

To the Advisory and Finance Committee

We appreciate FinCom having us on the agenda to discuss the Plastic Bag Ban article submitted for the fall town meeting warrant.

Please find attached a packet of information including a copy of the proposed bylaw, a fact sheet, a scientific article and letters of support from various organizations.

During our presentation on August 17th, we will update you regarding changes in the proposed bylaw since we last met (including an exclusion for small businesses), review some of the salient points as to why we believe instituting such a bylaw is beneficial and have time to fully respond to any questions or concerns Board members may have.

Thank you and best regards until we meet next Wednesday.

Kenneth Stone, Ed.D.
Lee Burns, Ph.D.

ARTICLE : To see if the Town will vote to amend the General Bylaws by adopting a bylaw entitled "Plastic Bag Ban" as follows; or to take any other action relative thereto:

SECTION 1 – DEFINITIONS

CARRYOUT BAG:

A carryout bag is a thin film plastic bag of a thickness less than 3 mils with handles provided to a customer by an establishment and is used to transport merchandise from the establishment. Carryout bags do not include bags typically without handles used to contain dry cleaning, newspaper, small bags to contain fish, meats, produce or other products selected by the consumer to deliver items to the point of sale.

REUSABLE CARRYOUT BAG:

A Reusable Carryout meets all of the following requirements:

- [1] Is made solely of or in a combination of natural cloths, synthetic fibers, other washable material; or of a non-toxic plastic as defined by applicable state and federal regulations that is no less than 3 mils thick and has the word "Reusable" or "Reuse" printed on the outside of the bag in a visible manner.
- [2] Is specifically designed for multiple reuse and has handles.

RECYCLABLE PAPER BAG

A paper bag that [1] is 100% recyclable and [2] contains at least 40% post-consumer recycled paper content.

ESTABLISHMENT:

An Establishment means any business selling goods, articles, or personal services to the public, including restaurants, with a gross interior space of 3000 square feet or larger; or has at least two (2) locations under the same ownership or brand name within the Town of Plymouth.

SECTION 2: Findings, Purpose, and Declaration

(a) Findings. The town meeting finds and determines that:

1. Thin plastic bags are harmful to the environment.
2. Thin plastic bags are part of litter resulting in the Town being a less desirable place in which to reside and do business.
3. Thin plastic bags are a danger to marine and land animal life.

(b) Purpose. The purpose of this bylaw is:

1. To help lessen the deterioration of the environment.
2. To further educate the public regarding the importance of using biodegradable materials.
3. To provide additional enforcement to protect public and private property from litter.
4. To encourage the use of reusable carryout bags and thereby decrease plastic waste.

(c) Declaration. The town meeting declares that these plastic bags are a nuisance which must be abated according to the provisions and regulations herein contained.

SECTION 3. PLASTIC BAG BAN/PROHIBITION

No Establishment in the Town of Plymouth, as defined in Section 1, shall provide thin film plastic carryout bags as defined in Section 1. Establishments in the Town of Plymouth, as defined in Section 1, shall only provide Reusable Carryout Bags that comply with the definition in Section 1. Nothing in this section shall be read to preclude any Establishment from utilizing Recyclable Paper Bags, with or without handles, at the point of sale.

SECTION 4. ENFORCEMENT

This Bylaw may be enforced by any agent of the Board of Health.

All of the requirements set forth in this by-law shall take effect within six months of the approval of the bylaw by the Office of the Massachusetts State's Attorney General and satisfaction of the posting/publication requirements of G.L. c. 40, § 32. However, if a retail establishment cannot comply with the effective date of this by-law due to economic hardship, the establishment may petition the Board of Health for an extension of six months.

This Bylaw may be enforced through any lawful means in law or in equity, including, but limited to, non-criminal disposition pursuant to M.G.L c.40, Section 21D and the appropriate chapter of the Town's General By-laws. If a non-criminal disposition is elected, then any Establishment that violates any provision of this Bylaw shall be subject to the following penalties:

First Offense:	Written Warning
Second Offense:	\$50 fine
Third Offense:	\$100 fine
Subsequent offenses:	\$200 fine

SECTION 5: SEVERABILITY

If any provision of this bylaw shall be held to be invalid by a court of competent jurisdiction, then such provision shall be considered separately and apart from the remaining provisions of this bylaw, which shall remain in full force and effect.



