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MISSION BLUE: PROTECT OUR OCEANS

An Interview with Sylvia Earle, world renowned marine biologist,
explorer, author, and lecturer.

By Captain Kurt Lieber, Ocean Defenders Alliance Photos courtesy of Sylvia Earle, Mission Blue

I started scuba diving in 1974. I was inspired initially by Jules Verne, Jacques Cousteau, Diver Dan and, of course, the adventures of Lloyd Bridges on Sea Hunt! At the time I was living in Ohio and couldn't wait to get out and move somewhere where I could dive with all these fantastic creatures I was seeing on the television screens in my living room.

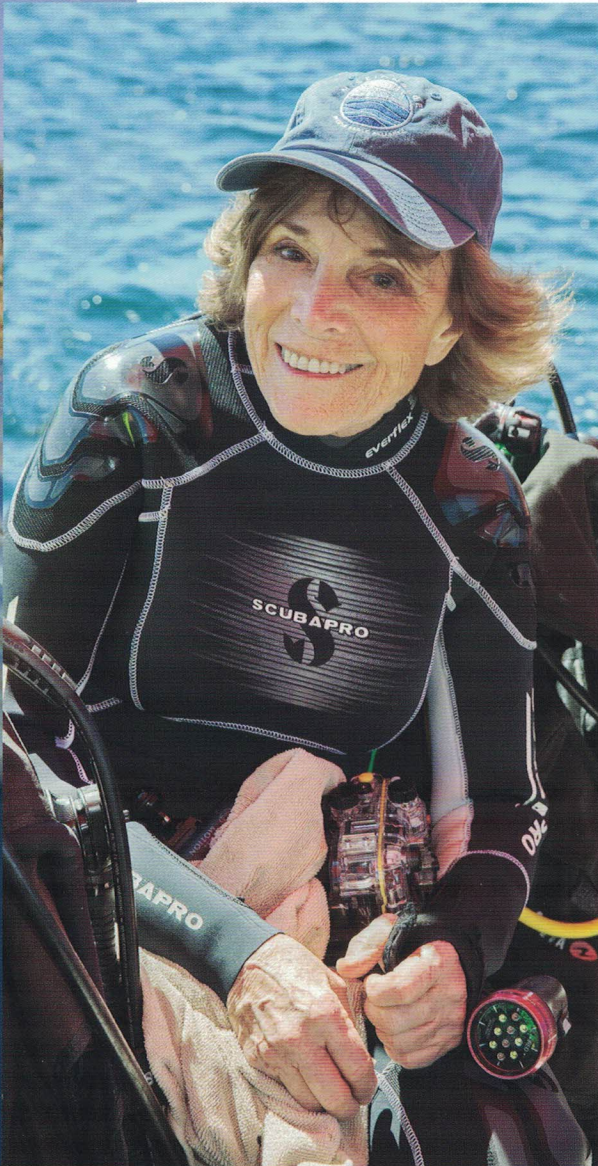
As I started educating myself about the people who were actually going out and studying the intricacies of life under the water, I started reading about this fantastic woman who was a scientist and was going where no woman (or man) had gone before. I mean, going down to one thousand feet, solo, in a suit that looked like something out of Journey to the Forbidden Planet... not only was this lady good looking, she was crazy! My kind of gal.



With people like Sylvia, Bob Ballard, Stan Waterman, Mike deGruy, Bob Talbot and Jean-Michel Cousteau showing the world, through film and photography, all the sights to be seen in our world's oceans, I was hooked, and started learning and exploring on my own here in southern California. I soon found out that our oceans have been devastatingly impacted by human activities. To that end, I have a few questions to ask marine biologist Sylvia Earle.

K.L.: With the vast majority of the large fish gone – in most cases only ten percent of these fish are left – do you think there is anything that can be done to allow these populations to come back?

S.E.: Our giant appetites have made it so that we have lost 90 percent of our big fish in just a few decades. On top of that, warming and acidifying seawater, caused by our greenhouse gas emissions, is threatening these species and the habitats they rely upon to survive. So how long before those fish are all gone if we keep eating them this way, and how long before all of the corals bleach and reefs erode, destroying habitat for countless species? Everyone can make a difference just by changing what he or she consumes. Less demand will mean less support for commercial fisheries and the fossil fuel industry. It isn't too late to shift from the swift, sharp decline of ocean systems in recent decades to an era of steady recovery. There is time, and there is a growing awareness, which is the best way to counter indifference. The next ten years will be the most important in the next 10,000 years in terms of shaping a future where humans can have a hope for an enduring place within the natural systems that keep us alive.



