

SAVE OUR LEATHERBACKS OPERATION



PROJECT KOMODO



...saving our seas...before they are gone

NEWSLETTER

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Founder's Comments



We humans have heavily polluted our own nest. The average person uses, then tosses, an amazing amount of single use plastic. Even when disposed properly, a lot of plastic finds its way to lakes and rivers, then to our seas. One garbage truck of plastic reaches our oceans every minute where it will persist for centuries!

The gyres swirl ocean plastic in massive garbage patches. As more plastic pours into our seas, it is not hard to envision how these garbage patches will grow to reach the beaches of the US and many other nations.

At present, ocean plastic kills 100 million sea turtles and other marine animals each year by entrapping them or permanently clogging their bellies when mistaken for food. Escalating amounts of plastic in our seas mean greater death tolls in the years ahead.

As you read our newsletter, you will learn of our progress against this destruction. We can fix this if we act before it becomes too late!

Join us! Help us! Donate today through our website LeatherbackTurtles.org or Facebook [@SaveOurLeatherbacks](https://www.facebook.com/SaveOurLeatherbacks)

Dr. Larry McKenna, Founder



Foundation Receives 2019 Awards

On October 28, 2019, DEMA announced that they will honor Save Our Leatherbacks Operation (S.O.L.O.) and Founder, Dr. Larry McKenna, with their "2019 Gold Diving Community Champion Award" at DEMA Show in November. Their press release stated that S.O.L.O. "...started in 2002 and first focused on the critically endangered Leatherback Sea Turtle. Working on a remote nesting beach in Papua, Indonesia, in partnership with a local subsistence village, S.O.L.O. met its goal to significantly increase this sea turtle's hatching rate. More recently, additional marine environmental projects within S.O.L.O.'s foundation structure have focused on clean up campaigns which have spawned more local community activity to help reduce marine litter."



Hatchlings on Papua beach, photo by Dr. McKenna

Dr. McKenna speaking at EarthX show in Dallas, photo by Pam Miller

Larry was also honored with the "Someone You Should Know" Award at the Our World Underwater Dive and Travel Show" in Chicago in February 2019. He accepted the award during the show's film festival, stating that the award "means so much...to all of the people who have helped our foundation over 16 years..."

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Join us at DEMA!

We will be at DEMA Show in Orlando, FL from November 13-16, 2019. We will give two presentations entitled "Project Komodo©: Saving Leatherback Sea Turtles and Our Seas from Massive Garbage Patches":

Thurs. Nov. 14 12:00-12:45 AM Room W304A
 Fri. Nov. 15 12:00-12:45 AM Room W304D

We will be in booth 2300 within "Magnet Zone A" and conveniently near the Registration entrance.

Of course, we'll proudly display our 2019 Gold Diving Community Champion Award at our booth starting November 14.

If you are attending DEMA, please join us at our presentations and visit our booth to learn how you can help!

Why do care we are so much about Ocean Trash?

The answer is simple. 100 million marine animals perish annually from marine debris found in our oceans (Vandana Rambaran, Fox News, Oct. 3, 2019). Plastic debris eventually breaks into small pieces that remain for centuries, continuing to kill marine animals of all sizes, from tiny larvae and babies to huge adult whales. Here are a few examples...



Leatherback Sea Turtle died from plastic ingestion & entrapment (photo by Malta ERA)



Young Leatherback Turtle died from plastic ingestion (photo by Marine Wildlife Watch of the Philippines)



Alaskan Salmon stuck in a plastic ring (photo by USFWS)



Hawaiian Monk Seal trapped In plastic net, in French Frigate Shoals (photo by NOAA)



Baby Loggerhead turtle died in Florida from ingesting 104 tiny pieces of plastic as shown (photo by Gumbo Limbo Nature Center)



Albatross died from ingesting plastic on Midway Atoll (photo by USFWS)



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Project Komodo Brochure Tells a Story...

