for its fish – but what lies beneath New England’s waves goes largely unseen and unremembered. One of these unknown treasures is Cashes Ledge, a 25-mile long underwater mountain range which lies 80 miles off the coasts of Massachusetts, Maine, and New Hampshire and shelters one of the most distinctive marine ecosystems in the Atlantic. But Cashes Ledge is as sensitive to human interference as it is important to ecological diversity. With limited protection against increasingly destructive fishing techniques, Cashes Ledge remains vulnerable.



ATLANTIC RICHES

Cashes Ledge hosts a remarkable diversity of marine life, from the Atlantic wolffish and rare blue sponge to the unusual red cod. The reason for such diversity lies in the mountain range itself, whose pinnacles interrupt the primary Gulf of Maine current and create a stunning oceanographic phenomenon known as internal waves, which carry high levels of nutrients and oxygen from the sea surface to the sea floor. This unusual circulation pattern results in an incredibly productive and diverse ecosystem. Cashes Ledge boasts the deepest cold water kelp forest in the Gulf of Maine and possibly the North Atlantic and has a rich array of invertebrates including sea anemones; bright orange, red, yellow and blue sponges; horse mussels; sea stars; brittle

and feather stars; sea squirts; worms and northern shrimp. Atlantic bluefin tuna can be found pursuing herring on Cashes Ledge and blue sharks are common during the warm summer months. Humpback and Northern right whales often stop off to feed on the abundant supply of plankton. Cashes Ledge is also rich in a variety of groundfish including Atlantic cod, white hake, monkfish, haddock and redfish. A variety of offshore sea birds can be found dining at Cashes, such as sooty shearwaters and Wilson’s storm-petrels.

Cashes Ledge is also a rarity in New England waters. Though the ledge’s jagged, rocky formation has protected this particular habitat from significant human interference, other areas in the Gulf of Maine have not been so lucky. Cashes Ledge

is unique in the greater Gulf of Maine system because its mountains shield one of the few remaining examples of what an undisturbed and thriving ecosystem in this region could look like. It’s no wonder that scientists have used Cashes Ledge as an oceanographic research lab for decades.

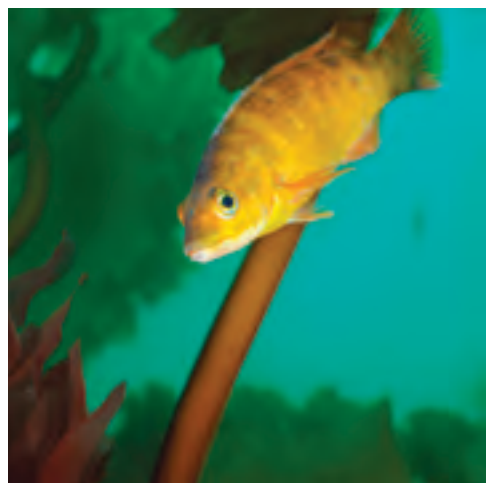
UNDER ATTACK

Up until the late 1900s, the rocky seafloor surrounding the Cashes Ledge mountain range prevented fishermen from trawling the ocean floor for their catch. Today, modern fishing gear equipped with “rock-hoppers” is more effective and more destructive, and poses a serious threat to this ecological treasure beneath the waves. Certain species are especially at risk. Bottom trawling could easily wipe out certain populations of sea anemones, and

scientists estimate that it would take over 200 years for the population to recover and return to the area. The kelp forests are also prone to shredding from simple fishing gear like lines, hooks, and traps, and bottom trawling could remove entire sections of the kelp forests – requiring years to recover. Any sustained damage to this delicately balanced ecosystem could last for decades or more.

INADEQUATE PROTECTION

Though a portion of Cashes Ledge is currently protected by the New England Fishery Management Council (NEFMC), this protection is very limited. A part of Cashes Ledge has been designated as a habitat protection area and much of it is currently closed to fishing for cod, haddock and other groundfish. However, Cashes Ledge remains open to fishing with certain kinds



Cunner is one of many species that live in Cashes Ledge, which sits less than 100 miles from the New England coastline.

of gear such as “mid-water” trawlers, large offshore lobster pots and seine nets that can seriously impact this sensitive ecosystem. Furthermore, the NEFMC is now considering modifications or elimination of these already limited protections – threatening the diversity of ocean wildlife and the unique habitat found on Cashes Ledge and the long-term health of this important and vulnerable ecosystem.

