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UNDER THE WAVES

Actress and surfer Aimee Teegarden joins Oceana to reveal the hidden treasures below the surface.

PLUS

CAN WE SAVE THE OCEANS TO FEED THE WORLD?

PROTECTING SEA TURTLES AND SHARKS

OCEANA UNCOVERS SEAFOOD FRAUD



Oceana is the largest international advocacy group working solely to protect the world's oceans. Oceana wins policy victories for the oceans using science-based campaigns. Since 2001, we have protected over 1.2 million square miles of ocean and innumerable sea turtles, sharks, dolphins and other sea creatures. More than 500,000 members and e-activists support Oceana. Global in scope, Oceana has offices in North, South and Central America and Europe. To learn more, please visit www.oceana.org

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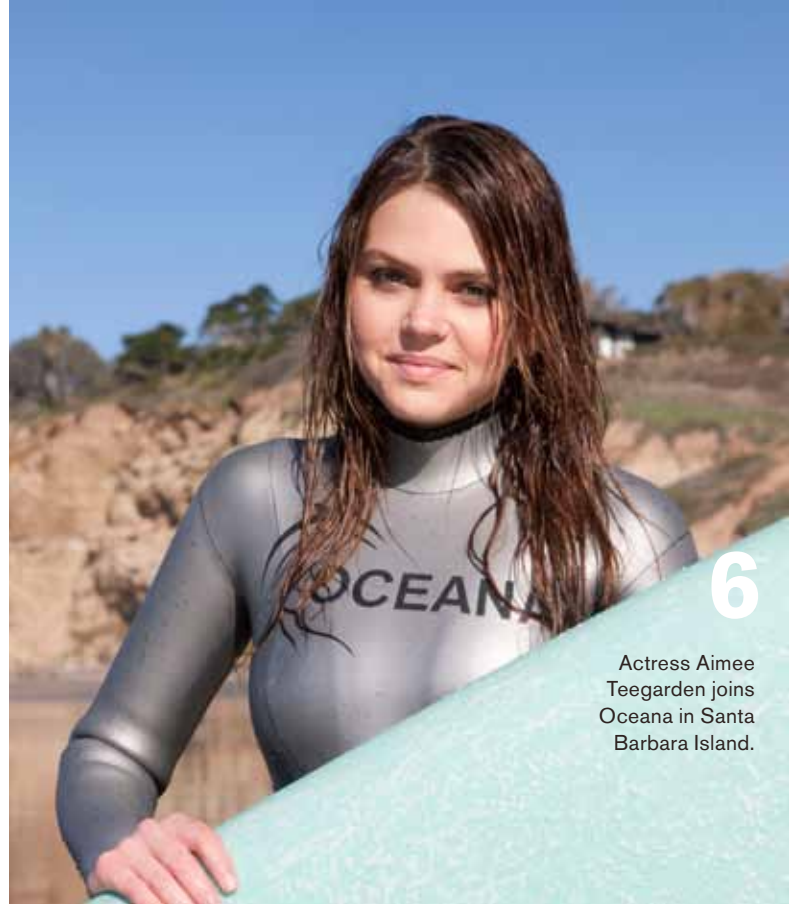
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Actress Aimee Teegarden joins Oceana in Santa Barbara Island.

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Actress Aimee Teegarden of "Friday Night Lights" joins Oceana in a mission to reveal the mysteries of the oceans' hidden depths. Join her in beautiful Santa Barbara Island, California.

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Aimee Teegarden in Santa Barbara Island, California.

© OCEANA | Tim Calver

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Oceana's accomplishments wouldn't be possible without the support of its members. You can help Oceana fight to restore our oceans with your financial contribution.

Call us today at 1.877.7.OCEANA, visit www.oceana.org/give or use the envelope provided in this magazine to make a donation. Please contact us if you are interested in planned giving that could support Oceana's work and also provide you with income and potential tax benefits. Oceana is a 501(c)(3) organization and contributions are tax deductible.



OCEANA

Protecting the
World's Oceans

How saving the oceans can feed the world

On terra firma, conservation and agriculture are at war. To optimize food production, we usually minimize biodiversity. The imperatives to steward life and to end hunger collide. We cut down forests to plant cornfields.

This moral dilemma will become ever more acute in the coming decades. There will be 9 billion of us by 2050, give or take a billion. Rising general standards of living will generate a disproportionately large increase in the demand for animal protein. To put it simply, the better off people get, the more they want chicken, steak and lobster.

Livestock production is an intensive user of increasingly scarce natural inputs. Feeding cattle, for example, requires huge quantities of arable land and fresh water. On a global basis, arable land per capita has already been steadily declining for decades.

The oceans can be a big part of the solution. If we save the oceans, we can help feed the world.

Ocean protein has huge advantages over terrestrial livestock. It is cheaper to produce per pound. It requires no land. It is much more CO₂ efficient. It uses only trivial amounts of fresh water. And of course it is healthier for us – switching diets to fish from red meat has been shown to lower rates of heart disease and even cancer.

On a global basis, a fully productive ocean could provide the entire animal protein diet for a billion people, or 13 to 15 percent

of the animal protein produced on the entire planet. However, almost no one is planning for the oceans to play this vital role in feeding humanity. Why? Because the world's oceans' productivity is already in decline. Starting in the late 1980s, the total weight of the world's wild fish catch peaked. This long-term decline is even more serious because it is happening in the face of ever more sophisticated and aggressive commercial fishing techniques.

At first thought, this seems like a marine reprise of the terrestrial war between biodiversity and food production. To feed people, we've overfished the oceans, just like we've cut down the rainforests.

But think again. In the ocean, food production and biodiversity need not be at war – indeed, in a healthy ocean, they are allies. The measures we need to take to protect biodiversity – setting scientific catch quotas, protecting nursery habitat, reducing bycatch – are the same steps that will increase productivity.

Restoring ocean productivity and biodiversity is a surprisingly manageable task given that 61 percent of the world's wild ocean fish are caught in the ocean territory of just 10 countries, and 86 percent in 25 countries.

Yet many of these countries lack an effective ocean policy advocate. A recent study showed that ocean philanthropists are spending nearly six times more per pound of fish in protecting biodiverse places rather than productive ones.