Project Komodo was launched in February 2019 to clean up the Great Pacific Garbage Patch using a unique approach from Dr. Larry McKenna's prior US Air Force experience designing airplanes and helicopters. As with all of S.O.L.O.'s efforts, the project also has a goal to educate. This brochure tells the story of a plastic bag's journey from first use until it reaches our oceans. The graphics are the result of collaboration with a professor and her visual arts students at Lonestar College in Texas. We also credit the text to Bonnie McKenna and the images to Annie Crawley, NOAA, US Fish & Wildlife Service, and NOAA. Here are excerpts from the brochure:

By following a plastic bag, the kind you get in stores around the world, you can see how our oceans are being choked by rafts of plastic, now grown to monumental proportions. Once the purchase is removed from the bag, in the best scenario, the bag should go into a container to be recycled or taken to a dump site/land-fill to be buried forever.

STOP!

Once in the gyre, that bag floats among the swirling mass of other plastics and trash found there. Eventually, the bag will break into small pieces, but it will persist for hundreds of years. Wherever carried by the ocean currents, the bag, and other sorts plastic will bring death to sea turtles, birds, dolphins and other animals in our oceans and on our beaches by entrapping them or permanently clogging their bellies when mistaken for food.

Rubbish, trash, garbage, litter... no matter what you call it... is choking our oceans. What is the common thread about this man-made plague? Plastic, in all shapes, sizes, types, and colors. Plastic has changed our world in marvelous ways too numerous to count, but there is also a dark side. Plastic, especially single-use plastic, is winding up in our oceans, all oceans!

Not everyone has access to such collection of the bag and perhaps does not even have any idea of why it is not okay to just throw the bag on the ground for the wind to blow away. Not all dumps/land-fills are as careful as they should be; litter can escape here too. Eventually, the bag we are following will find its way to a stream, river, or storm-drain, all of which lead eventually to our oceans.

As the earth spins and the tides around the oceans ebb and flow the plastic bag will slowly merge into one of the five ocean gyres. An ocean gyre is a vast system of circular ocean currents formed by global wind patterns and forces created by Earth's rotation. The movement of the world's major ocean gyres helps drive the "ocean conveyor belt" that circulates ocean water around the entire planet. The major gyres are found in the North Atlantic, South Atlantic, North Pacific, South Pacific, and the Indian Ocean.

Our goal is to clean the ocean gyres of plastics and other trash. Why is the Komodo dragon our logo? Komodo dragons are efficient eaters, leaving not even bones behind, perfectly representing our goal of removing all plastic from the gyres to save our oceans and their delicate habitats.

Credits: Text by Bonnie McKenna; Images by Annie Crawley, NOAA, US Fish & Wildlife Service; Komodo Dragon modified from Flickr photo by Dan Jewell

What is Your Plastic Footprint?

One of the themes of Scuba Show 2019 in Long Beach, California was the impact of single use plastic on our oceans. This photo shows a man wearing the quantity of plastic bags that the average American uses each year. The astounding quantity is thought provoking! It is distressingly sad to think of these bags making their way to our oceans where they will be ingested, in whole or in broken pieces, by sea turtles, whales and other animals who will then die.

You can estimate your own single use plastic footprint at this website:
<http://whatismycarbonfootprint.com/plastic-footprint/>

An estimate of 21.4 kg (47.2 lbs) amounts to 1490 pieces per year.

Take the challenge to reduce your single use plastic footprint and recalculate after a few months to verify your progress. Ask your friends to do the same!



