

Pirkei Avot

(Ethics of Our Fathers)

“You are not obligated to complete the work, but neither are you free to desist from it (2:21).”

“If I am only for myself, who am I? (1:14)”

Virtually every piece of plastic that has ever been created is still on this earth in some form



The Problem of Plastics in Florida

a different story

©League of Women
Voters of the
Pensacola Bay Area

What's Different about Florida?

- Florida has the second longest coastline of any state, after Alaska, of 1,800 miles (2,898 km)
- Nowhere in Florida is more than 60 miles from coastal waters
(<https://2fla.com/florida-fun-facts>)
- Floridians do a particularly poor job of protecting those waters

A Few Plastic Facts

- Gulf of Mexico has one of the highest concentrations of plastic of any body of water (http://www.nola.com/environment/index.ssf/2017/08/gulf_of_mexico_plastics_concentration.html)
- >90% of bottled and tap water tested contained microplastics (<https://www.usatoday.com/story/news/nation-now/2018/03/15/does-bottled-water-you-paid-3-contain-tiny-particles-plastic-study-says-yes/427210002/>)
- Microplastics preferentially absorb toxins (<https://www.epa.gov/trash-free-waters/toxicological-threats-plastic>)
- Almost 90% of teens tested in Britain had Bisphenol A in their bodies (<http://www.dailymail.co.uk/news/article-5351661/Chemicals-plastic-90-teenage-bodies.html>)

From the Economist



FREE

PLASTIC

IS TOO

EXPENSIVE

PLASTIC

BY

THE

NUMBERS

FREE PLASTIC IS TOO EXPENSIVE...

35 MILLION TONS:

Amount of plastic trash
produced each year
worldwide



9 MILLION TONS:

Amount of plastic that ends up in the water
each year

<https://phys.org/news/2018-04-science-amount-straws-plastic-pollution.html#jCp>

IT'S ESTIMATED THAT WITHOUT
CHANGES IN OUR CONSUMER
HABITS BY **2050** THERE WILL BE
MORE
PLASTIC
THAN FISH
IN THE
OCEAN



(https://www.washingtonpost.com/news/morning-mix/wp/2016/01/20/by-2050-there-will-be-more-plastic-than-fish-in-the-worlds-oceans-study-says/?utm_term=.b7305efe5d8c)

PLASTIC IS TOO EXPENSIVE...



FREE PLASTIC IS TOO EXPENSIVE...

7% - 10%:

Annual petroleum consumption used in the US and worldwide to make plastics

12 MILLION:

Barrels of petroleum used in the US to make plastic bags

The energy needed to make 14 plastic bags will power a car 1 mile

FREE PLASTIC BAGS ARE TOO EXPENSIVE...

15:

Single use plastic bags the average family takes home from a typical shopping trip

12:

Minutes these bags are used

20 to 1000:

Years it can take for these plastic bags to degrade

FREE PLASTIC BAGS ARE TOO EXPENSIVE...

AS MUCH AS 5 TRILLION:

Worldwide, the number of plastic bags produced and used annually



1-10 MILLION:

Bags used per minute



100 BILLION:

Plastic bags used per year in the US

FREE PLASTIC BAGS ARE TOO EXPENSIVE...

88%:

Percent of plastic bags sent to landfills or end up in the environment in Florida



FREE PLASTIC STRAWS ARE TOO EXPENSIVE...

7.5 MILLION:

Plastic straws lying around America's shorelines.

437 MILLION – 8.3 BILLION

Plastic straws are on the entire world's coastlines.



PLASTIC BOTTLES ARE TOO EXPENSIVE...

1 MILLION:

The number of plastic bottles used per minute worldwide

1,500 MILLION:

The number of plastic bottles used per second in the US

13:

The number of bottles used per person in the US/month

PLASTIC CUPS ARE TOO EXPENSIVE...

500 BILLION:

The number of Styrofoam cups used per year worldwide

25 BILLION:

The number of Styrofoam cups discarded in the US every year

500 YEARS:

How long that Styrofoam cup will remain in the landfill

FREE PLASTIC IS TOO EXPENSIVE...

An estimated **100,000** turtles and marine animals and up to **1 million** sea birds die each year after ingesting or being entangled in plastic marine litter.



FREE PLASTIC IS TOO EXPENSIVE...



Just 1/2 day in the 'hood...



FREE PLASTIC BAGS ARE TOO EXPENSIVE...

Bags become litter, clog waterways & sewers.

They contaminate compost and hinder recycling efforts.

