

## Bring Your Own Bag

### Why move away from disposable plastic bags?

Plastic pollution in the Great Lakes affects water quality, human and animal health and safety, and the local economy. Plastic accounts for 96% of the litter profile on Great Lakes beaches<sup>1</sup>. Beach cleanup data at local and international levels show that disposable plastic bags are a major source of plastic pollution in our coastal environments<sup>6,1</sup>. Disposable plastic bags are also known to clog storm drains and pipes causing road or basement flooding. Lastly, any plastic in the environment poses a risk wildlife health and safety<sup>5</sup> and potentially threatens human health<sup>7</sup>. Plastic in the water or along coasts also negatively affects the economy, due to expensive debris removal and reduction in tourism dollars<sup>3</sup>.

### Ohio Sea Grant's Role

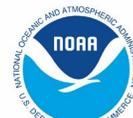
Ohio Sea Grant, with support from the NOAA Marine Debris Program, conducted two linked research projects from 2016-2020 that informed a comprehensive education and outreach campaign designed to reduce plastic pollution in the environment. The first project, "Keeping Cleveland Clean," represented a collaboration between Ohio Sea Grant and the City of Cleveland. An online survey and focus group gathered information from over 1,500 Northeast Ohio residents to identify the use and disposal methods for three single-use plastic bags. The second project, "Behavior Change and Marine Debris," established partnerships with the Lake County Solid Waste District and multiple private businesses to study the effectiveness of free reusable bag giveaways and reminder strategies for bringing reusable bags, such as magnets, key chains, and window decals. Ohio Sea Grant engaged in outreach to distribute the free bags and reminder strategies, observed changes in bag use profiles at multiple locations, and employed an online survey to solicit recommendations from shoppers on preferred plastic bag reduction strategies.

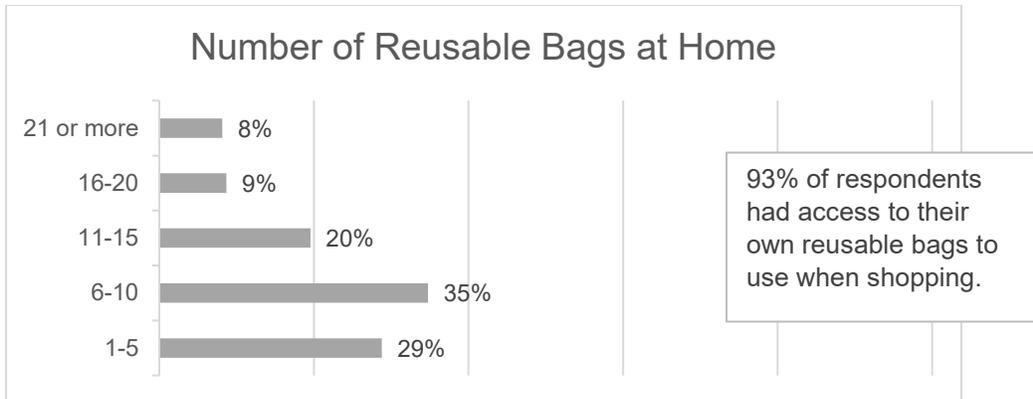
### Summary of Results

Several main themes connect the results from the two projects. First, outreach campaigns that distribute free reusable alternatives to plastic are not achieving their desired outcomes. Study participants suggest that they have access to reusable shopping bags, but either forget to bring them or repurpose them for other uses like lining garbage bins and disposing of pet waste. From a policy standpoint, over 75% of participants across the studies indicate they are in favor of legislation that implements plastic bag fees or bans. When working with local businesses, we learned that businesses involved in the projects have not lost money or customers because they removed plastic bags from stores. In fact, many customers and staff have shared that they prefer to not receive disposable plastics bags and are supportive of sustainable changes.

### Barriers to Using Reusable Bags

Study participants suggest that they have access to reusable shopping bags, but either forget to bring them or repurpose them for other uses like lining garbage bins and disposing of pet waste. Results have shown that 93% of respondents have access to their own reusable bags but 80% of respondents forget to bring them into the store or they repurpose the disposable plastics bags they receive<sup>3</sup> (50%). Many organizations have taken to giving away free reusable bags to encourage people to use these instead of disposable alternatives but results from work conducted at Lake County Farmers Markets shows that giving away bags for free does not encourage their reuse. Of 1,600 free reusable bags given away, 188 (14%) were observed in use at markets when the free bags were being distributed and only 50 (4%) were observed in use at markets when no bags were given out, despite two more observation sessions.





### Support for Reducing the Availability of Disposable Plastic Bags

Overall, the support for legislation limiting the availability of disposable plastic bags is high with 75% of respondents supporting either bags bans, fees, or both. Research conducted over several studies has shown similar support rates. Support for businesses adopting plastic bag free business models also shows high support from customers. Interviews conducted with store staff at a reusable clothing stores located in Cuyahoga County showed that overall customer response was positive when the store decided to eliminate disposable plastic bags.