This creates a huge opportunity for strategic philanthropy. Oceana has shown that we can win sensible ocean policies at the national level. With more resources, we will go to the most productive parts of the world's oceans and win the policies that will feed the planet while restoring and protecting their biodiversity.



Andy Sharpless

Andy Sharpless
CEO

Oceana is grateful for the grants, contributions, and support it has received from dozens of foundations and companies and thousands of individuals. Oceana wishes to thank all of its supporters, especially its founding funders as well as foundations and individuals that in 2011 awarded Oceana grants totaling at least \$500,000: Adessium Foundation, Arcadia Fund, Gordon and Betty Moore Foundation, Oak Foundation, Oceans 5, Planet Heritage Foundation, Robertson Foundation, Rockefeller Brothers Fund and the Sandler Foundation of the Jewish Community Endowment Fund.

New dredge gear to save sea turtles

In September, the New England Fishery Management Council approved a new rule to require modified fishing gear to protect sea turtles in the Atlantic scallop fishery.

All six species of sea turtles found in U.S. waters are threatened or endangered with extinction. Loggerheads are often injured or killed by scallop dredges, which drag along the sea floor and can drown or crush the turtles. Kemp's ridleys, the rarest species of sea turtle, and green sea turtles are also caught and sometimes killed by the scallop dredges.

The new gear, called a turtle deflector dredge, pushes sea turtles out of harm's way. The government estimates that the devices will reduce the number of sea turtles killed by dredges by more than half. The rule, which will require the devices from May 1 to October 31 in the entire Mid-Atlantic region, must now be approved by the federal government. It could go into effect as early as March 2012.



Florida protects threatened sharks

In November, the Florida Fish and Wildlife Conservation Commission voted to fully protect tiger sharks and three species of hammerhead sharks: scalloped, smooth and great hammerheads from commercial fishing in all state waters. Recreational catch and release fishing can continue.

The protections are critical to saving the sharks, which have faced drastic population declines. Tiger sharks numbers have dropped by up to 97 percent in U.S. Atlantic waters, and the three species of

hammerheads have declined by about 70 percent in the northwest Atlantic.

Tens of millions of sharks are killed each year for shark fin soup, a Chinese traditional dish, contributing to population declines around the world. Florida's decision to protect tiger and hammerhead sharks continues a recent trend in shark conservation, with all U.S. West Coast states and Hawaii banning shark fin trade and possession in 2011.

Europe protects porbeagle sharks

The European Union banned all fishing for porbeagle sharks in November in a huge step forward for conservation of the threatened sharks.

Long coveted for their large fins and meat, porbeagle sharks are vulnerable to overfishing because they reproduce slowly. Scientists estimate that the

population of porbeagle sharks in the Mediterranean Sea has declined by as much as 99 percent in the last century.

Under the new rules, no porbeagle sharks may be caught in E.U. waters, including the Mediterranean, and no E.U. ship in international waters is permitted to catch porbeagles.

The sharks are a highly migratory species that can grow to eight feet in length. They are found in the North Atlantic as well as the ocean waters surrounding Antarctica.

Oceana uncovers rampant seafood fraud

An investigation by Oceana revealed that one in five fish fillets bought in Boston-area markets was mislabeled, a confirmation of the widespread issue of seafood fraud.

Atlantic cod was the most commonly mislabeled species in Oceana's analysis, which tested 88 samples from 15 supermarkets. Red snapper, an overfished species, was often sold as vermilion snapper.

Other independent studies have also uncovered seafood fraud, suggesting that mislabeling occurs as much as 25 to 70 percent of the time for red snapper,

wild salmon and Atlantic cod, which are replaced with cheaper or less desirable species. One study found 38 percent of wild salmon was mislabeled in the Puget Sound area of Washington.

The United States imports more seafood than any other nation. Of the 84 percent of seafood that is imported into the United States, only two percent is currently inspected, and less than 0.001 percent specifically for seafood fraud. Oceana is pushing for legislation to require better traceability of seafood from hook to fork.



Key committee approves expansion of Chile's Motu Motiro Hiva Marine Park

In January, a Chilean government committee unanimously approved Oceana's proposal to nearly triple the size of the Motu Motiro Hiva Marine Park, which was established in 2010 after Oceana's expeditions to the remote Pacific Ocean area showed an extraordinary array of marine wildlife.

The lower house of the Chilean Parliament's Committee on Natural Resources and Environment will now

vote on the measure, which has already received verbal support from Chilean President Sebastián Piñera.

The marine park surrounds Salas y Gomez Island, a rocky outpost 2,000 miles from Chile's shore. A joint expedition by Oceana, the Waitt Foundation, National Geographic and the Chilean Navy revealed that the marine reserve is teeming with wildlife, from sharks to enormous corals. Nearby Easter Island, which has faced centuries

of fishing, features much smaller fish and wildlife populations, making it hard for the local Rapa Nui people to continue to live off the water.

The establishment of the marine reserve in 2010 expanded Chile's protected marine areas by a hundredfold. The new proposal would expand the reserve to more than 255,000 square miles, which would make it the second largest marine reserve in the world.

1

Oceana welcomed two new board members. **Rogier van Vliet**, chairman of the Adessium Foundation, and **Ricardo Cisneros**, chairman of Cisneros Corporation, joined the philanthropists, business people and scientists who make up Oceana's leadership.

2

The European Commission has proposed **a full ban on shark finning** on E.U. vessels anywhere in the world. The proposal follows years of campaigning by Oceana, and would close loopholes in the current laws on shark finning, which allow cutting off fins at sea under certain circumstances.



3

Oceana joined other conservation groups in **opposing the U.S. Environmental Protection Agency's air permits for a Shell drillship** in the Arctic. The ship, the Discoverer, is scheduled to drill in the Beaufort and Chukchi seas in summer 2012. The permits allow Shell's fleet to emit air pollutants that are harmful to human health and the environment.

4

Following Oceana's research expedition in the Baltic Sea last spring, Oceana recommended a **series of marine protected areas** in the world's largest inland sea. The recommended protected areas would save important habitats.