PLYMOUTH PROPOSES A BAN ON THIN FILM PLASTIC CARRYOUT BAGS

- **Plastic bags are hard to recycle:** Plymouth does not accept plastic bags for recycling. Neither does Waste Management, the country's largest trash hauler. It is now cheaper to make a new plastic bag than to recycle one.
- **Most plastic bags are not recycled:** Americans use approximately 100 billion plastic carryout bags each year; between 86 and 95% of these bags are not recycled (EPA figures).
- **Plastic bags are found as litter throughout Plymouth:** Plymouth's annual beach and town wide clean ups find large numbers of plastic bags along with other plastics. The Ocean Conservancy found that plastic bags make up the 3rd largest type of litter from land-based sources found on U.S. Coasts, surpassed only by cigarette butts and plastic bottle caps.
- **Plymouth uses millions of plastic bags annually:** According to a survey by the Mass Food Association (the industry's lobby group), in 2012 the average market handed out 2,682,643 disposable bags. Using these numbers and considering all the markets in Plymouth, that equals over 18 Million carryout disposable bags being distributed annually in Plymouth from the supermarkets alone!
- **Ocean plastic is increasing:** The world's oceans are now estimated to contain more than 5 Trillion plastic particles. The World Economic Forum says that by 2050, the weight of plastic in the ocean will outweigh the fish. One study stated that in some parts of the ocean, there are 6 pounds of plastic for every 1 pound of plankton. Plastic never biodegrades. Every piece of plastic that ever entered the ocean is still there and always will be.
- **Plastic kills:** Australian researches reported that nearly all of the world's seabirds have eaten plastic. 2 Million land and seabirds die annually from ingesting plastic and more than 100,00 marine mammals die from eating or from entanglement with plastics in the North Pacific alone. Raccoons, deer and even many family dogs and cats suffer or die annually as the result of eating plastic.
- **Plastics are made of non-renewable sources:** Thin plastic carryout bags are made with derivatives of fossil fuels. In 2010, 191 Million barrels of liquid gas, 412 Billion cubic feet of natural gas, and 65 Billion kilowatt hours of electricity were used in the U.S.A. to make plastic resins. Worldwide, over 436 million barrels of oil are used annually to make plastic bags. This results in millions of tons of green house gases entering the atmosphere every year.

- **Reusable bags are the best solution:** While paper bags are better than plastic overall (biodegradable, 58% are recycled, made from a renewable resource, plastic makes up 4 times as much solid waste as paper, all waste management companies accept paper for recycling), both are very carbon intensive to produce, ship and recycle. Carryout paper bags will continue to be allowed under Plymouth's bylaw. However the most sustainable practice is to shop with reusable bags. Shopping with reusable bags also saves money for local retailers and for the citizens of Plymouth.
- **Bag Bans are effective:** The goal of this bylaw is to reduce plastic waste by encouraging the use of reusable bags. In jurisdictions where bag restrictions are in place, the average reduction in use of plastic bags ranges from 80 to 90%. That could reduce the amount of solid waste Plymouth must pay to have processed by between 250,000 to 350,000 pounds if not more.

Plastic bag bans in Massachusetts, the nation and the world

Over 40 nations worldwide have banned or otherwise put restrictions on thin film carryout plastic bags. England, Scotland, Ireland and much of Europe have restrictions. Many third world countries such as Bangladesh have bans. Even China, one of if not the most polluted country in the world, recognized the harm these bags cause and imposed restrictions.

California and Hawaii have bans throughout their states. 60 Million people live in as many as 300 jurisdictions throughout the USA (the numbers change upward daily) that have restricted plastic carryout bags in one manner or another.

4.5 Billion people worldwide live in areas with plastic bag bans.

36 ~~34~~ communities in the Commonwealth have already approved restrictions on plastic shopping bags. This includes 13 of our neighbors on the Cape and Islands. Groups in over 20 municipalities statewide are currently pursuing bans. This includes a number of other towns on the South Shore in addition to Plymouth. The number of Massachusetts's towns doing so grows daily.

The momentum keeps building. And with good reason.