They cost hundreds of thousands of dollars a year to clean up.



FREE PLASTIC IS TOO EXPENSIVE...

Bags float in the air and in the water.



Bags are on the bottom of the sea and top of Mount Everest

Scientists have found microplastics in the ocean, on isolated Alpine peaks, in animals' digestive track and in humans



FREE PLASTIC IS TOO EXPENSIVE...

Tiny bits of plastic have been found in shellfish along the Oregon shore.

Tiny bits of plastic were found in waters around Anna Maria Island by high school students in south Florida.

Tiny bits of plastic were recently found in mosquito larvae

Tiny bits of plastic have been found in people

BUT THERE ARE SOLUTIONS

Plastic Legislation:

- *Total plastic bag or straw bans*
- *Single-use plastic bag fees*
- *Mandatory plastic bag recycling*
- *Voluntary programs*

In 2002 Ireland placed a **28** cent levy on plastic bags and experienced a **95%** reduction in plastic litter.



Plastic Ban Firsts

San Francisco

first American city to ban the bag

California

first US state to ban the bag and straws

Bangladesh

first country to ban the bag in 2002

<http://ecospearbd.com/bangladesh-world-leader-in-banning-plastic-bags/>

Seattle

first American city to ban plastic straws and utensils

Scotland

first country to ban straws and other single use plastic by the end of this year

Taiwan

first country to ban all single-use plastic, takes effect in 2030

Single-use plastic legislation

- At least:
 - 15 countries in Africa
 - 7 countries in Asia
 - 5 countries in Europe (as well as EU)
 - Several states in Australia
 - 4 countries in South America
 - Mexico and several Canadian provinces in NA
- 9 states and many cities and counties have enacted single-use plastic bag legislation and others have single-use plastic bag legislation pending
- **Many states have pre-emptions banning the ban**

Florida!

In 2008 legislators enacted statute 403.7033

...no local government, local governmental agency, or state government agency may enact any rule, regulation, or ordinance regarding use, disposition, sale, prohibition, restriction, or tax of...

basically, single use plastic bags until DEP has studied the issue.

2010 DEP report:

“...bags are not inherently bad but they have terrible consequences in a throw-away society”

Contained:

strategies to discourage use of plastic bags

strategies to encourage use of reusable bags

meanwhile...

local control...

Bills each session

Both house and senate

alas, never out of committee

Resolutions by communities and cities

PENSACOLA CITY COUNCIL,

ESCAMBIA BOARD of COUNTY COMMISSIONERS

ECUA

legislation...

There were four bills proposed last year:

SB 88 - Preemption of Recyclable and Polystyrene Materials

Deleting preemptions of local law relating to the regulation of auxiliary containers, wrappings, or disposable plastic bags; repealing the preemption of local laws regarding the use or sale of polystyrene products to the Department of Agriculture and Consumer Services, etc.

SB 502 - Prohibition of Plastic Carryout Bags and Straws

Prohibiting a store or food service business from providing a carryout bag made of plastic film to a customer; prohibiting a food service business from selling or providing a single-use plastic straw to a customer, etc.

legislation...

HB 603 - Single-Use Plastic Straws

Single-Use Plastic Straws: Authorizes food service establishments to distribute single-use plastic straw to customers upon request & to make single-use plastic straws available through self-serve straw dispensers; **preempts regulation of single-use plastic straws to state.**

SB 588 - Single-use Plastic Straws

Single-use Plastic Straws: Providing that a food service establishment may distribute a single-use plastic straw to a customer only if requested to do so by the customer; providing exceptions; providing that a food service establishment may make single-use plastic straws available through self-serve straw dispensers, etc.

What to do?

- Choose reusable bags/cups/straws rather than single use plastics
- Choose refuse, say “I don’t need a bag/straw”
- Support legislation for home rule.

Just say no



B.Y.O.B.



BRING YOUR OWN BAG!

Sources

- National Oceanic and Atmospheric Administration
- Plastic Oceans Foundation
- United Nations Environmental Program
- 5 Gyres Institute
- Ellen MacArthur Foundation
- Conservation Biology
- Florida Department of Environmental Protection
- Surfrider Foundation
- National Conference of State Legislatures
- EPA
- The Economist
- Conservation Now
- Center for Biological Diversity
- Earth Policy Institute
- EIA – Energy Information Agency
- National Geographic
- Outdoor Conservation
- Portland State University
- Mote Marine Teaching Lab
- NY Times
- Scientific American
- BBC