*"30% are cranky, 5% are super excited about it, 65% forgot we are bagless but do not really care."* (Assistant Manager)

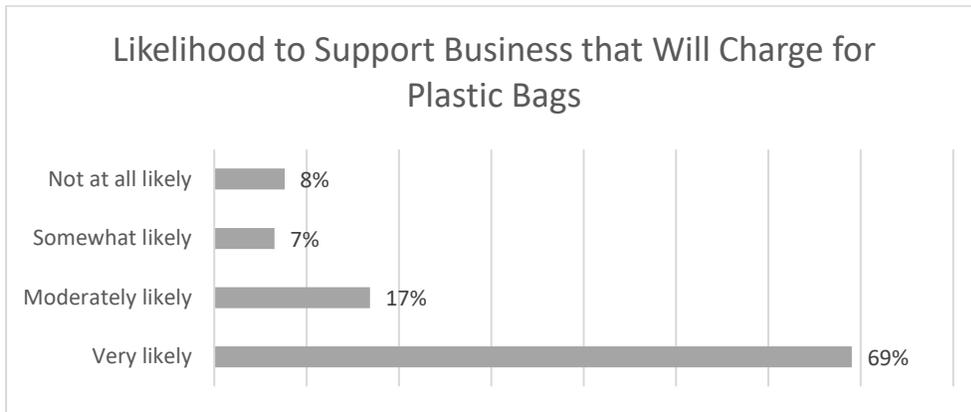
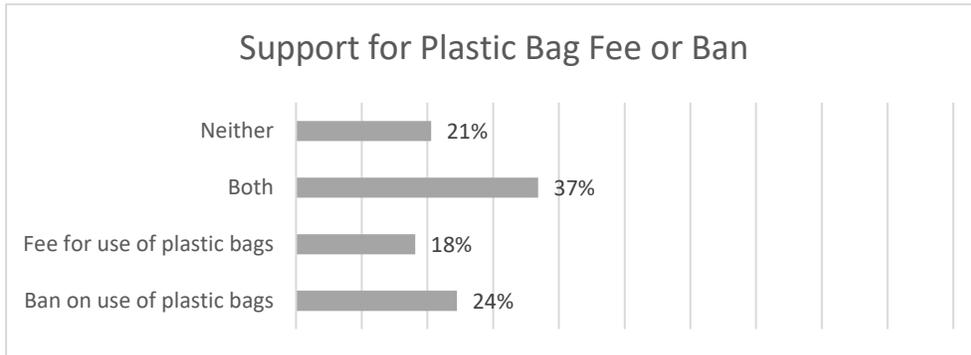
*"But most of our customers don't mind to just carry their stuff without bag."* (Sales Associate)

Hand carrying items or using their own bags were the only options customers had for carrying their items. The bagless initiative did not affect stores sales or income revenue.

*"Bagless initiative doesn't affect the store's sale volumes."* (Sales Associate)

In fact the store was able to save money because they were no longer purchasing disposable plastic bags. Customers who shop at the store mentioned they had difficulties carrying items since they rode the bus. The store received a donation of used bags to offer to these customers if needed.

*“They may have a harder time transporting the stuff...People have mentioned it is harder without a bag since they take the bus.” (Sales Associate)*



## Plastic Bag Facts<sup>4</sup>

- Americans use 100 billion bags per year, or 2,000 bags per minute.
- Only 1% of plastic bags are actually recycled.
- The average family takes home 1,500 bags per year.

## What Can You Do?

- Bring your own bags with you when you do any type of shopping.
- If you forget your bags, place your items bag in your cart and then pack everything once you get to your car.
- If you have a few items, hand carry the items from the store.
- Ask the store for a box you can use.
- If you must use plastic bags, reuse them to pick up animal waste or to line your garbage cans.
- Encourage others to use reusable bags.

## Partners

National Oceanic and Atmospheric Administration, City of Cleveland Mayor's Office of Sustainability, thundertech inc., Lake County Solid Waste District, Revolve Kids, and Produce Place.

## References

<sup>1</sup> Adopt-a-Beach. 2018. Raw beach cleanup data for 2018. Alliance for the Great Lakes, Adopt-a-Beach Program.

<sup>2</sup> Bartolotta, J.F., and S.D. Hardy. 2018. Barriers and benefits to desired behaviors for single use plastic items in northeast Ohio's Lake Erie basin. *Marine Pollution Bulletin*. 127: 576-585.

<sup>3</sup> Bear Creek Economics, CW Research and Consulting, and ABT Associates Inc. 2019. The Effects of Marine Debris on Beach Recreation and Regional Economies in Four Coastal Communities: A Regional Pilot Study.

<sup>4</sup> Center for Biological Diversity. 2020. 10 Facts About Single-Use Plastic Bags.

<sup>5</sup> Derraik, J.G., 2002. The pollution of the marine environment by plastic debris: a review. *Marine Pollution Bulletin*. 44:9, pp. 842–852.

<sup>6</sup> Ocean Conservancy. 2015. International Coastal Cleanup 2015 Report.

<sup>7</sup> World Health Organization. 2019. Microplastics in drinking water. Geneva. License: CC BY-NC-SA 3.0 IGO.

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