For more information or questions, email: PlymouthBansTheBag@hotmail.com



Global Plastic Production Rises, Recycling Lags

New Worldwatch Institute analysis explores trends in global plastic consumption and recycling
For Immediate Release | January 28, 2015 | CONTACT GAELLE GOURMELON

Washington, D.C.—For more than 50 years, global production of plastic has continued to rise. Some 299 million tons of plastics were produced in 2013, representing a 4 percent increase over 2012. Recovery and recycling, however, remain insufficient, and millions of tons of plastics end up in landfills and oceans each year, writes Gaelle Gourmelon, Communications and Marketing Manager at the Worldwatch Institute, in the Institute's latest Vital Signs Online article (www.worldwatch.org).

Worldwide plastic production has been growing as the durable, primarily petroleum-based material gradually replaces materials like glass and metal. Today, an average person living in Western Europe or North America consumes 100 kilograms of plastic each year, mostly in the form of packaging. Asia uses just 20 kilograms per person, but this figure is expected to grow rapidly as economies in the region expand.

According to the United Nations Environmental Program, between 22 percent and 43 percent of the plastic used worldwide is disposed of in landfills, where its resources are wasted, the material takes up valuable space, and it blights communities. Recovering plastic from the waste stream for recycling or for combustion for energy generation has the potential to minimize these problems. However, much of the plastic collected for recycling is shipped to countries with lower environmental regulation. And burning plastic for energy requires air emissions controls and produces hazardous ash, all while being relatively inefficient.

Most plastic scraps from the United States, Europe, and other countries that have established collection systems flow to China, which receives 56 percent (by weight) of waste plastic imports worldwide. Indirect evidence suggests that most of this imported plastic is reprocessed at low-tech, family-run facilities with no environmental protection controls, such as proper disposal of contaminants or waste water. There are also concerns that low-quality plastics are not reused but are disposed of or incinerated for energy in plants that lack air pollution control systems. Through its 2010 Green Fence Operation, the Chinese government has started to work to reduce the number unregulated facilities.

Approximately 10–20 million tons of plastic end up in the oceans each year. A recent study conservatively estimated that 5.25 trillion plastic particles weighing a total of 268,940 tons are currently floating in the world's oceans. This plastic debris results in an estimated \$13 billion a year in losses from damage to marine ecosystems, including financial losses to fisheries and tourism as well as time spent cleaning beaches. Animals such as seabirds, whales, and dolphins can become entangled in plastic matter, and floating plastic items—such as discarded nets, docks, and boats—can

transport microbes, algae, invertebrates, and fish into non-native regions, affecting the local ecosystems.

The environmental and social benefits of plastics must be weighed against the problems that the durability and high volume of this material present to the waste stream. Plastics help to reduce food waste by keeping products fresh longer, allow for the manufacture of life-saving healthcare equipment, reduce packaging mass compared with other materials, improve transportation efficiency, and have large potential for use in renewable energy technologies. But plastic litter, gyres of plastics in the oceans, and toxic additives in plastic products—including colorants, flame retardants, and plasticizers (such as bisphenol A, or BPA)—are raising awareness of and strengthening consumer demand for more sustainable materials.

Along with reducing unnecessary plastic consumption, finding more environmentally friendly packaging alternatives, and improving product and packaging design to use less plastic, many challenges associated with plastics could be addressed by improving management of the material across its life cycle.

Businesses and consumers could increase their participation in collection in order to move plastic waste toward a recovery supply chain, and companies could switch to greater use of recycled plastics. Governments must regulate the plastic supply chain to encourage and monitor recycling.

Report highlights:

- About 4 percent of the petroleum consumed worldwide each year is used to make plastic, and another 4 percent is used to power plastic manufacturing processes.
- In Europe, 26 percent, or 6.6 million tons, of the post-consumer plastic produced in 2012 was recycled, while 36 percent was incinerated for energy generation. The remaining 38 percent of post-consumer plastics in Europe went to landfills.
- In the United States, only 9 percent of post-consumer plastic (2.8 million tons) was recycled in 2012. The remaining 32 million tons was discarded.

The full data and analysis are available for purchase through our Vital Signs Online website.



THE LEAGUE
OF WOMEN VOTERS®

August 11, 2016

To Whom It May Concern,

I am writing this letter on behalf of the Greater Plymouth Area League of Women Voters to express this organization's support of the Town of Plymouth adopting a bylaw entitled "Plastic Bag Ban".

After a study of the question of solid waste, the League adopted a position several years ago to "promote increased source reduction and recycling and decreased reliance on land filling and incineration". This proposed bylaw is definitely one step towards reducing the amount of solid waste generated in this town.