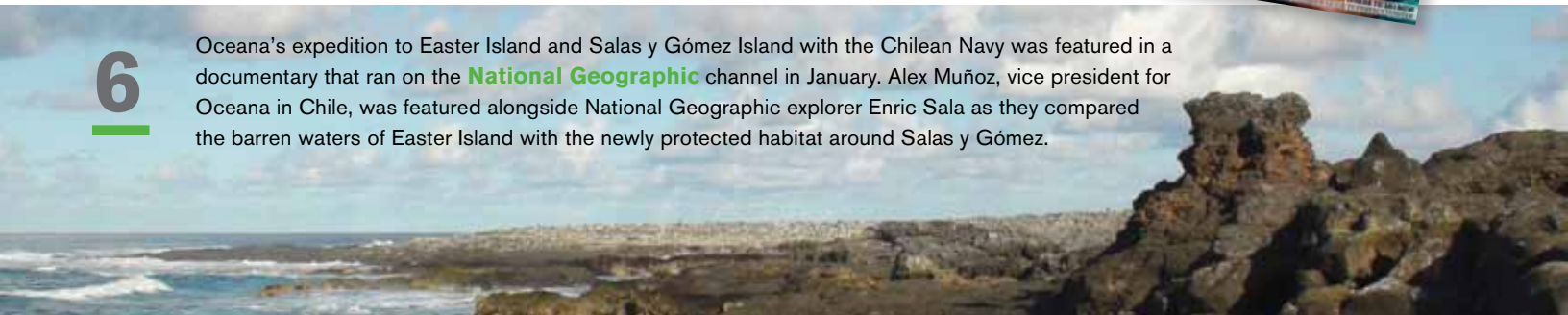
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Outside Magazine named Oceana as a nonprofit that deserves your dollars in its "Year of Giving Adventurously" feature. "Oceana can point to dozens of policy victories on four continents in the past ten years," the magazine noted.



6

Oceana's expedition to Easter Island and Salas y Gómez Island with the Chilean Navy was featured in a documentary that ran on the **National Geographic** channel in January. Alex Muñoz, vice president for Oceana in Chile, was featured alongside National Geographic explorer Enric Sala as they compared the barren waters of Easter Island with the newly protected habitat around Salas y Gómez.



Shane Gero

As a Ph.D. candidate at Dalhousie University in Nova Scotia and a lead researcher for the Dominica Sperm Whale Project, Shane Gero has spent thousands of hours at sea observing families of sperm whales off the coast of the Caribbean island of Dominica. His research marks the first time that scientists have tracked individual sperm whales from birth into maturity, and it provides insights into sperm whale society, diet, genetics, communication and culture.



© David Fabien

How did you become interested in sperm whales?

They are the largest of the toothed whales, among the deepest divers, have the planet's largest brain, and they can be found in every ocean and most coastal seas and gulfs on the planet, so as a result they are a significant part of the ocean ecosystem. They also live in complex multi-level societies, have a highly sophisticated communication system, and show signs of culture – so there are lots of interesting questions to explore.

During your research have you become attached to any of the individual whales?

I don't pretend that the animals know who I am, but I have followed some of these whales since birth. I have been there as they have played with their siblings, nursed from their mothers and through the toils and troubles of growing up. As a result, I feel an obligation to them to share their stories in an effort to ensure they have a healthy ocean in which to raise the next generation.

What do you see as the biggest threats facing sperm whales?

While whaling for sperm whales has largely stopped, humans are still the sources of the major threats to sperm whales. Chemical and heavy metals are

being found in the tissues of animals from around the world, including those as far away as Antarctica, and animals can become entangled in fishing gear including longline and gill nets. But ocean noise is increasingly being seen as a major threat to cetaceans around the world.

I am not asking people to care about sperm whales specifically. I am just asking them to care. If more people feel the shared burden we all have to protect the oceans, then I will have done my job.

Close your eyes and imagine you're a sperm whale. Your world is mostly darkness. In order to stay connected with your family you play a constant game of Marco Polo. You see with sound. Now imagine a constant background noise from all around blurring the echoes. As humans it might compare to living in a rock concert your whole life, just asking your neighbor a simple question would be difficult.

Why do you think sperm whale conservation is important?

On an evolutionary timeline, sperm whales are among the oldest of the toothed whales. They have lived in the oceans for longer than modern humans have walked upright. Both the whales and humanity depend on the ocean for survival, so in some ways, I am not asking people to care about sperm whales specifically, I am just asking them to care. If more people feel the shared burden we all have to protect the oceans then I will have done my job.

Anything else you want to share about sperm whales or your research?

Ultimately, what I have learnt from these families of sperm whales thus far is simple. Love your family. Learn from your grandmothers' experience. Be a good neighbor. Share the burden of your responsibilities by working together. Spend time with your older brother because eventually he moves away. And most importantly, life, it seems, is about the relationships one builds with those around them.



aimée teegarden

The “Friday Night Lights” actress and surfer turns her attention to the hidden treasures beneath the waves in a new campaign for Oceana.





What made you decide to partner with Oceana?

My initial interest in Oceana had to do with their efforts in bringing awareness to the harm being done to sea turtles. I'm always trying to find a great charity to partner with and bring a voice to and I'm really passionate about animals, the ocean and sea life.

What ocean issues are most important to you?

When people go to the beach, it's really easy to pick up your trash and throw it away and not trash another animal's habitat. It's the easiest, no-brainer issue. I try to do my part and I think everyone else should do their part too.

What sea creature is your favorite?

Well, after today, I love the sea lions! So cute, so playful. They are just so funny and interactive and have humanistic qualities about them. So, today it's definitely the sea lions!

Before today did you have a favorite?

I love sea turtles! I think they are so majestic and beautiful and so cool looking. The first time I went snorkeling in Hawaii, I saw this huge sea turtle and I snorkeled right on top of it. That set me off on sea turtles.

What is your favorite thing about surfing, and do you have a favorite spot?

I love surfing because it's the idea of being in the ocean. Sitting in the ocean and waiting for a set of waves, and understanding and realizing you are a part of something that is so much bigger than you are, really just helps me relax and calm down and makes me realize that the little issues in life aren't so big. It's just a fun sport to do with my friends and reconnect and be a part of the ocean.

Tell me about your experience today at Santa Barbara Island.

Around Santa Barbara Island is this amazing sea lion rookery where all the baby sea lions grow up. They live in the kelp forest and they need this habitat for food and protection. Without this important habitat for the sea lions, who knows what would happen.

