

**DOES THE
“GREAT PACIFIC GARBAGE PATCH”
REALLY EXIST?**

Is it “twice the size of Texas” as environmentalists allege?

**Or is it a
Great Pacific Garbage Myth?**

**ARE 100,000 MARINE MAMMALS
AND A MILLION SEABIRDS
BEING KILLED EACH YEAR BY PLASTIC
BAGS, AS ENVIRONMENTALISTS
ALLEGE?**

**Or are they being killed
by something else?**

**FIND OUT THE ANSWERS HERE – WITH
PHOTOGRAPHIC EVIDENCE!**

SAVE THE PLASTIC BAG COALITION

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THE PURPOSE OF THE COALITION

Save The Plastic Bag Coalition was formed in 2008 to respond to the myths, misinformation, and exaggerations about plastic bags created and disseminated by environmental groups and their overzealous supporters.

An [editorial](#) in the London Times on March 8, 2008 stated:

“Many of those who have demonized plastic bags have enlisted scientific study to their cause. By exaggerating a grain of truth into a larger falsehood, they spread misinformation and abuse the trust of their unwitting audiences.”

David Laist, a senior policy and program analyst with the federal Marine Mammal Commission, has [stated](#):

“In their eagerness to make their case, some of the environmental groups make up claims that are really not supportable.”

The chief scientist on the Scripps Seaplex expedition, which went out to the Pacific to survey marine debris, [states](#) as follows regarding the “Great Pacific Garbage Patch”:

“Misinformation on this issue is rampant.”

The Algalita Marine Research Foundation created the idea of a “Great Pacific Garbage Patch.” In December 2011, Dr. Marcus Eriksen of Algalita [admitted](#):

“The idea of a single, Texas-size garbage patch is the myth of media sensationalism.”

**ARE 100,000 MARINE MAMMALS
AND A MILLION SEABIRDS
BEING KILLED EACH YEAR BY PLASTIC BAGS?**

The following statement was contained in editorials published in the [Daily Breeze](#) and the [San Jose Mercury News](#):

“Plastic bags kill an estimated 1 million seabirds and 100,000 other animals every year, whether from eating the things or getting tangled in them.”

On January 22, 2008, the Los Angeles County Board of Supervisors considered adoption of a plastic bag reduction program. The following [statements](#) were made at that meeting:

Emily Utter of Chico Bag Company (reusable bag maker): *“And as we’ve heard, plastic bags pose a huge environmental threat to our marine environment, 100,000 marine deaths per year due to plastic bags.”*

Heal the Bay: *“You’ve all heard the numbers 6 billion bags, which is a million bags a minute worldwide are used throughout the world. We have a global environmental crisis. You’ve heard the numbers on a million sea birds, 100,000 marine mammals annually.”*

Supervisor/Chair Yvonne Burke: *“We look to this body to protect the animals that are dying out there by the millions.”*

In fact, the allegation that 100,000 marine mammals and a million seabirds die each year as a result of plastic bags is **untrue**. An [article](#) in the The Times of London on March 8, 2008 entitled “Series of blunders turned the plastic bag into global villain” states in part as follows:

“The central claim of campaigners is that the bags kill more than 100,000 marine mammals and one million seabirds every year. However, this figure is based on a misinterpretation of a 1987 Canadian study in Newfoundland, which found that, between 1981 and 1984, more than 100,000 marine mammals, including birds, were killed by discarded nets. The Canadian study did not mention plastic bags.”

Fifteen years later in 2002, when the Australian Government commissioned a report into the effects of plastic bags, its authors misquoted the Newfoundland study, mistakenly attributing the deaths to “plastic bags”.

The figure was latched on to by conservationists as proof that the bags were killers. For four years the “typo” remained uncorrected. It was only in 2006 that the authors altered the report, replacing “plastic bags” with “plastic debris”. But they admitted: “The actual numbers of animals killed annually by plastic bag litter is nearly impossible to determine.”

In a postscript to the correction they admitted that the original Canadian study had referred to fishing tackle, not plastic debris, as the threat to the marine environment.

Regardless, the erroneous claim has become the keystone of a widening campaign to demonise plastic bags.

David Santillo, a marine biologist at Greenpeace, told The Times that bad science was undermining the [British] Government’s case for banning the bags. “It’s very unlikely that many animals are killed by plastic bags,” he said. “The evidence shows just the opposite.”

The U.S. National Oceanic and Atmospheric Administration (“NOAA”) [states](#) as follows:

Question: “Is it true that 100,000 marine mammals and/or sea turtles die each year due to marine debris/plastics/plastic bags?”

Answer: “We were able to find no information to support this statement. An erroneous statement attributing these figures to plastic bags was published in a 2002 report published by the Australian Government; it was corrected in 2006.”

