NYPIRG
NEW YORK
PUBLIC INTEREST
RESEARCH GROUP

Shop Where You Drop

A Survey of Consumer Bottle Return Habits

By Joseph Stelling and Laura Haight

Summary

The New York Public Interest Research Group (NYPIRG) surveyed people at retail outlets across New York State regarding their practices while redeeming bottles and cans under the New York State Returnable Container Act, commonly referred to as the Bottle Bill. Survey results showed that the majority of respondents shopped frequently at the same location where they were returning beverage containers. Respondents also overwhelmingly chose to visit that specific retail location partially or mainly due to the convenience of the bottle return system offered by the retailer. In addition, survey results showed that the vast majority of respondents either returned beverage containers while shopping and/or running other errands, or used methods of transportation (foot, bike, mass transit, etc.) that resulted in no additional fossil fuel consumption to bring their beverage containers to the store. Overall, the results suggest possible benefits to retailers who offer a convenient bottle return system and strongly contradict an argument that has been made by some industry opponents that bottle deposit laws lead to increased fossil fuel use and air emissions as a result of consumers returning bottles and cans to the store to recover their deposits.

Introduction

Passed in 1982, New York's Bottle Bill requires a 5-cent refundable deposit to be placed on certain beverage containers sold in New York. Consumers pay a deposit to retailers at the time of purchase and recover their deposit when they return beverage containers to redemption locations such as retailers that sell covered beverages. Over the thirty year history of the Bottle Bill in New York, the system has proven to be a highly effective means of diverting such containers from the waste stream, preventing litter and increasing recycling rates. Between 1983 (the year New York's Bottle Bill went into effect) and 2007 (the most recent year for which the New York Department of Environmental Conservation has reported statistics), the Bottle Bill achieved an average redemption rate of 73.1%, with additional containers being captured by curbside programs.[i]

Despite the Bottle Bill's strong track record, bottle deposit systems have been criticized by opponents seeking to block or repeal bottle bills in New York and other states. One criticism levied by Bottle Bill detractors involves the notion that bottle deposit systems result in additional fossil fuel use and harmful emissions stemming from consumers making separate trips just to return beverage containers. Also, detractors have made claims that the Bottle Bill is burdensome to grocery stores because they have to take back beverage containers from people who aren't shopping at their stores. The goal of this survey was to assess the validity of these common criticisms by looking at consumers' bottle return habits at locations with dedicated bottle return areas.

Survey Method

From October through December of 2011, volunteers gathered survey responses at 96 different retail locations across New York State from 1107 individuals who were in the process of redeeming deposits on beverage containers. Surveyors asked a brief series of questions about respondents' bottle return practices, and recorded their answers in a standard response form for analysis. The results of the survey are descriptive statistics calculated from the collective survey responses across all survey locations and respondents. All survey locations were retail stores (grocery stores, big box stores, etc.) that had a dedicated bottle return area, such as an array of reverse vending machines (RVMs) or a bottle return window.

Results and Discussion

Tables 1 and 2 outline the cumulative responses of survey participants, who were asked a slightly different set of questions based on whether or not they were shopping at the retail location during their visit.

Table 1 - Respondents shopping at location during visit

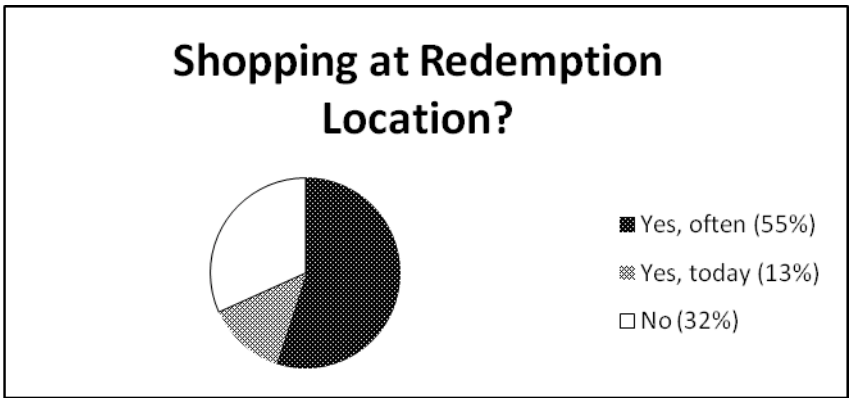
Shopping here today?		Shop here often?		Chosen for convenient return system?	
Yes	756	Yes	609	Yes or Partly	429
		%	80.6	%	56.7
% of total respondents	68.3	No	147	No	327
		%	19.4	%	43.3

Table 2 - Respondents not shopping at location during visit

Shopping here today?		Dedicated Trip?		Method of travel?		Large Quantity (≥72 containers)?		Chosen for convenient return system?	
No	351	Yes	220	Foot/bike/Mass transit	208	Yes	182	Yes or Partly	262
		%	62.7	%	59.3	%	51.9	%	74.6
% of total respondents	31.7	No	131	Car	143	No	169	No	89
		%	37.3	%	40.7	%	48.1	%	25.4

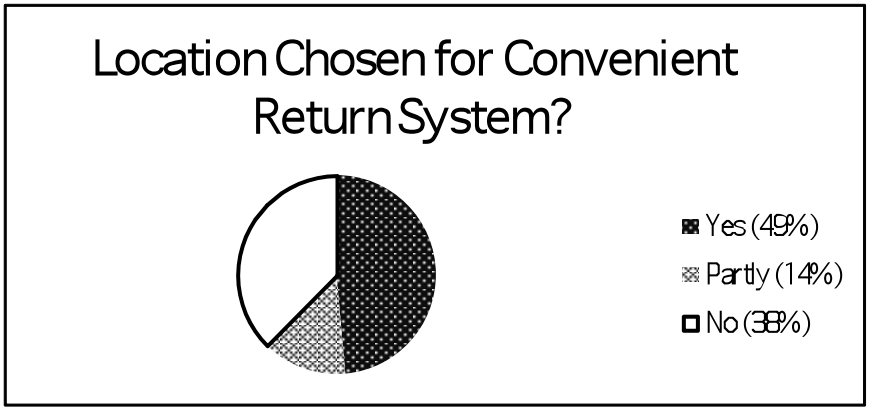
Are consumers shopping where they return their bottles and cans?