What did you learn from seeing this hidden treasure/special place

It's crazy because you know that these hidden treasures are all over the ocean – you just have to look under the surface. I had no idea this existed just 40 miles off of LA. It's really upsetting to think these special places could be destroyed by destructive fishing, pollution or other

threats. It really makes it obvious why we need to identify these unique and important areas in the ocean and then protect them. I love that Oceana finds the hidden treasures and then fights to protect them.

Did you know Oceana has protected over 1.2 million square miles of ocean in the last 10 years?

I did and getting to experience a special place like Santa Barbara Island really puts it all in perspective. How can you not want to protect an amazing habitat like that? We just need to show how special these places are... Once you see these amazing things, all you want to do is protect these places and the animals that depend on them.

What was your favorite part about being out there today?

Obviously, the sea lions, but I've never been free diving. That was cool to learn. The sea lions are just as curious about us as we are about them and the longer we were in the water the more comfortable they would get. It was just wonderful being out there and seeing them interact with us and each other and to see them and be at ease. I thought that was really cool. 🐬

Photos: © OCEANA | Tim Calver



Save the Oceans and Feed the World

**What food requires no fresh water to produce?
Produces little carbon dioxide? Doesn't use up any
arable land? And provides healthy, lean protein at a
cost per pound lower than beef, chicken, lamb or
pork, making it accessible to the world's poor?**

By **Andy Sharpless** and
Suzannah Evans

The answer: wild fish. And the humble fish will be critical to feeding the world in the coming decades as the human population continues to grow, passing 9 billion by 2050.

The United Nations Food and Agriculture Organization says that the world must produce 70 percent more food to meet the coming hunger needs, from 270 million metric tons in 2009 to 470 million metric tons in 2050. But the resources needed to create that additional food are increasingly scarce or involve developing lands that have irreplaceable natural value, like rainforests. More frequent droughts due to climate change and the transfer of arable lands from agriculture to biofuels will also contribute to the declining land space available to grow crops and graze livestock.

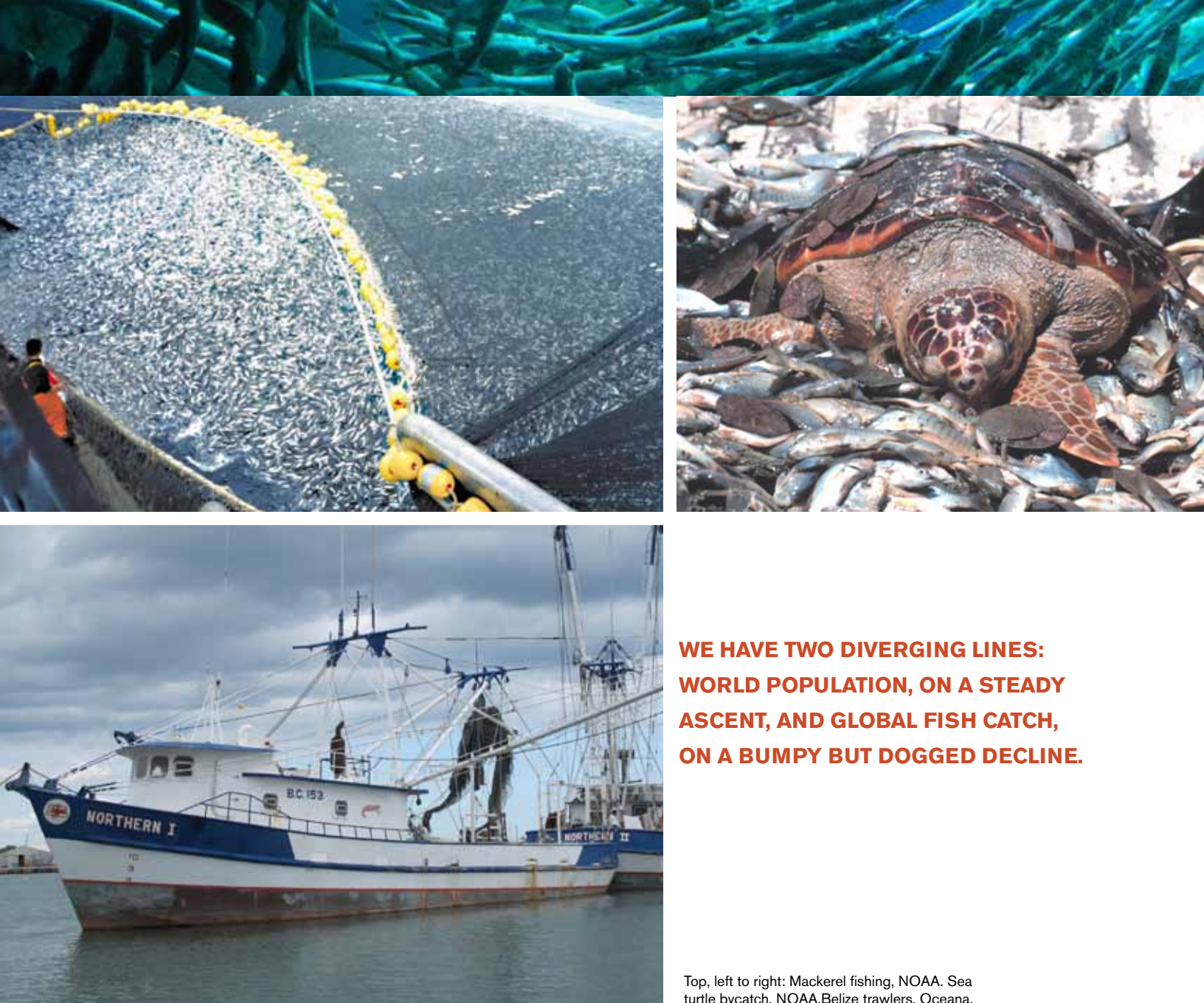
Meanwhile, the poorest billion people on earth already depend upon fish as their primary

source of animal protein. Cheap and accessible to anyone with a hook or net, fish – along with shellfish, octopi, sea cucumbers and more – have provided sustenance for humanity since the dawn of time.

And these creatures from the sea can play a critical role in feeding the world in the next decades, too. Most importantly, unlike farm-raised crops or livestock, wild seafood can feed the world sustainably while also shoring up the health of the oceans themselves.

It means that we've got an opportunity to protect the oceans while helping combat hunger around the world.