K.L.: With the oceans being constantly bombarded by a variety of abuses, from overfishing, climate change, noise pollution, ocean acidification to oil and gas extraction and exploration, is there anything you feel we can do as individuals to reverse this exploitation that is obviously NOT sustainable?

S.E.: People don't tend to think about the ocean when they think of what we need to do to take care of the planet – as if the ocean somehow doesn't matter or is so big, so vast, that it can take care of itself, or that there is nothing that we could possibly do to harm the ocean. But that's not true. With new technology and new research findings, now we know that the ocean has limits; there is only so much that we can take out before it will be empty of fish and other sea life, and there is also a limit to how much of our greenhouse gas emissions, excess toxic chemicals and trash we can throw into the ocean before this vital living system will no longer be able to function. Getting beyond that idea that the ocean is too vast to impact is very challenging. With knowing comes caring, and with caring comes the hope that an ocean ethic will arise that will secure a sustainable future for ourselves, our children, and for the sea. There is still time, but not a lot.

KL: Here in California we have set aside 16 percent of our state waters to serve as marine protected areas (MPAs). How effective are MPAs, and can you cite examples where they have proven to be successful, and others that have failed?

SE: The establishment of marine protected areas (or MPAs) – designated zones of ecological importance in which activities such as fishing and mining are strictly prohibited much like national parks on land – is becoming a very popular conservation method that has power to protect the health of the ocean as a whole. Slowly, but surely, several nations have shown leadership in increasing ocean care.



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The tone was set in 2006 by two presidents: George W. Bush, who designated major areas in the northwestern Hawaiian Islands and the western Pacific, and Anote Tong, leader of the Pacific island Republic of Kiribati, who declared protection that year and in 2008 for 158,000 square miles of ocean surrounding the nation’s 33 atolls and islands. Another island nation, the United Kingdom, followed in 2010 with what at the time was the world’s largest fully protected marine reserve: 225,810 square miles around the Chagos Archipelago in the Indian Ocean. In November 2012, Australia created a network of marine reserves covering 888,035 square miles of sea and bringing the total area of Australia’s protected ocean to 1.2 million square miles. Two years ago, President Obama expanded the areas established by Bush to create one of the largest protected areas on Earth, and in the past year the UK Government announced that it would create the world’s largest marine reserve around the Pitcairn Islands in the South Pacific and the Atlantic’s largest around Ascension Island – both UK Overseas Territories. But even with all of this progress, only two percent of the ocean is fully protected and less than four percent is protected in any way.

One example of both success and failure in an MPA is Australia’s Great Barrier Reef. Australia is a country I have admired and loved, from afar and up close in person for years since I first started visiting in the 1970s. The Great Barrier Reef Marine Park Authority has historically been a pinnacle of marine protection policy and enforcement – an example for the rest of the world. But now in Australia, and around the world, we are witnessing the impact of seven billion carbon emitters on a planet that isn’t getting any bigger. The Great Barrier Reef –

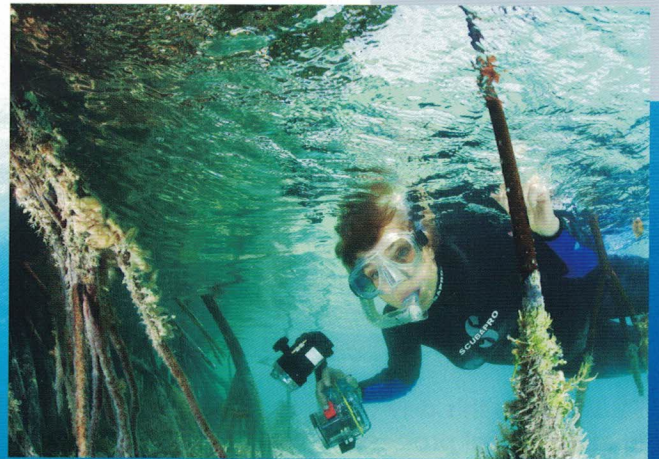
a UNESCO World Heritage Site and one of the seven natural wonders of the world – is in peril, sickened by extremely warm sea temperatures caused by climate change that is bleaching corals at an unprecedented rate. The good news is that coral reefs can recover from bleaching if stressors are reduced quickly. The Australian government would help immensely by confronting the truth that human-caused CO2 emissions are contributing to the recent tragic bleaching event. People around the world are holding their breath, hoping policymakers will restrict greenhouse gas emissions and limit climate change before it's too late.