We can see from the results in Table 1 that a majority of survey respondents (68.3%) were also shopping where they returned their bottles and cans. Of these, the vast majority (80.6%) indicated that they shop at that location often.



Are consumers visiting a retail location because of the retailer's convenient return system?

Both shoppers (Table 1) and non-shoppers (Table 2) were asked about whether or not they chose to visit the particular retail location where they were interviewed based on the convenience of the bottle return system offered on the premises. A majority (56.7%) of those that were shopping at the retail location as well as returning bottles and cans said that the convenience of the bottle return system on the premises was partly or fully responsible for their choice to visit that location. Not surprisingly, roughly three-quarters (74.6%) of those who were at the location exclusively to return bottles and cans indicated that they had chosen the location because of the convenient return facilities. In total, 62.4% of all survey respondents indicated that the convenient return system offered by the retailer was fully or partly responsible for their choice to visit that location.

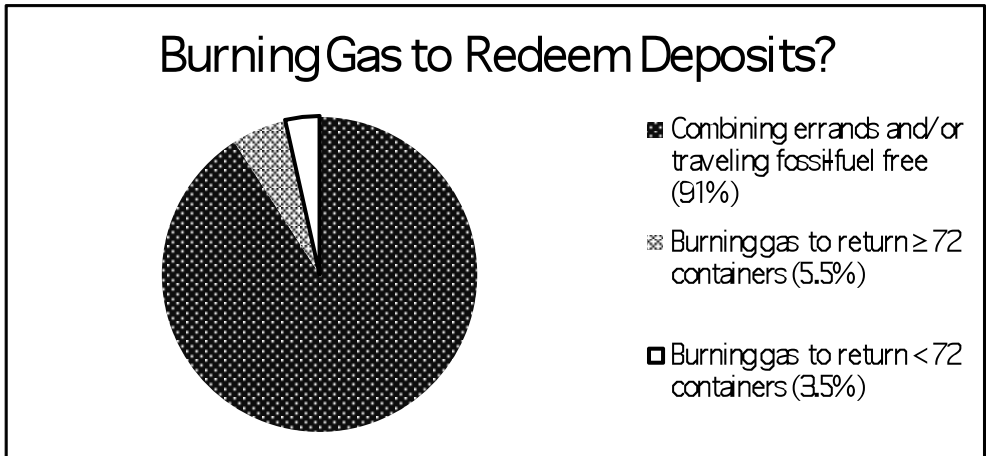


The combination of the facts that (1) the majority of survey respondents shopped at the location where they were returning their bottles and cans, and (2) a majority of respondents identified the convenient return system as a reason for visiting that location, suggests that these retailers may have benefited from offering a convenient bottle return system by attracting additional customers.

Are consumers burning fossil fuels just to return bottles and cans?

In order to determine whether or not consumers were using additional fossil fuels just to return bottles and cans, we looked at a combination of factors. Respondents who were shopping at the location during their visit were obviously not burning gas just to return bottles and cans. Among those not shopping at the location during their visit, it was necessary to inquire further into their activities. In addition to asking whether those respondents made a dedicated trip to return bottles and cans or if they were simultaneously running other errands, surveyors also inquired about the method of travel (foot, bike, car, bus, etc.) people used and the volume of beverage containers being returned.

The results showed that consumers were not wasting fossil fuels or creating additional air emissions to return their bottles and cans. Only 9.1% of survey respondents indicated that they had used an automobile exclusively to return beverage containers, and the majority of those respondents were maximizing the benefit of using their automobile by returning a large volume of beverage containers during their visit. The remainder of those surveyed were shopping at the location during their visit (68.3%), running additional errands (11.8%), or traveled by foot, bike, or mass transportation (10.7%). In fact, just 3.5% of all respondents indicated that they had used an automobile exclusively to return less than 72 beverage containers.



Conclusion

The results of this survey show that the majority of respondents were shopping where they returned their bottles and cans, and chose that particular retail location fully or in part due to the site's convenient bottle return system. This suggests that, in addition to being paid a handling fee for each container they take back through the Bottle Bill, retailers who offer a convenient return system may also be benefitting from the Bottle Bill by attracting additional customers.

In addition, the survey found that most trips to return bottles and cans were combined with shopping or other errands. Of the survey respondents who were making dedicated trips to return beverage containers, only 9% took a car, and of these, most were returning large volumes of beverage containers. These results dispel the notion that bottle deposit systems that require consumers to return beverage containers to retail outlets result in a significant increase in greenhouse gas emissions. This could be further demonstrated through an analysis of the Bottle Bill returns, which far exceed that statewide average recycling rate of 20%. Recycling metal, glass and plastic rather than using virgin materials saves significant amounts of energy and reduces greenhouse gas emissions.[ii]

New York Public Interest Research Group
February 4, 2013

[i] Beverage Container Deposit and Redemption Statistics (for 10/1/06-9/30/07). New York State Department of Environmental Conservation. www.dec.ny.gov/chemical/8500.html

[ii] Beyond Waste: A Sustainable Materials Management Strategy for New York State. New York State Department of Environmental Conservation. Dec. 27, 2010, p. 19. http://www.dec.ny.gov/docs/materials_minerals_pdf/frptbeyondwaste.pdf