**WILD FISH IS
FUNDAMENTALLY
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OTHER NATURAL
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SEAFOOD IS TRULY
RENEWABLE.**



**WE HAVE TWO DIVERGING LINES:
WORLD POPULATION, ON A STEADY
ASCENT, AND GLOBAL FISH CATCH,
ON A BUMPY BUT DOGGED DECLINE.**

Top, left to right: Mackerel fishing, NOAA. Sea turtle bycatch, NOAA. Belize trawlers, Oceana.

Wild fish is fundamentally different from many other natural resources in one important way: Unlike coal, gemstones, or natural gas, seafood is truly renewable. Most food fish reproduce at astonishing rates, with a female Atlantic bluefin tuna, for example, producing as many as 30 million eggs in one spawning season. Despite this fecundity, Atlantic bluefin tuna has become a posterchild for overfishing. But if that bluefin tuna were given the opportunity to reproduce and grow to maturity, its population could maintain healthy levels even as commercial fishing takes place.

Unfortunately, the global fishing fleet doesn't, in general, fish sustainably. The historical record is packed with examples of fishing fleets decimating one fish population after another, moving on to the next species or region while leaving empty waters behind. Atlantic cod, salmon, roughy and Chesapeake Bay oysters are just a few famous examples. And thanks to \$16 billion a year in government subsidies, the global fleet is an estimated 250 percent larger than needed to fish responsibly.

Despite all these boats on the water, many featuring high-tech methods for finding fish, the global fish catch peaked in the late 1980s and has been declining ever since. Some parts of the ocean are so overfished that jellyfish are now the largest biomass, moving in as their predators disappear.

So we have two diverging lines: World population, on a steady ascent, and global fish catch, on a bumpy but dogged decline.



Assuming per capita consumption of seafood stays the same, wild fish will no longer be a viable source of food and protein for much of the world in 2050. But if we apply sustainable fishing programs around the world, the trend is reversed dramatically – and we could have enough fish to feed more than 12 billion people, well above the 9.1 billion projected by the FAO. Looking at it another way, if we enact sustainable fishing and rebuild fish populations, per capita seafood consumption could rise by as much as 34 percent per person at a population of 9 billion, while still protecting wild fish, and the oceans, from collapse.

How do we save the oceans to feed the world? International action through the United Nations and other global bureaucratic bodies is difficult, expensive and time-consuming, and ultimately, many of those entities are essentially powerless.

Instead, we can focus on the countries which control the world's fish catch, as well as those countries which control the largest ocean territories, or "exclusive economic zones" (EEZs). Each country's EEZ extends to 200 nautical miles from shore, and those relatively shallow waters contain the vast majority of marine life: 99 percent of coral reefs and 88 percent of the global fish catch.

Individual nations have made great strides toward ocean conservation. A few examples from just the last couple of years: Belize banned all forms of trawling, the most devastating method of commercial fishing; the United States outlawed shark finning, which decimates the slow-growing top predators; Chile reduced the quota for jack mackerel, one of the country's most important fisheries, to science-based levels. Chile and the U.S. are two of the largest fishing nations in the world, while Belize is home to a large portion of the

world's second-largest coral reef system, so these single-nation actions had huge benefits to the ocean.

Scientists know what steps need to be taken in order to protect wild seafood stocks: avoid overfishing by setting responsible catch limits; minimize bycatch, or the accidental killing of untargeted marine life; and protect habitat in the process of catching fish. Just as we have historical examples of fishing fleets driving fish populations past the brink of collapse, we also have seen fish rebound under science-based management.

Haddock, a white fish often used in fish and chips and other popular recipes, faced collapse along the Georges Bank in New England, one of the U.S.'s historic fishing regions. Under rampant overfishing, haddock catches began to drop precipitously in the 1960s until catch restrictions were

**SCIENTISTS KNOW
WHAT STEPS NEED
TO BE TAKEN IN
ORDER TO PROTECT
WILD SEAFOOD STOCKS.**

Left to right: A menhaden boat, NOAA.
Ocean perch from a bottom trawl, NOAA.





HADDOCK CATCHES BEGAN TO DROP IN THE 1960S UNTIL RESTRICTIONS WERE IMPOSED IN 1994, LEADING TO AN IMMEDIATE REVERSAL.

imposed in 1994, leading to a rebound. Later, fishery managers imposed bottom trawling bans during spawning season, and established hard caps on haddock bycatch. As a result, haddock populations in the Georges Bank have returned to their pre-1960s levels. And with continued care, haddock will thrive, safeguarding a food source and fishing jobs.

In January, the U.S. announced it had set catch limits to prevent overfishing for every federally-managed fishery, both commercial and recreational, for the first time. The U.S. controls the largest amount of ocean of any nation, and ranks fourth in wild fish catch and third in total seafood consumption. This historic step, which confirms the U.S. as a world leader in sustainability, underscores the importance of national action to save the oceans to feed the world. 🐟

WILD FISH REDUCES GLOBAL ANNUAL PROTEIN FOOTPRINT



450K sq. km of arable land saved

Equal to 1.5 times the land used to grow corn in the U.S.



Half a Gigaton of CO2 saved

More than Canada's 2011 emissions



1000 trillion liters of water saved

Enough to meet human survival needs for 20 years



175M metric tons of grain saved

Equal to 23 times the amount given in global food aid

THE SERENGETI OF THE SEA

BY EMILY FISHER

WHY WE NEED TO CHANGE THE WAY WE THINK ABOUT – AND MANAGE – OUR NATION’S MOST IMPORTANT LITTLE FISHES.

Here’s a thought exercise: If you were to fly over the entire Pacific Ocean from west to east searching for whales, how many would you find? Probably not too many – until you arrived at the U.S. Pacific West Coast.

That’s according to Oceana’s Senior Director of the Pacific, Susan Murray. “The California Current ocean ecosystem off Washington, Oregon and California is a foraging hot spot. Species are coming from all over the Pacific to feed on rich little fish,” she said. “It’s the Serengeti of the sea.”

For example, every year thousands of blue whales, humpback whales, fin whales and more flock to California’s waters to feast on abundant krill, squid, sardines and anchovies.

These tiny creatures, known as “forage fish,” might not be as charismatic as whales – but they are among the most important yet underappreciated marine species on Earth. They form the foundation of the marine food web and provide food for everything else larger than they are, including marine mammals, seabirds, and recreationally and commercially important fish species such as salmon and rockfish.