In 2013 the League sponsored an educational forum in conjunction the Network of Open Space Friends on the dangers of plastic and plastic bags to the environment and to the health of people and animals. This bylaw is a natural progression from that educational effort to action.

The Greater Plymouth Area League of Women Voters is asking that you join with is in support of this bylaw in order to make our town a healthier and more attractive place to live.

Very truly yours,

Mary LeSueur,
Board Member and Chair of the Sustainability Committee

Plymouth Area Interfaith Clergy Association
PO Box 3284 - Plymouth, MA 02361



August 8, 2016

Board of Selectman
Town of Plymouth
11 Lincoln Street
Plymouth, MA 02360

To whom it may concern:

We write as concerned leaders from religious communities in the Plymouth Area in support of action that will protect our environment – for the wellbeing of our vulnerable earth and all its creatures.

The Plymouth Area Interfaith Clergy Association strongly endorses the plastic bag warrant article.

At a meeting of our clergy association this Spring, we learned more about the threat to the environment that comes with plastic bag use. We are aware that residents of Plymouth use over 18 million polyethylene shopping bags per year, and that people typically return these bags at a rate of only 5%. Eliminating such non-biodegradable packaging will not only reduce waste, it will also make our town more beautiful by reducing the unsightly and ultimately permanent litter that these plastic products have caused. We are particularly troubled by the way that plastic bag litter disturbs and damages wildlife in our area.

We believe once people are made aware of what is at stake, that they can change their habits. Other coastal towns have found this to be true. We urge you to vote favorable action on this Article.

Sincerely,

Helen Nablo
President, Plymouth Area Interfaith Clergy Association
Pastor, The Church of the Pilgrimage

Plymouth



Network of
Open Space Friends

August 11, 2016

To Whom It May Concern:

The Network of Open Space Friends (NOSF) is a coalition of environmental groups and concerned citizens of the town of Plymouth that came together in order to protect the open space we have in the Town of Plymouth and to encourage better stewardship of our environment. You may be aware of this organization since it is this group that organizes the two volunteer Home Town Litter Clean-ups each year.

Partly as a result of these litter clean-ups and partly because of the environmental concerns of members of this organization, the NOSF formed a sub-committee to work on ways to reduce the amount of solid waste generated in the Town of Plymouth. NOSF also cosponsored the showing of the film Bag-It which included a panel of experts on the dangers of plastic in our environment. As a result of the information generated from these activities it is clear to us that banning single use bags would be of benefit to the residents of our town.

Plastic bags littering our public spaces are an eye soar that is apparent to both residents and visitors alike. Beyond that, they provide a significant threat to many of the marine animals that live in our waters. These problems can be addressed by reducing the number of thin plastic bags that are currently so ubiquitous.

We urge your support of the bylaw entitled "Plastic Bag Ban". Please join with us to make America's Hometown a leader in improving the environment we all depend upon.

Very truly yours,

A handwritten signature in cursive script that reads "Evelyn Strawn". The signature is written in dark ink and is positioned above the printed name.

Evelyn Strawn

Coordinator, Network of Open Space Friends

Plymouth Town Hall
11 Lincoln Street
Plymouth MA 02360

Plymouth Open Space Committee

August 2, 2016

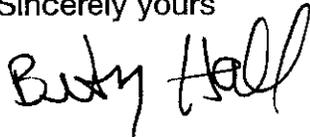
Kenneth Stone, Ed.D.
Lee Burns, Ph.D.

Dear Drs. Stone & Burns

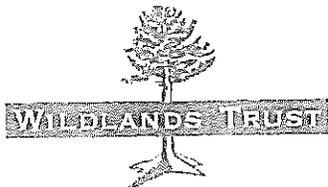
The Open Space Committee is in unanimous support of your article to ban the use of thin plastic carryout bags in Plymouth. We know that the millions of plastic bags used every year create vast amounts of non-degrading litter that is virtually permanent, and kill birds, animals and marine life which mistake them for food. We also appreciate the care you have taken to exempt smaller businesses from the ban, and to distinguish between the banned bags and bags used for produce, raw meat and fish.

Let us hope that Plymouth will join the many Massachusetts towns that have already taken this important step toward reducing plastic trash.

Sincerely yours

A handwritten signature in black ink that reads "Betsy Hall". The signature is written in a cursive, flowing style.