KL: You have created a nonprofit organization called Mission Blue. I saw a few years ago that you started a program where you designate areas of the oceans as “Hope Spots.” Can you tell us what these are and what you hope to achieve with them?

SE: When I was awarded the TED Prize in 2009, I was given a special opportunity to make one of my biggest wishes come true – a wish that could “change the world.” I suggested the following: “I wish you would use all means at your disposal – Films! Expeditions! The web! New submarines! – To create a campaign to ignite public support for a global network of marine protected areas – “Hope Spots” – large enough to save and restore the ocean, the blue heart of the planet.” That’s how I founded Mission Blue. By designating Hope Spots around the world, Mission Blue is highlighting places in the ocean in need of special protection with the goal of safeguarding at least 20 percent of the ocean by 2020. Mission Blue collaborates with nearly 150 international partners from big multinationals like National Geographic and the International Union for Conservation of Nature (IUCN) to barebones scientific teams to grow the Hope Spots movement and protect large portions of the ocean – our life support system.

KL: Can you tell us of some “Hope Spot” successes? Are there any in the United States?

SE: The Gulf of California Hope Spot is a stellar example. Cabo Pulmo is a small place, but it is making a big difference in terms of inspiring hope. This village shows that if you make an investment, care for a place, it can recover. The fish had been depleted, the coral reefs were in trouble, but by taking the pressure off, by creating a safe place in the ocean for the wildlife that is here, recovery has taken place. The people took their ocean back, replaced the fishing with ecotourism, and the community is thriving.



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“WHATEVER ELSE WE ACHIEVE, THE ULTIMATE SUCCESS WILL BE TO DISPEL IGNORANCE ABOUT THE SEA.”



Diving now in Cabo Pulmo is almost like diving in the ocean as it was 60 years ago. Protection really works, and it's an idea beginning to catch hold around the world.

United States Hope Spots include the Gulf of Mexico deep reefs, the Gulf of the Farallones, Bahamian reefs off the southern tip of Florida and Cashes Ledge in the Gulf of Maine. Mission Blue has received mountains of requests for new Hope Spots and we are getting close to launching a new Hope Spot nomination system with our partners at IUCN that will lead to many new Hope Spots, including in the US.

KL: Lastly, in this day and age, most people feel totally disenfranchised by the political system. You once served in our political process by running the National Oceanic and Atmospheric Association (NOAA). As one who has worked both inside and outside the system, what do you feel is the best way for ordinary people to become involved in saving what is left of our oceans, and does signing a petition carry any weight?

SE: Whatever else we achieve, the ultimate success will be to dispel ignorance about the sea. Of all the ocean's problems, what we don't know poses the greatest threat. We must work together to push that frontier of ignorance further and deeper – and to return to the surface brimming with knowledge. Policymakers within the 'system' and citizens outside of it share a responsibility to do what they can to help the world understand threats to life in the ocean and solutions to them. We need people from all backgrounds and professions to raise awareness and inspire empathy among their communities and constituents about issues affecting the ocean, like climate change, ocean acidification, overfishing and pollution. Researchers need to speak out about their findings, activists need to spread the word about them, policymakers need to hear from voters and corporations that saving the ocean is a priority, and they need to work with scientists to act on those demands in effective ways. Petitions, when directed at the appropriate decision makers, can be an effective way to cause grassroots policy change. The only difference that has been made ever in the world, for good or for not so good, always starts with just one person. But it will take a coalition of researchers, indigenous communities, students, engineers, explorers, artists, teachers, policymakers and advocates to use their unique capabilities and new technologies to appeal to our global society and change our relationship with the ocean for good.

K.L. Thanks for your time and insights Sylvia, and I hope we can carry on this conversation in the future.

For more information on Sylvia Earle and Mission Blue go to mission-blue.org Photos provided by Mission Blue