But these tiny fish are increasingly threatened by fishing pressure, climate change and pollution. Oceana is leading the charge in shifting the way we think about, and manage, forage fish – and in the process, paving the way for more abundant oceans and healthy coastal communities.

As a result of their key ecological role, forage fish are central to the economies of the West Coast states, supporting ocean-based tourism and recreation sectors that provide 400,000 jobs and \$18 billion in revenue, according to the National Ocean Economics Program. For instance, tourists who venture to the coast for a weekend fishing trip don’t simply buy fishing line and bait, they also purchase food, stay in hotels and spend money in other local businesses. By feeding larger fish, forage fish

‘IF YOU CARE ABOUT A HEALTHY OCEAN, IF YOU LIKE WHALES AND DOLPHINS, IF YOU EAT SEAFOOD ... THEN YOU HAVE TO THINK ABOUT THE FOOD FOR THOSE THINGS!’

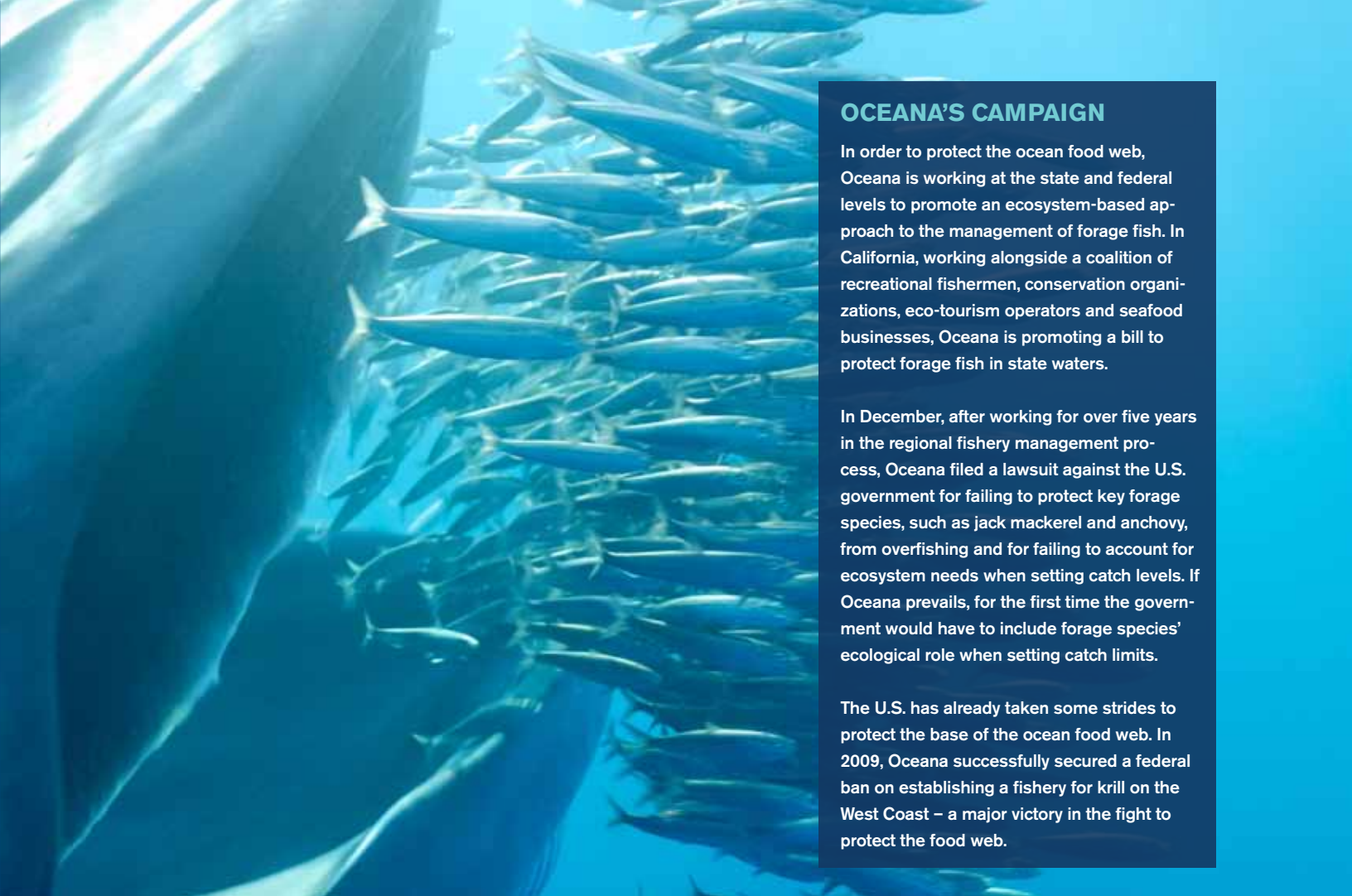
- SUSAN MURRAY,
SENIOR PACIFIC DIRECTOR

provide the foundation to keep recreational fishing a vibrant part of the economy.

There is also a direct commercial harvest of forage fish. However, many of the forage fish caught aren’t even destined for human consumption. Most sardines caught on the West Coast, for instance, are fed to ranches bluefin tuna in Australia, or are sold as bait for high seas industrial longline fisheries based out of Asia. Globally, between a quarter and a third of all forage fish caught worldwide is reduced into fish meal and fish oil to feed farmed fish, pigs and chickens.

Using forage fish to feed farmed seafood species such as salmon and bluefin tuna amounts to an incredible waste of protein – anywhere from 50 to 90 percent of the value of the fish is lost, according to Murray. For example bluefin tuna require seven to 25 pounds of sardines to gain a single pound.

Meanwhile, forage fish themselves could provide healthy, sustainable protein for millions of people, in addition to the marine wildlife that depends upon them. Forage fish such as sardines are high in omega-3 fatty acids, which are beneficial to eye, brain and heart health. And because they are low on the ocean food chain, they are lower in dangerous contaminants



OCEANA'S CAMPAIGN

In order to protect the ocean food web, Oceana is working at the state and federal levels to promote an ecosystem-based approach to the management of forage fish. In California, working alongside a coalition of recreational fishermen, conservation organizations, eco-tourism operators and seafood businesses, Oceana is promoting a bill to protect forage fish in state waters.