Betsy Hall
Chair



Wildlands Trust, Inc. | 675 Long Pond Road | Plymouth, MA 02360
Phone: 774 343 5121 | Fax: 774 343 5121 | www.wildlandstrust.org

December 28, 2015

Board of Selectmen
Town of Plymouth
11 Lincoln Street
Plymouth, MA 02360

Dear Gentlemen:

As direct caretakers for over 1,000 acres of publicly accessible open space here in the Town of Plymouth, Wildlands Trust is deeply familiar with the issue of plastic litter in our community. Our staff spends thousands of hours annually caring for land here in southeastern Massachusetts, and one of our most frequent scourges of litter are single-use plastic bags. These plastic bags threaten our precious environment on multiple levels. They often wind up in waterways or on the landscape, become eyesores, and degrade water and soil as they break down into tiny toxic bits. Their manufacture, transportation, and disposal use large quantities of non-renewable resources and contribute to the production of global-warming gases. All of these problems could be mitigated by reducing the amount of single-use plastic bags used here in Plymouth.

Wildlands Trust urges the Board of Selectmen to support the proposed Carryout Plastic Bag Bylaw here in Plymouth.

Sincerely,

Karen H. Grey
Executive Director



January 19, 2016

To Whom It May Concern:

The board of the Southeastern Pine Barrens Alliance (SEMPBA) recently voted to support the passage of Article 35 which seeks to establish a "Carryout Plastic Bylaw."

SEMPBA is a non-profit, all-volunteer group dedicated to preserving the globally rare Pine Barrens of Southeastern Massachusetts.

Our volunteers participate in the town wide litter clean up and spend a great deal of time in Plymouth forests where they have witnessed the proliferation of single-use plastic bags along the trails and in the trees and bushes of otherwise pristine environments.

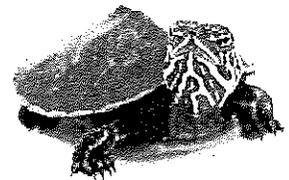
We believe that reducing the use of these types of bags would be a constructive way to promote a healthier habitat.

We urge Plymouth residents to support passage of this bylaw.

Very truly yours,

Sharl Heller

Sharl Heller, President



Northern Red-bellied Cooter found only in ponds in Plymouth County

Southeastern Massachusetts Pine Barrens Alliance, Inc.
204 Long Pond Road, Plymouth, MA 02360
(774) 773-9982 • sempba@pinebarrensalliance.org • www.pinebarrensalliance.org



SIX PONDS

*Long Pond, Little Long Pond, Bloody Pond,
Gallows Pond, Halfway Pond, Round Pond*

The Six Ponds Improvement Association Box 1580 Plymouth, MA 02362 www.sixponds.org

Date: January 20, 2016

To: Board of Selectmen, Finance Committee Members – Town of Plymouth

From: The Six Ponds Improvement Association

Re: **Carry Out Bag Bylaw**

The Six Ponds Improvement Association is dedicated to the protection of the ponds, natural areas and quality of life in our neighborhoods and town. Please join with us and other communities across the Commonwealth and the country and eliminate thin plastic shopping bags. Please support the Carry Out Bag Bylaw.

This past week there were public service announcements from the New England Aquarium demanding an end to the use of thin plastic shopping bags. The obvious litter issues aside, these bags wreak havoc with wildlife in our ponds and in the ocean.

One estimate is that every American throws away over 300 of these bags every year. In Plymouth alone that translates to **over 17 million thin plastic bags** that annually become part of the solid waste stream or end up as litter. This represents a substantial cost for transportation and disposal.

In Plymouth at our twice-yearly town cleanups we pick up thousands of these bags. But the ones we pick up is where we're lucky . . . unlucky are the thousands upon thousands of bags that end up in our woods and trails, open space areas, ponds and oceans where they are unsightly, harm and kill wildlife, and clog boat engines and machinery. Ultimately the bags fragment in to microscopic particles that take thousands of years to break down chemically, and that bioaccumulate and poison the animals – including humans – who ingest them.

The Town of Plymouth can do something to decrease the astounding number of thin plastic bags. *America's Hometown* can serve as an example to the rest of the South Shore, the Commonwealth and the Nation by working to eliminate the use of these ubiquitous and unnecessary bags.