Question: “Is it true that marine debris kills a million seabirds each year?”

Answer: “This statement is currently unknown. We are so far unable to find a scientific reference for this figure. The closest we have found is “214,500 to 763,000 seabirds are killed annually incidental to driftnet fishing by Japanese fishermen in the North Pacific Ocean (US Department of Commerce, 1981)” from Laist, 1987.”

WHAT IS REALLY KILLING TURTLES? NOT PLASTIC BAGS!

Click [here](#) for an index of all sea turtles admitted to the Sea Turtle Rescue and Rehabilitation Center from 1996 to 2012. Many of the injuries or deaths are caused by fishing nets and hooks. Plastic bags and plastics are not even mentioned.

SURVEY OF 152 BIRD ENTANGLEMENTS OFF THE U.S. WEST COAST FROM 2001 TO 2005

Table 1. Entangled birds (n=152) recorded from 2001-2005.

Common name	n	Entanglement material (where identified)
Black-footed Albatross	1	Rope
Brandt's Cormorant	11	Fishing line, fishing hook, rope and metal
Brown Pelican	5	Fishing hook, hook and sinker
California Gull	4	Fishing line
Common Merganser	1	Fishing line
Common Murre	42	Balloon, fishing line, fishing hook, fishing net, hook, line and sinker, plastic, salmon gear
Double-crested Cormorant	3	Fishing line
Glaucous-winged Gull	5	Fishing line, fishing hook, fishing net
Heermann's Gull	1	Fishing line
Northern Fulmar	3	Balloon & string, fishing line and sinker
Pelagic Cormorant	6	Fishing line, fishing hook, line and sinker
Short-tailed Shearwater	1	Fishing line
Sooty Shearwater	11	Fishing line, fishing hook
Surf Scoter	1	Fishing line
Western Grebe	8	Fishing line, string
Western Gull	25	Fishing line, fishing hook, line and sinker
Unidentified spp.	24	Fishing line, fishing hook, plastic, rope and string

<http://www.farallones.org/volunteer/documents/PSGPoster.pdf>

DOES THE “GREAT PACIFIC GARBAGE PATCH” EXIST?

On June 24, 2010, the Los Angeles Times stated in an [editorial](#):

“The Great Pacific Garbage Patch is an area of the ocean larger than Texas and thick with floating plastic debris: bottles, bottle caps, bits of packaging and uncountable plastic bags.”

The statement is untrue. We challenge you to check Google Images and find a single photograph of it.

The chief scientist on the Scripps Seaplex expedition, which went to the Pacific to survey marine debris, [states](#) as follows regarding whether there is area of trash the size of Texas:

“There is no evidence for this. There certainly is a lot of trash, but there have been no measurements of either the trash’s total area or its growth rate.”

Dr. Marcus Eriksen of the Algalita Marine Research Foundation sailed a from Long Beach to Hawaii to find the “Great Pacific Garbage Patch.” He [states](#):

“There is no island of plastic trash.”

He says that there is a confetti of waste on the ocean surface.

The U.S. National Oceanic and Administration (NOAA) [states](#) as follows:

“The name “garbage patch” is a misnomer. There is no island of trash forming in the middle of the ocean nor a blanket of trash that can be seen with satellite or aerial photographs. This is likely because much of the debris found here is small bits of floating plastic not easily seen from a boat.”

“The reported size and mass of these “patches” have differed from media article to article. Due to the limited sample size, as well as a tendency for observing ships to explore only areas thought to concentrate debris, there is really no accurate estimate on the size or mass of the “garbage patch” or any other concentrations of marine debris in the open ocean.”

JUNK-n-Gyre

In 2008, the Algalita Marine Research Foundation sent a vessel called the JUNK from Long Beach to Hawaii to prove the existence of the “Great Pacific Garbage Patch.” The captain of the vessel was Dr. Marcus Eriksen. In this image, the JUNK drags the trawl device through the North Pacific Gyre. There are no visible plastic bags or any other trash.

http://www.youtube.com/watch?v=3d3_fLsjC8U



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24 hours and 50 miles later, Dr. Eriksen pulls the trawl device aboard the boat. There are no visible plastic bags or any other trash.

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Video

JUNK-n-Gyre



Dr. Eriksen shows the inside of the trawl device containing debris.

JUNK-n-Gyre



Dr. Eriksen empties the contents of the trawl device into a pan, a tiny amount considering this is the result of a 24-hour 50-mile trawl.

JUNK-n-Gyre



Dr. Eriksen shows the results a jar. It appears that there are at least two fish. Based on a 24-hour 50-mile trawl through the Gyre, the amount of debris is tiny and insignificant.