In December, after working for over five years in the regional fishery management process, Oceana filed a lawsuit against the U.S. government for failing to protect key forage species, such as jack mackerel and anchovy, from overfishing and for failing to account for ecosystem needs when setting catch levels. If Oceana prevails, for the first time the government would have to include forage species' ecological role when setting catch limits.

The U.S. has already taken some strides to protect the base of the ocean food web. In 2009, Oceana successfully secured a federal ban on establishing a fishery for krill on the West Coast – a major victory in the fight to protect the food web.

that accumulate in bigger fish, such as mercury and PCBs. Forage fish also reproduce faster and can be harvested more sustainably than many of the predator fish more commonly found on menus.

Oceana advocates a science-based, precautionary approach to forage fisheries, rather than waiting for them to become depleted before we act.

"Instead of asking how many herring we can take out of the ocean, we should ask how many of the fish do we need to leave in the ocean to support healthy wildlife, a healthy ocean, valuable fisheries, vibrant coastal economics and human consumption needs," Murray said.

If these questions aren't taken into consideration, the results could be disastrous for fisheries, wildlife and the coastal economy of the West Coast.

The California Current is a hot spot because it is characterized by strong seasonal upwelling, which occurs when winds drive cold, nutrient-rich water towards the ocean surface, replacing the warmer surface waters. The upwelling fuels the rich plankton blooms that feed the current's productive ecosystem.

There are only three other places in the world where upwellings like this occur: Peru, the Canary Islands region, and the Benguela Current off Namibia, which is a "sister ecosystem" to the California Current and serves as a cautionary tale of what can occur when forage fish are removed from the ecosystem.

When Namibia's sardine and anchovy fisheries were aggressively targeted in the early 2000s, their populations collapsed, and jellyfish invaded. Jellyfish are efficient consumers of plankton, and if given the chance, they can and will proliferate. Namibia's forage fisheries have failed to rebound. The country's hake fishery collapsed as a result, and some marine animals in the area have become endangered. Gannets, once abundant seabirds that rely on anchovies, are now teetering on the brink.

It is this bleak scenario that Oceana is working hard to prevent on the West Coast.

"If you care about a healthy ocean, if you like whales and dolphins, if you eat seafood, if you want to have healthy wildlife, then you have to think about the food for those things," Murray said. "How much is there to eat?" 🐟

Photo: Bryde's whale, © Randy Morse

Oceana's Evening at the Cinema



Left to right: General manager of Fashion Island, Tanya Thomas, Ocean Council members Slane Holland Lightburne and Eve Kornyei, and Barbara MacGillivray. Cinema Crowd



On December 14, over 250 Oceana supporters gathered for an exclusive preview of Newport Beach's new state of the art Island Cinemas, located within the Fashion Island shopping center. During the

preview guests enjoyed a special advanced screening of *Sherlock Holmes: A Game of Shadows* and pre-movie snacks and beverages provided by the Island Hotel Restaurant, Roy's Restaurant, Café Beau

Soleil, The Cheesecake Factory, California Pizza Kitchen and the Daily Grill. All of the proceeds from the evening were donated to Oceana.

An Evening with Oceana's Board of Directors

Oceana's staff, funders, board members and supporters gathered in Washington, DC for Oceana's winter board meeting. During the meeting, Ocean Council member Susie Trees hosted a reception in her home in celebration of Oceana's 2011 victories for the oceans. The reception was hosted by Oceana's board chair Dr. Kristian Parker and board secretary Simon Sidamon-Eristoff and attended by several notable guests, including Senator Sheldon Whitehouse (D- RI), Joshua Reichert, Tom Wathen and Lois Schiffer.



Left: Lois Schiffer, Victoria Stack, Oceana executive vice president Jim Simon, Oceana board member Sydney Davis.

Bottom, left to right: Oceana CEO Andy Sharpless, Oceana board member Kristian Parker, Senator Sheldon Whitehouse. Oceana board member Valarie Van Cleave, Michael Gershenson, Oceana major gifts manager Jessica Champness.



A Luncheon in Honor of Sir Thomas R. Moore

On December 5, Oceana board member and Ocean Council chair Susan Rockefeller hosted a distinguished group of guests at the Rockefeller Family Foundation for a luncheon in honor of longtime Oceana

supporter Sir Thomas R. Moore. The group was given an exclusive preview of the Elizabeth Taylor auction at Christie's. Earlier in the year, Sir Thomas had generously pledged \$100,000 to match funds

generated via Oceana's paddle raise to end trawling in Belizean waters at the Christie's Green Auction: A Bid to Save the Earth.



Left to right: Sir Thomas Moore and Sarah Langham. Sir Thomas Moore, Oceana board member and Ocean Council chair Susan Rockefeller, Head of Communications at Christie's, Toby Usnik.

Vanessa Noel Winter Cocktail

Over 90 guests gathered on December 1 at Ocean Council member Vanessa Noel's Manhattan boutique and residence for a cocktail party and art exhibition. The

photographs on display during the evening were taken by Nantucket artist Michael Gaillard. In addition to the beautiful coastal images, guests also enjoyed cocktails

featuring Elit by Stolichnaya, an Oceana supporter.

Left to right: Ocean Council member Danielle Steakley, Jon Nagel, Oceana vice president for global development, Bettina Alonso. Ocean council member Vanessa Noel, Michael Gaillard



Make every day **EARTH DAY**

Oceana is a member of EarthShare, a federation that represents the nation's most respected environmental and conservation charities in hundreds of workplace giving campaigns across the country.



EarthShare's payroll contribution program allows donors to direct their contributions to Oceana; to any combination of EarthShare's members; or to all of them through one general gift to EarthShare! To find out more about how you and your workplace can support Oceana through an EarthShare campaign, please email info@oceana.org or visit EarthShare's website at earthshare.org.



1% for the Planet is a growing global movement of over 1,400 member companies – small and large – in 38 countries that donate at least 1% of sales to environmental organizations. As a 1% non-profit partner, Oceana may accept donations from members of the 1% network – a network growing every day. Over 2,100 non-profits worldwide are included in the 1% program, and over \$50 million has been funneled toward nonprofit partners to date.