CLF ACTION

CLF has taken the lead in campaigning for the permanent protection of Cashes Ledge from damaging fishing gear. It is clear to us that the real value of this special place lies in preserving this treasure for ocean wildlife and as an open sea laboratory for the world’s scientists.

CLF is also committed to raising public awareness for Cashes Ledge and other ocean habitats through the recent launch of the New England Ocean Odyssey, featured earlier in this issue. This five-year program is just one of many ways CLF remains dedicated to conserving New England’s oceans.

Protecting Cashes Ledge is more than an environmental obligation – it is an opportunity. Preserving this area of natural beauty offers the chance to create another legacy for New England – one that recognizes its biodiversity and provides a thriving environment for generations to come.



Photojournalist Brian Skerry and his crew dove underwater last June to capture the diversity of Cashes Ledge life on camera.

AMMEN ROCK

Ammen Rock is the highest peak in the Cashes Ledge range. Rising steeply off the ocean floor from 460 feet below to within 40 feet of the ocean’s surface, Ammen Rock, like a rock in a river, disrupts the strong ocean currents, sending streams of swirling water across the underwater mountain. This unusual phenomenon produces “internal waves” that create ideal conditions for extraordinarily high production of algae and phytoplankton – the foundation of the marine food web. Created 13,000 years ago by melting glaciers, the unique topography and ecology of Cashes Ledge make it one of the most outstanding marine areas in the North Atlantic. Large and small alike – from whales and cod to anemones and sponges – Ammen rock is home to New England’s most prized, and precious, species.

FOLLOW CLF ONLINE

Sign up for email alerts @ clf.org

In between quarterly issues of *Conservation Matters*, make sure you stay informed of what CLF is doing and how you might be able to get involved. Doing so is easy – just find us at any one of the following web sites.

- CLF’s blog clf.org/blog/
- Twitter @theclf
- Facebook [fb.com/TheCLF](https://www.facebook.com/TheCLF)

BRIAN SKERRY

National Geographic photographer



Photo Brian Skerry

Brian Skerry, a National Geographic photographer, is the photographer behind New England Ocean Odyssey. He is also a passionate ocean advocate and New England native.

1 How did you start diving?

I began diving at age 15 right here in New England. Since the earliest age I had a fascination with the ocean – this innate desire I couldn't explain.

2 What are people's greatest misconceptions about diving in New England?

I will acknowledge that diving in temperate colder waters can be intimidating as it does require more effort than in tropical locations: you have to wear more equipment and the visibility will not be as good. That said, there is a great misconception that there isn't much to see, and that what there is to see is not very interesting. From 35 years of diving I can tell you: it's quite the opposite.

3 Over your 35 years of diving, what experiences and sights stand out?

I tend to be drawn to temperate waters as they are some of the most rich, life-filled waters on the planet. New England is no exception: there is an incredible array of life in New England's waters. One of my favorite places is Eastport Maine, the easternmost point in the United States. Because of the great tidal exchange in Passamaquoddy Bay, the abundance of marine life there is tremendous. The other thing that rises high on my list would be diving with sharks. When you think of diving with sharks, you think of tropical locations, which are all fantastic, but New England has had a healthy population of sharks for years. Sadly, that population is no longer what it used to be.

4 What changes have you observed in New England's ocean?

When I started in 1978 or 79, I made dives off the beach in Jamestown and Rockport, and I can recall seeing huge shoals of fish

on a much more frequent basis: pollack or herring and other species. I remember seeing lots of that kind of stuff. That was not the case in later years; I saw fewer and fewer of those big old cod. And these days, I just don't see those fish. On the more positive side, there is Boston Harbor. I used to dive with friends in Boston Harbor in the 80s and 90s on shipwrecks. I remember how terrible the water quality was: it was like diving in a sewer. When the water would come over bow it would leave a brown stain. It was like literally diving in crap. It was horrible. Largely thanks to CLF, it's much, much better. The water is much cleaner, and life there is dramatically and noticeably better.

5 What is your goal with New England Ocean Odyssey?

The goal would be to really celebrate this incredible diversity that we have right here in our own backyard. I know for a fact that there is this incredible web of life. Everything is connected to everything else. My hope is that through photography we can take this magnificent life beneath the sea and bring it to people's homes and to their lives. And with that, the hope is that New Englanders and people everywhere will see New England's water differently. If they can appreciate and love what I know is down there, then I know they will have a passion to protect it.



WHY I GIVE

For over twenty years I have supported CLF because I know that CLF will always stand up for our environment. As an environmental organization, it stands up for what it believes in, regardless of the consequences. At a time when our state is facing ever increasing environmental threats, we need CLF to keep our water clean, our forests healthy and to hold our government to account. We need CLF now more than ever.