We can do this! Please support the Carry Out Bag Bylaw. Thank you!

cc: Jonathan Beder – Director, Department of Public Works
Lee Burns, PhD – Co-Coordinator, Carry Out Bag Bylaw
David Gould – Director, Department of Marine and Environmental Affairs
Ken Stone, Ed.D – Co-Coordinator, Carry Out Bag Bylaw
Richard Vacca – Conservation Agent



January 19, 2016

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The board of the Southeastern Pine Barrens Alliance (SEMPBA) recently voted to support the passage of Article 35 which seeks to establish a "Carryout Plastic Bylaw."

SEMPBA is a non-profit, all-volunteer group dedicated to preserving the globally rare Pine Barrens of Southeastern Massachusetts.

Our volunteers participate in the town wide litter clean up and spend a great deal of time in Plymouth forests where they have witnessed the proliferation of single-use plastic bags along the trails and in the trees and bushes of otherwise pristine environments.

We believe that reducing the use of these types of bags would be a constructive way to promote a healthier habitat.

We urge Plymouth residents to support passage of this bylaw.

Very truly yours,

Sharl Heller

Sharl Heller, President



Northern Red-bellied Cooter found only in ponds in Plymouth County

Southeastern Massachusetts Pine Barrens Alliance, Inc.
204 Long Pond Road, Plymouth, MA 02360
(774) 773-9982 • sempba@pinebarrensalliance.org • www.pinebarrensalliance.org



Advocacy Department

Six Beacon Street, Suite 1025 • Boston, Massachusetts 02108
tel 617.962.5187 • fax 617.523.4183 • email jclarke@massaudubon.org

August 10, 2016

Dr. Ken Stone
10 Madison Reach
Plymouth, MA 02360

Dr. Lee Burns
110 Treetop Way
Plymouth, MA 02360

Dear Dr. Stone and Dr. Burns,

I am writing to express Mass Audubon's endorsement of the proposed bylaw to reduce plastic bags that you are sponsoring at Plymouth Town Meeting this fall.

Mass Audubon encourages the use of reusable shopping bags as opposed to plastic or other one-time use bags to reduce solid waste and provide for overall environmental health. US EPA statistics show that over 380 billion plastic bags are consumed in the US each year. Plastic bags are made of nonrenewable resources, and serve as a major source of greenhouse gas emissions, pollution, and marine litter. Most go to landfills, accumulate, and then do not easily decompose (it takes nearly 1000 years for a plastic bag to fully compost). Plastic bags should not be burned because they contain pollutants and toxic fluorocarbons.

These single-use bags also pose a threat to sea turtles, whales, and other marine animals that die every year from eating plastic bags they mistake for food. Because they are made from polyethylene, which is made from crude oil and natural gas, plastic bags deplete valuable and costly nonrenewable resources.

Thirty-six communities in Massachusetts have passed regulations on plastic bags, and many others, including Boston, are currently considering joining this list. Throughout the world, more and more municipalities are living more sustainably by taking measures to curb plastic waste. Mass Audubon applauds the effort being made in Plymouth to eliminate the use of single-use plastic bags and contribute to a shift away from disposable petroleum-based products.

Sincerely,

John J. Clarke
Director of Public Policy & Government Relations

Protecting the Nature of Massachusetts



January 7, 2016

Board of Selectman
Town of Plymouth
11 Lincoln Street
Plymouth, MA 02360

To Whom It May Concern:

The New England Coastal Wildlife Alliance (NECWA) is a nonprofit environmental organization based in southeastern MA. Our mission is to better understand and protect the unique coastal marine wildlife in the waters off New England. Our many projects and activities support this mission, including our Marine Wildlife Research Program, our Internship Program, and our New England Basking Shark and Ocean Sunfish Sighting Network (NEBShark).

NECWA spends hundreds of hours working offshore aboard commercial whale-watching vessels that operate out of Plymouth Harbor. When offshore, we collect sighting data on the marine wildlife seen from the vessel and we conduct educational outreach activities with our passengers as we head offshore. Also, NECWA devotes a great deal of time each fall and winter responding to strandings of ocean sunfish, torpedo rays, sea turtles, whales, dolphins, and various other species or types of marine animals.

During these activities, we always spend time picking up plastic bags and other marine debris from the water or from the shoreline. Not only do we collect marine debris as a secondary activity during many of our outdoor programs, but NECWA sponsors a number of beach cleanups each year in a continued effort to remove plastics from the environment.

