Nearly every food product we buy... 
Take a look around you - most of what we eat, drink, or use in any way comes packaged in petroleum plastic - a material designed to last forever, yet used for products that we then throw away. This throwaway mentality is a relatively recent phenomenon. Just a generation ago, we packaged our products in reusable or recyclable materials – glass, metals, and paper, and designed products that would last. Today, our landfills and beaches are awash in plastic packaging, and expendable products that have no value at the end of their short lifecycle.

The short-term convenience of using and throwing away plastic products carries a very inconvenient long-term truth. These plastic water bottles, cups, utensils, electronics, toys, and gadgets we dispose of daily are rarely recycled in a closed loop. We currently recover only 5% of the plastics we produce. What happens to the rest of it? Roughly 50% is buried in landfills, some is remade into durable goods, and much of it remains “unaccounted for”, lost in the environment where it ultimately washes out to sea.

Okay, So It’s Not the Cover of the Rolling Stone,
But Still...

Have you ever written a letter to the editor? It’s something each of us could do, and with the Internet, it’s easier than ever. So why was last month the first time I ever tried it? Oh sure, I leave comments on blogs and online newspaper web sites, but I had never sent a letter to be published in print until the article “An Ocean of Plastic” appeared in the October 29, 2009 issue of Rolling Stone Magazine, of all places. Now, we’re not talking about a couple of small paragraphs. Kitt Doucette’s article about Captain Charles Moore, the North Pacific Gyre, the Great Pacific Garbage Patch, and the problems of plastic pollution is a 4-page spread in the center of the magazine, right after Madonna. I wish I could link to it so you can read it for yourself. Unfortunately, Rolling Stone doesn’t publish all its articles online. At this point, the only way to read it is to buy a back issue.

So anyway, it’s a great article. But one sentence on the third page caught my attention:

“When was the last time you spent an entire day without using a piece of disposable plastic?”

I jumped on it. I had to. I read so many articles about the environmental problems in the world that rarely contain any hopeful information about what we as individuals can do about them. I fear that readers end up depressed, hopeless, and unmotivated to take action. What’s the use of that? Normally, I would have found the magazine’s web site and left a comment. But because this article was not online, I had to do what I’d never done before... write an actual letter to the actual editor. Fortunately the editor had an email address or it might not have happened.

So, here’s a shortened version of my letter, which was published in the current (11-26-2009) issue of Rolling Stone. Click on the image to see the full page as a PDF.
And here is the original letter that I sent:

from Beth Terry to letters[at]rollingstone[dot]com date Mon, Oct 19, 2009 at 5:05 AM subject An Ocean of Plastic mailed-by gmail.com

Editor:

In his article, “An Ocean of Plastic,” Kitt Doucette asks, “When was the last time you spent an entire day without using a piece of disposable plastic?” My answer: yesterday. And the day before that. And the one before that. It’s not impossible to get off the plastic-ridden consumer treadmill of mass consumption, but it does take dedication. I’ve been blogging ways to live with less plastic at Fake Plastic Fish (http://www.fakeplasticfish.com) for over two years in response to learning about the plastic in the ocean.

It’s great to bring awareness to the problem of plastic pollution, but let’s give readers some solutions as well. A half a century ago, people lived well with much less plastic. We can do it again.

Sincerely, – Beth Terry

I’m very pleased that the editor chose to include my letter. But I wish the reference to Fake Plastic Fish had been included to provide RS readers some solutions and demonstrate that it is possible to live with very little disposable plastic. So far the weight of my plastic waste for 2009 is under 3 pounds. Think I can keep it there through the end of the year?


Midway (Fri., 1/22/10) – Experiencing the Patch

by Clare Fieseler — Jan 23, 2010

I stepped into the pages of Rolling Stone today. No rock-and-roll but plenty of plastic.
4.5 million tons of plastic brought back to the Midway Islands by the 1,000,000 albatross residents.

When Rolling Stone magazine ran an article this past October titled “The Great Pacific Garbage Patch,” I received exactly two text messages and three emails. Family and friends thought I might know something about this plastic vortex. Is this true? Is it really the size of Texas? Can you see it from space? I had read a few journal articles about the presence of micro plastics in the stomachs of seabirds. Besides from that, the topic was as obscure to me as metaphysics. I had never seen this so-called “patch.”

The patch is actually not easily visible, like an oil slick or the Great Wall of China might be. The problem of ocean plastics reveals itself in much more discreet and destructive ways: ingestion by marine mammals, coral reef entanglement, or beach litter. (NOAA has a great myth-buster website about the “garbage patch”). Where I sit now in Midway’s old navy barracks, I am a few hundred miles south of the hyped “patch.” Still, the gravity of the plastic problem revealed itself today during our marine debris beach survey.

Comprised of ten beachcombers and ten bloated bags of plastic, our group was suddenly approached by a critically endangered Hawaiian monk seal (only 1,100 individuals left in the wild). The yearling hauled out from the white water about 20 yards from us. At once, we were experiencing the majesty of the ocean and its abuse. The contrast was truly striking.

Indeed, the media often misinforms us about the effects of marine debris on survivorship of marine animals. Rolling Stone claims that 100,00 marine mammals die each year from plastic debris. Our trip leader and marine mammal scientist Dr. Andy Read argues that this mortality effect is inconclusive. Plastics are certainly a growing problem in the North Pacific – the media has made that known – but its definitive sources and end effects on ocean residents are less certain.

Midway Atoll is trying to quantify this problem. A current island study shows that 23% of the marine debris that the tide brings in has a land origin, 18% has a fisheries origin, and the remainder is unknown, mostly
unidentifiable shards of plastic. Midway Atoll Nation Wildlife Refuge deputy site manager John Klavitter crunched some statistics on the atoll's yearly atoll accumulation.

- 8 tons of plastic debris washes up on the beaches of Midway Atoll
- 8.6 tons of netting from fisheries becomes entangled on reefs or sand
- 4.5 tons of plastic are brought in by seabirds and fed to their chicks

Plastic is present but how does it affect the islands ecological balance? There is no conclusive evidence that albatross chicks are dying directly from plastic ingestion; its most likely that plastic ingestion contributes to other natural forces – like dehydration and starvation – to decrease chick fitness and cause higher mortality rates. Given that 99.9% of Midway’s albatross chicks having plastic in their gut, scientists hypothesize that this phenomenon could likely impact population size in the future.

Since the resident Black-footed Albatross and Laysan Albatross forage on different species in different ranges of the North Pacific, it’s also hypothesized that the two species bring in different amounts of plastic. Perhaps the current species composition of the island’s seabird population may shift due to variable plastic forces, suggests Klavitter.

Rolling Stone provided the “shock,” but what the media doesn’t make clear is that we need still to clarify the “awe” – and extent – of this problem. At Midway, at least, they are beginning to scratch the plastic surface.

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There were some precious treasure in the approximately one ton or marine debris we collected from the beach today. Everybody had a favorite:

Laysan Albatross nest with prime view of marine debris. Giddy up.
Andy: a fresh water lure
Matt Potti: lighter with Japanese characters
Rhianna: a riding saddle
Josh: an intact construction helmet
Nick: 8-foot corrugated sewer pipe
Dave: car Reflector
Matt Bowers: plastic O-ring from Denmark
Amy Smith: computer monitor
Tom: wiffle ball
Katelin: milk bottle half-full with milk
Clare: star of David holiday decoration

Some photos of animals trapped by trash