Over the last year, this has been particularly true. I have watched as CLF made sure the government abides by its obligations, pushed for strict limits on sewage discharges and nutrient pollution, and opened the way for citizens and conservation groups to comment on enforcement cases. This year, as in years past, I was proud of my long-standing commitment to CLF.

I made my first donation to CLF in 1989. A decade ago I decided to make a gift of stock to establish a charitable gift annuity. That way, I was able to give considerably more to CLF than I had ever been able to before. The annuity works for both of us: while they benefit from the donation, I benefit from a lifetime stream of income that is partially tax deductible. There are other New Englanders who have made the same decision I have, and I know that CLF would be happy to describe in greater detail how they work.

I'm a great believer in CLF, and am glad to have found a way to support the organization that benefits us both.

Phil Hoff
Former Governor of Vermont
Burlington, Vermont

pdbreen, flickr

{ BE A SMART PHILANTHROPIST }

Contact us today to learn more about giving to CLF.

Tim Harwood
VP Development
tharwood@clf.org
617.850.1738
www.clf.org/donate
www.clf.org/plannedgiving

We all want our donations to make the biggest impact possible on the things we care most about. Now CLF has a new tool to help you achieve just that. We are pleased to unveil CLF's new planned giving website: www.clf.org/plannedgiving. The new site presents the different ways you can support CLF's important work

and demonstrates the financial and tax implications of each. The site also offers free e-brochures with helpful topics like when is the best time to create a will and the best way to pass on your conservation values. We hope you find this a useful tool when planning your next gift to CLF!

CONSERVATION MATTERS

THE JOURNAL OF THE CONSERVATION LAW FOUNDATION | VOLUME XI, NO. 3 | SUMMER 2012 | ISSN 1521-9941

LETTER FROM THE PRESIDENT



Dear CLF Friends,

New England is intimately connected to its ocean for its cultural history, its economy, and for the draw it exerts on visitors

during the long, lazy summer months. For something so important, it is a resource whose treasures are rarely in view. A few new projects will change that.

A few months ago we launched a 5 year campaign called New England Ocean Odyssey with renowned photojournalist Brian Skerry to document and raise awareness about New England's oceans. Many of the photos that line these pages are from Brian's early dives for CLF, and all are from New England. What they show is an underwater ecosystem that is more beautiful than many of us ever knew.

There can be no doubt that New England's ocean is a national treasure. It is my belief that places like George's Bank, Stelwagen Bank, and Cashes Ledge, all found right

here in The Gulf of Maine, should stand alongside places like Acadia, Zion and Yellowstone. Like the grey seal on the cover, they are arresting, calming, rare places. Beyond their arresting beauty, these creatures and places share one other trait: they are facing increasing pressure – pressure that requires us to help protect them. That's why we're trying to raise awareness. Just as Brian Skerry says in his interview, we believe that once people see these places and these creatures, they won't have any choice but to care.

You, too, play an important role in raising awareness. We've just launched a project called the My New England Photo Contest: Ocean Edition in which people can submit photos of New England's oceans, from above or below the water, that Brian himself will judge. Do you have beautiful photos? Share them with us! Just type into your web browser: www.bit.ly/NE00PhotoContest

Best,

John Kassel

John Kassel
President

Michael B. Moskow
Chair, Board of Trustees

Sara Molyneaux
Vice Chair, Board of Trustees

Peter Nessen
Vice Chair, Board of Trustees

Gordon Hall III
Vice Chair, Board of Trustees

Eugene H. Clapp
Treasurer, Board of Trustees

Thaleia T. Schlesinger
Secretary, Board of Trustees

Daniel Amory
Chair, Maine Board

John B. French, Esq.
Chair, Massachusetts Board

Martin L. Gross, Esq.
Chair, New Hampshire Board

Louise Durfee, Esq.
Chair, Rhode Island Board

Ann Seibert
Chair, Vermont Board

CLF Maine / 47 Portland Street, Suite 4
Portland, ME 04101 P: 207.210.6439

CLF Massachusetts / 62 Summer Street
Boston, MA 02110 P: 617.350.0990

CLF New Hampshire / 27 North Main Street
Concord, NH 03301 P: 603.225.3060

CLF Rhode Island / 55 Dorrance Street
Providence, RI 02903 P: 401.351.1102

CLF Vermont / 15 East State Street, Suite 4
Montpelier, VT 05602 P: 802.223.5992