All types of marine debris, especially plastic bags, are a huge problem in the natural environment and can harm or kill many species of marine animals. A plastic bag floating in the water column looks just like a jellyfish that are eaten by many species of marine wildlife that feeds in our productive waters, including ocean sunfish and leatherback sea turtles. Other marine animals like seals and whales can become entangled in plastic bags and other marine debris.

NECWA and our members support a ban on plastic bags in Plymouth and other towns in Massachusetts and hope you will join us in this very important effort. Please support the proposed Carryout Plastic Bag Bylaw in Plymouth, MA.

Sincerely,

Carol "Krill" Carson
Marine Biologist and President, NECWA



THE HUMANE SOCIETY
OF THE UNITED STATES

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Jennifer Leaning, M.D., S.M.H.
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Walter J. Stewart, Esq.

Andrew Weinstein

Jason Weiss

David O. Wiebers, M.D.

July 30, 2016

On behalf of the Humane Society of the United States, Cape Wildlife Center, and our tens of thousands of supporters in the Commonwealth, I am writing to express our support for the restriction of single-use plastic bags.

The millions of tons of trash discarded in the Bay State every year impose lethal dangers to wildlife. While much of this garbage is hauled to landfills, a large amount makes its way into the natural environment.

Although exact figures are near impossible to attain, the Massachusetts Department of Transportation runs three volunteer programs that together removed about 98,000 bags of litter from Massachusetts highways and roadways in 2012. Beyond our highways, debris also clogs the oceans; the Ocean Conservancy's 2014 coastal cleanup in Massachusetts involved nearly 3,000 volunteers and removed more than 11 tons of debris. This ubiquitous trash provides an ample banquet for wild animals displaced into developed areas due to shrinking habitats. Unfortunately, the simple act of satisfying hunger pangs often ends in injury or death.

Plastic bags and other pieces of litter are also indirect killers. Plastic bags tossed from car windows can put curious animals in the path of oncoming vehicles. This roadside garbage can have a domino effect; for example, a billowing plastic bag may attract a curious prey animal, which may be hit by a car, which then puts predators and scavengers in harm's way.

The exact number of trash-related fatalities is anyone's guess but what is not conjecture is the array of terrestrial and marine species affected by it. Stranded whales, turtles, and dolphins have been found with plastic bags in their stomachs or dead from entanglement.

Perhaps the most famous case involved a pygmy sperm whale stranded off the New Jersey coast in 1993. Inky, as she was called, had 3 square feet of plastic clogging her stomach. She survived, but many do not. Cape Wildlife Center has treated many animals victimized by plastic bags and improperly-discarded trash.

Halting the proliferation of plastic bags will help protect our environment and wildlife. Thank you for your time and the opportunity to submit testimony.

Sincerely,

Stephanie J. Harris
Massachusetts State Director
Sharris@humanesociety.org
617.943.6659

Deborah Millman
Director, Cape Wildlife Center
Dmillman@fundforanimals.org
508.362.0111



MASSACHUSETTS
SIERRA
CLUB

Massachusetts Sierra Club
10 Milk Street, Suite 417
Boston MA 02108-4600
(617) 423-5775
www.sierraclubmass.org
office@sierraclubmass.org

August 1, 2016

Dear Town Meeting:

The Massachusetts Chapter of the Sierra Club has been actively supporting efforts to curb the use of single-use polyethylene bags at the state and local levels. Such restrictions are part of a campaign to reduce unnecessary plastic waste and ultimately achieve zero waste.

The Massachusetts Sierra Club strongly endorses your plastic bag warrant article. In the past four years, 35 Massachusetts municipalities from Williamstown to the Vineyard have passed laws to restrict plastic bags. This proposed by-law is similar to other legislation that has been successfully implemented throughout the Commonwealth.

Plastic bags are composed of petrochemicals derived from non-renewable, fracked natural gas and oil. Plymouth residents are estimated to use over 18 million polyethylene shopping bags per year. Bags are not recycled conveniently or in a closed loop fashion. People typically return bags at a rate of only 5%. Eliminating such non-biodegradable packaging will not only reduce waste, it will also beautify the Town by reducing the unsightly and ultimately permanent litter that these plastic products have caused. As litter, bags directly harm animals on land and in the Atlantic Ocean.

The proposed by-law allows alternatives that are reusable and/or made of natural, biodegradable and renewable materials. Moving to better packaging will enhance the sustainability of the town's retail economy.

We urge you to vote favorable action on this Article.

Respectfully,

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