Since returning from the JUNK voyage, Dr. Eriksen has stated:

“There is no island of plastic trash.”

Dr. Eriksen maintains that there is a “confetti of waste” spread across the entire ocean surface, but as we have seen from the YouTube video, the amount even in the Gyre is tiny.

THE RESULT OF A ONE-MILE TRAWL IN THE WORST AREA OF THE PACIFIC GYRE ACCUMULATION ZONE



This is the photograph that Los Angeles County claims is substantial evidence of a “Great Pacific Garbage Patch” that justifies banning plastic bags.

The sample in the photograph was collected from a one-mile trawl in an accumulation zone in the particular area of the Pacific Ocean that has the most concentrated debris. *This is not an instant scoop up from the ocean.* We cannot ascertain what exactly is in the jar. As suggested by the label on the jar, much of the contents may be zooplankton, which are tiny animals. This is apparently as bad as it gets. It is a tiny amount over a one-mile distance.

Oregon State University Press Release
OCEANIC “GARBAGE PATCH” NOT NEARLY
AS BIG AS PORTRAYED IN MEDIA

January 4, 2011

CORVALLIS, Ore. – There is a lot of plastic trash floating in the Pacific Ocean, but claims that the “Great Garbage Patch” between California and Japan is twice the size of Texas are grossly exaggerated, according to an analysis by an Oregon State University scientist.

Further claims that the oceans are filled with more plastic than plankton, and that the patch has been growing tenfold each decade since the 1950s are equally misleading, pointed out Angelicque “Angel” White, an assistant professor of oceanography at Oregon State.

“There is no doubt that the amount of plastic in the world’s oceans is troubling, but this kind of exaggeration undermines the credibility of scientists,” White said. “We have data that allow us to make reasonable estimates; we don’t need the hyperbole. Given the observed concentration of plastic in the North Pacific, it is simply inaccurate to state that plastic outweighs plankton, or that we have observed an exponential increase in plastic.”

White has pored over published literature and participated in one of the few expeditions solely aimed at understanding the abundance of plastic debris and the associated impact of plastic on microbial communities. That expedition was part of research funded by the National Science Foundation through C-MORE, the Center for Microbial Oceanography: Research and Education.

The studies have shown is that if you look at the actual area of the plastic itself, rather than the entire North Pacific subtropical gyre, the hypothetically “cohesive” plastic patch is actually less than 1 percent of the geographic size of Texas.

“The amount of plastic out there isn’t trivial,” White said. “But using the highest concentrations ever reported by scientists produces a patch that is a small fraction of the state of Texas, not twice the size.”

Another way to look at it, White said, is to compare the amount of plastic found to the amount of water in which it was found. “If we were to filter the

surface area of the ocean equivalent to a football field in waters having the highest concentration (of plastic) ever recorded," she said, "the amount of plastic recovered would not even extend to the 1-inch line."

Recent research by scientists at the Woods Hole Oceanographic Institution found that the amount of plastic, at least in the Atlantic Ocean, hasn't increased since the mid-1980s – despite greater production and consumption of materials made from plastic, she pointed out.

"Are we doing a better job of preventing plastics from getting into the ocean?" White said. "Is more plastic sinking out of the surface waters? Or is it being more efficiently broken down? We just don't know. But the data on hand simply do not suggest that 'plastic patches' have increased in size. This is certainly an unexpected conclusion, but it may in part reflect the high spatial and temporal variability of plastic concentrations in the ocean and the limited number of samples that have been collected."

The hyperbole about plastic patches saturating the media rankles White, who says such exaggeration can drive a wedge between the public and the scientific community. One recent claim that the garbage patch is as deep as the Golden Gate Bridge is tall is completely unfounded, she said.

To read the rest of the press release and for an article in the Oregonian about the findings, click on the following link:

<http://www.savetheplasticbag.com/ReadContent717.aspx>

HEAL THE BAY VIDEO IMAGE 1



Note the wording on this image of intact plastic bags floating in water: “GREAT PACIFIC GARBAGE PATCH”

SEE CAPTION ON NEXT PAGE

HEAL THE BAY VIDEO IMAGE 2



These are images from a recent Heal the Bay [video](#) about plastic bags. In the image on the previous page, intact plastic bags are portrayed as floating in the ocean. The image morphs into the above map of the “Great Pacific Garbage Patch.”

Note that the image overlaying the “Great Pacific Garbage Patch” is a gigantic white plastic bag along with scattered images of small plastic bags.

The commentary on the video says that the Great Pacific Garbage Patch is “said to be twice the size of Texas.” The video misinforms and deceives the public. The “Great Pacific Garbage Patch” does not exist. The video has been viewed more than 1.2 million times.