photo by Pam Miller

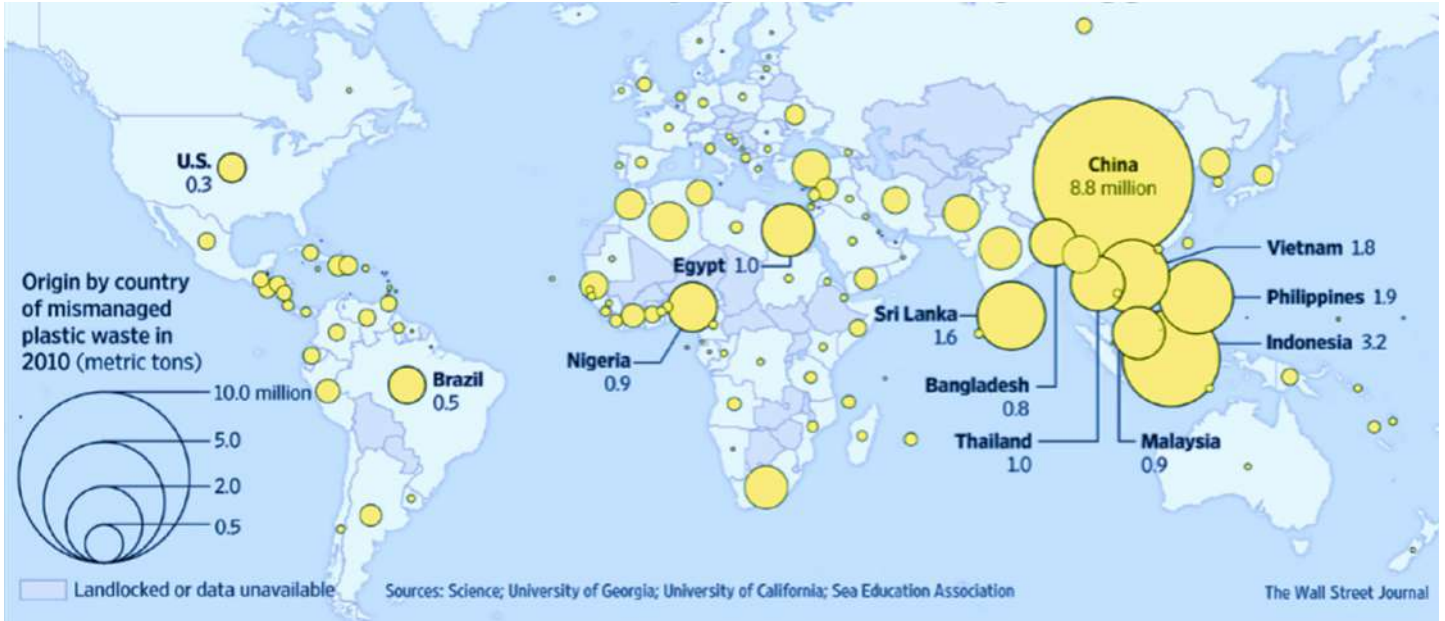

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Everyone in Every Country Can Reduce Ocean Plastic!



All countries contribute too much plastic to our seas, and 83% of ocean plastic comes from 20 countries where waste management/collection is lacking, mainly in Asia and Africa. During our travels, we have photographed severe trash challenges on land. Trash from all countries makes it way to sea, forming huge garbage patches.



Asia, image by Bonnie McKenna



Africa, photo by Larry McKenna

Bali Bans Single Use Plastics

Bali banned single-use plastics—including shopping bags, styrofoam and straws—as of June 2019. When Bali Governor Wayan Koster announced the ban, he expressed hope this would reduce Bali’s ocean plastics by 70% within a year. He also stated that sanctions imposed for non-compliance would include not extending business permits (*The Jakarta Post*, Dec. 25, 2018). Dr. Larry McKenna has visited Bali since the ban began. He has seen much less trash within the rivers, beaches, and seas. Many Bali restaurants no longer offer straws. Customers who want a straw must visit another store to buy a paper straw. Dr. McKenna is shown sitting outside of a Bali McDonald’s that no longer offers plastic straws.



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11th Hour Heroes Cleanup Success

The first 11th Hour Heroes project was launched at “DEMA Show 2016”. Project goals, set in a partnership with Mel Agudo, owner of Marco Vincent Dive Resort (MVR) in Puerto Galera, Philippines, are to reduce local marine litter and illegal fishing. Among the volunteer team’s successes are local clean up campaigns and modestly increased marine park dive fees to fund better enforcement of existing fishing regulations in the Verde Island dive area.

S.O.L.O.’s Director, Bonnie McKenna, observes that this team’s clean up campaigns, begun in 2017, have spawned more local community activity to further reduce marine litter in the Puerto Galera area. The team’s efforts also provided our foundation with research data now being used for Project Komodo.



First Philippines underwater and beach clean ups led by Bonnie McKenna, S.O.L.O. Director, and Marlon Albo, MVR Dive Center Manager in 2017 (photos by Rizza Lyn Fermin)

In 2018, the Scubadillos dive club from Dallas, Texas, participated in one of the team’s cleanups. Key to a successful underwater cleanup is for divers to use their good judgement to make sure that nothing is living in or on the items removed. If an organism is living in or on a piece of ocean trash, it is best to move on and find other trash to remove.