Susan Casey



Author Susan Casey has made her mark as the editor-in-chief of *O: The Oprah Magazine*, but her two books focus on the oceans' wildest adventurers, from shark researchers to rogue waves surfers. She spoke with Oceana about her first book, *"The Devil's Teeth,"* and the ceaseless pull of the ocean.

Why you were drawn to the oceans?

I think I was born drawn to the ocean. I grew up in landlocked Toronto, and I grew up around lakes, but I wasn't exposed to the ocean a lot. It wasn't until I started into my adult years that I started spending time by the ocean. But I was always obsessed by water. The ocean has so much incredible life, and as a writer, so many mysteries and awesome stories.

When did you first start writing about the oceans professionally?

At *Outside Magazine*, I wasn't writing stories about the ocean, but I was assigning a lot of them. I assigned stories about big wave surfing, and I assigned the story that became the movie *Blue Crush*. I was able to indulge my interest that way.

What drew you to sharks?

I was always interested in what lay below the surface of any given body of water. It always seemed like it was parallel universe. I saw this BBC documentary that was about the Farallon Islands. The islands are 27 miles from the coast of San

Francisco. The water is very dark, black, cold and filled with krill. This film showed the scientists in their little 11-foot Boston Whaler with these 20-foot white sharks. The whole thing was just so haunting. The notion that these incredible beasts

I think I was born drawn to the ocean – I was always obsessed by water. The ocean has so much incredible life, and as a writer, so many mysteries and awesome stories.

lived within San Francisco city limits, I just could not get it out of my mind. So I pursued the story, got to know the scientists, and learned why they haven't been written about, because they're really hard to get to and really dangerous.

What was it like the first time you looked down and saw a shark right next to your boat?

I remember it very vividly because there were a number of sharks around, they were really interested. All the scientists had done was put a six-foot flip board out in the water. They didn't tow the flip board, they just plunked it into the water, and we probably saw nine passes by sharks. Sharks were just circling the boat. And then just as the moment I thought I would never go in the water in the *Farallones*, I saw a guy getting out of the water, and that was my favorite character in the book, this Ron Elliott, who's the lone remaining urchin diver in the *Farallones*. He has dived out there alone for years and years and years. There's a very interesting cast of characters in the human realm as well as the shark realm out there.

Contributed photo



Sam Talbot

At the Surf Lodge restaurant in Montauk, New York, executive chef Sam Talbot does his best to recreate his childhood experience of fishing for blue crab and flounder along the North Carolina shores where he grew up.

That means that the seafood served at Surf Lodge is locally and sustainably sourced, a philosophy that Talbot applies to all the ingredients he uses. "I'm

constantly looking for the most eco-responsible source," Talbot said. "And usually when you find those people, their products, their fish, their vegetables, their honey, it's far superior to everything that's out there."

Rather than flying frozen fish halfway around the world, the seafood served at Surf Lodge comes from the Atlantic waters just beyond the beachside restaurant's windows. And guests love it, Talbot said.

"Once people realize they're doing something responsible that they weren't even aware of when they walk in the door

of the restaurant, they start to realize that this guy is really trying to do the right thing, and they look up other chefs who are doing that," Talbot said. "I think that response is wonderful."

In addition to emphasizing local and seasonal ingredients, Talbot's experience

with Type 1 diabetes inspired him to write a new cookbook featuring 75 healthy, all-natural dishes. *The Sweet Life: Diabetes Without Boundaries* (Rodale Books) is out now.



Fish Tacos with Tomato Salsa and Citrus Crema

Chef Talbot says: If you haven't tried fish tacos yet, you're missing out on one of the finer things in life. I spent two years concocting, tweaking, throwing out, and eating thousands of these damn things until I got it right. Actually, forget "right"—until I had it bulletproof. By "bulletproof" I mean if they weren't perfect, I would have been hazed, stoned, and exiled from where I reside. At the end of the day I realized you just need three ingredients: the fish itself, the tortilla, and, just as important, the freshly shaved green cabbage; this last provides just the right amount of texture and crunch in each bite. The salsa and citrus crema bring everything together. If you don't have time to make your own fresh salsa, a good quality jarred one will do. On the West Coast, mahi-mahi is most often used to fill fish tacos, but any mild white fish, such as cod or tilapia, will work brilliantly.

2 tablespoons unsalted butter, cut into small pieces
1/4 cup olive oil, plus more for brushing the tortillas
2 pounds skinless cod, snapper, or mahi-mahi fillets *
1/2 cup loosely packed chopped flat-leaf parsley
1/2 cup chopped fresh cilantro
4 garlic cloves, chopped
1/4 cup dry white wine
Salt and freshly ground black pepper
16 flour tortillas (6 inch)
1 cup Tomato Salsa (page 200)
1/2 large head green cabbage, thinly sliced
1/2 cup Citrus Crema (page 200)
1 Hass avocado, pitted, peeled, and thinly sliced
2 limes, cut into 4 wedges each

Preheat the oven to 350°F. Place the butter and 1/4 cup oil on a rimmed baking sheet and place it in the oven to melt the butter. When the butter is

melted, arrange the fish fillets on the baking sheet and sprinkle with the parsley, cilantro, and garlic. Pour the wine around the fillets and season generously with salt and pepper.

Bake the fish until it flakes easily with a fork, 10 to 12 minutes. Break the fish into 1-inch chunks and set aside. Heat a grill pan over high heat. Place the tortillas in the pan, one at a time, and cook until they are hot and marked with grill lines, 15 to 30 seconds. Brush the hot tortillas with a little oil and sprinkle with a little salt and pepper.

To assemble the tacos, spoon 2 tablespoons of salsa, a few fish chunks, and some of the cabbage onto each tortilla. Drizzle 1 tablespoon of the crema over each serving and top with 2 or 3 avocado slices. Season to taste with salt and pepper and serve with a lime wedge.

*Fish can be any mild white fish such as farm-raised tilapia or sustainable cod.

On an expedition to Chile's Salas y Gómez Island, Oceana and National Geographic documented a healthy marine ecosystem teeming with wildlife, especially sharks. After campaigning by Oceana, the Chilean government created the fourth largest fully protected marine reserve around the remote island. Now Oceana is working with the Rapa Nui community on Easter Island to expand the marine reserve. © OCEANA | Eduardo Sorensen.





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Chilean actress Leonor Varela dives with
Oceana near Chile's Salas y Gómez Island.

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