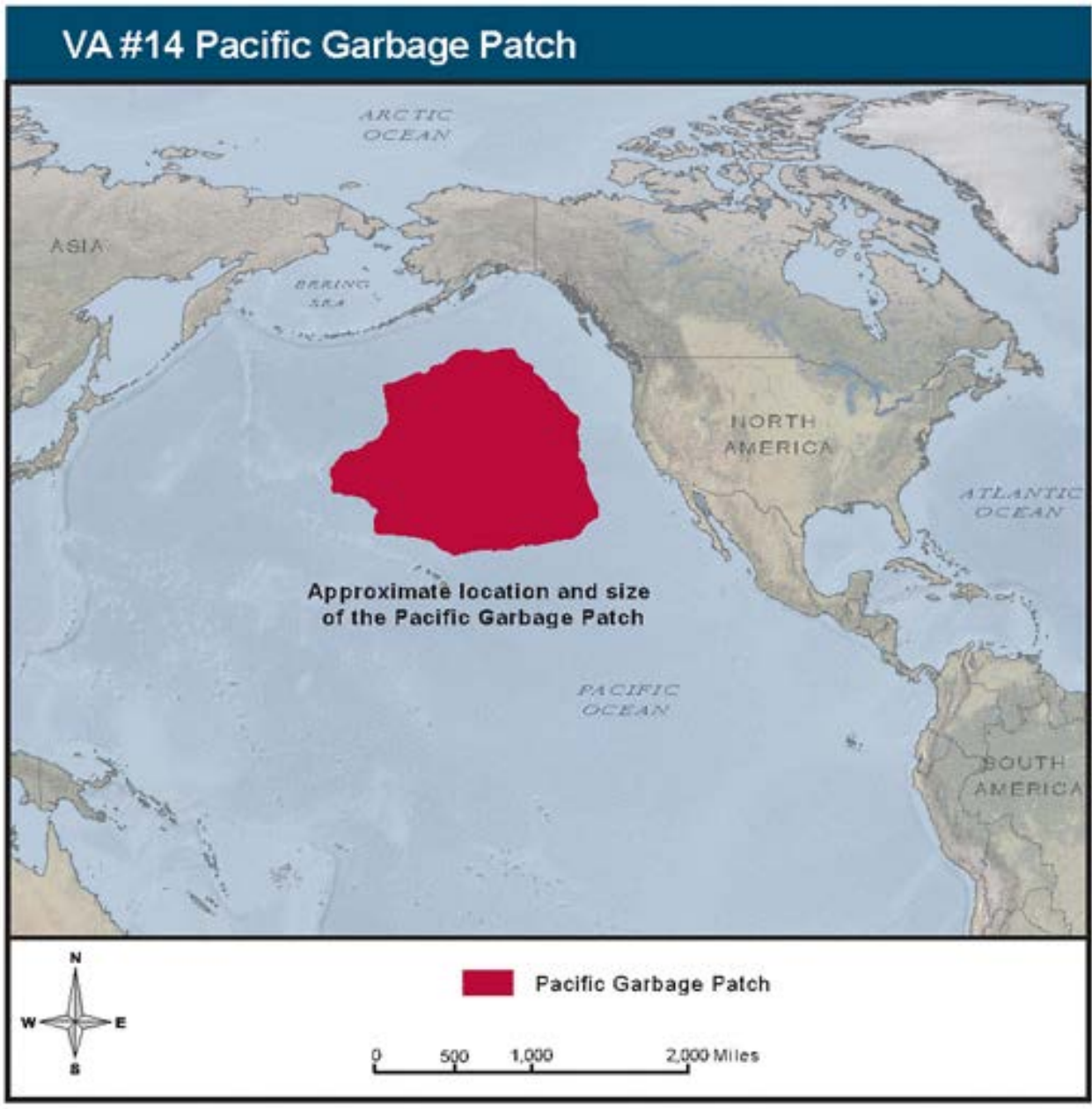
PLASTIC BAG CARTOON AIMED AT CHILDREN
PORTRAYING ISLAND OF PLASTIC BAGS IN THE PACIFIC OCEAN



This is an image from a children’s cartoon [video](#) falsely portraying the Great Pacific Garbage Patch as a massive island in the Pacific Ocean consisting of 1 billion plastic bags.

Californians Against Waste (“CAW”) publicized the video on its [website](#).

CALIFORNIA STUDENT TEXTBOOK



This is the map of the “Pacific Garbage Patch” in the California [textbook](#) approved by the California State Board of Education. We have protested.

A MISINFORMED SENATOR



Senator Mark Leno stated as follows during the floor debate on AB 1998:

“There are plastic patches now in our oceans which are twice the size of Texas.”

Senator Leno was misinformed.