Scubadillos on one of the Marco Vincent Dive Resort’s cleanup dives and debris removed. (photos by Rizza Lyn Fermin)

Octopus was left with its home. (photo by Lily Mak)

Upon returning home, the Scubadillos have done many lake cleanups in 2018/19. The Arlington, Texas-based Diving Rebels Club and others have joined some of the cleanups.



Wearing sunglasses removed from Lake Travis in 2018 (photo by Robert Weiss)

With beer cans removed from Lake Oachita in 2018 (photo by Lily Mak)



Possum Kingdom Lake in 2018 top, 2019 bottom & right (Inland Divers photos)



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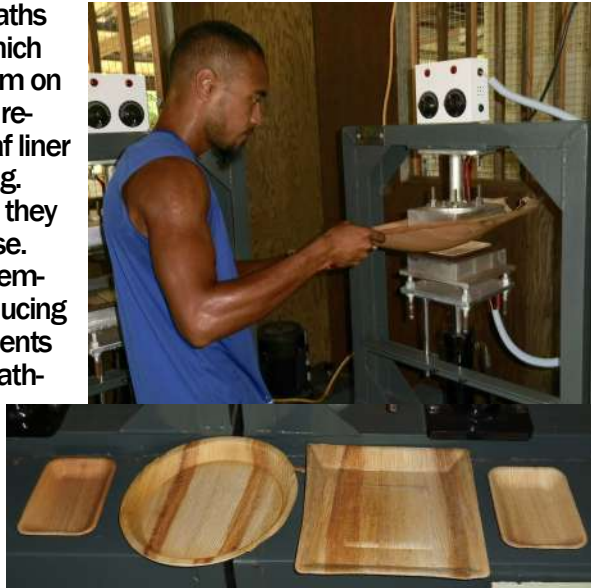


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Yap Replaces Styrofoam!

Betel nut is a cash crop for the island of Yap. Betel nut trees also produce a sheath that falls to the ground. A Yapese company, Yap Eco Leaf Plates, turns these sheaths into plates and trays which replace plastic styrofoam on the island. They can be re-used, and a banana leaf liner makes for easy cleaning. When no longer useful, they will naturally decompose. This business provides employment to those producing the items, and pays 5 cents for each betel sheath gathered by villagers. It doesn't get better than using local, natural raw materials to generate local income! To learn more, visit:

yapecoleafplates.org



Photos by Bonnie McKenna

Clean Beaches Win!

The US National Oceanic and Atmospheric Administration (NOAA) funded a study of the economic value of clean beaches in four areas that was completed in July 2019. It considered tourism, recreation, and employment. Here are the results:

	\$ (USD, millions)
Alabama	29
Delaware and Maryland	28
Ohio (Lake Erie)	206
Orange County, California	138

The prize is huge for achieving clean beaches, lakes, waterways, and oceans! Bali, Yap, and Marco Vincent Dive Resort are among those already winning the benefits.

Will your area be next?

Ending Single Use Plastic Straws and Bags

The video of Texas A&M University biologists removing a straw painfully stuck in an Olive Ridley Turtles nose on a boat off the coast of Costa Rica quickly went viral. Who among us cannot empathize with the pain this turtle experienced? The image quickly drove customer preferences to avoid plastic straws. A number of companies in the food, beverage, hotel, travel and theme park industries responded by discontinuing plastic straws. We commend those companies! Yet plastic straws still persist. While McDonald's has discontinued plastic straws in Bali and the United Kingdom, they have not done so globally. We've tested paper and other readily available alternatives that work acceptably well and won't persist in our oceans for centuries to harm or kill marine animals.

S.O.L.O. Director, Dr. Mike Miller, is undertaking a campaign to convince remaining companies to fully discontinue plastic straws. So far, he has contacted CEOs of corporations covering more than 230,000 restaurants, and his efforts continue.

Three volunteer Ambassadors from the Dallas, Texas Area,—Linda Briggs, Mona Valentine and Lily Mak—recently joined our team. Linda and Mona will be working to end single use plastic bags, and Lily's project is currently under development. We welcome them all aboard and look forward to seeing their efforts succeed!



Image by Christine Figenner



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Save Our Leatherbacks Operation Directors: Larry McKenna, Bonnie McKenna, "Bo" Esray, Tony Moats, Mike Miller, Pam Miller
 Komodo Dragon image in Project Komodo logo is modified from a Flickr photo by Dan Jewell.

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