



The Bagstreet Boys: Plastic Bags Ain't Nothin' but a Mistake

School:
SCAPA at Bluegrass

Teacher Advisor:
Ashlie Arkwright



The Bagstreet Boys (In photo, from left to right- Jayden Young, Shayda Alsalihi, Violet Ferguson, Sofia Wu, Nora Mack, Jamie Cook, and Marianne Gebb) are concerned about the environmental impact associated with the use of disposable plastic bags. Their research revealed that, globally, one million plastic bags are used every minute, and each bag is only used for fifteen minutes, on average. To target this issue, they encouraged the SCAPA community and the greater Lexington community to regularly use reusable plastic bags rather than disposable plastic ones. They also used their creative talents to turn donated used plastic grocery bags into reusable bags and then sold them at various events, raising and donating over \$350 to Lexington's Bluegrass Greensource.

Meet the Team Members

Sofia



Sofia oversees the making of the bags and runs our social media platforms.

Jamie



Jamie makes advertisements for our mission and counts the donated bags.

Shayda



Shayda works on and oversees the Action Plan.

Nora



Nora administers possible partnerships with organizations and communicates with representatives.

Violet



Violet oversees the preliminary steps of making the bags and helps teach the community about our mission.

Marianne



Marianne oversees finances and sales of bags and counts them to quantify our impact.

Jayden



Jayden takes photos at various events and researches facts for our project.

Overview of Phase One

After learning about the [negative environmental effects of single-use plastic bags](#), our team came up with a solution during the first phase of our project- upcycle single-use plastic bags into reusable tote bags. We focused on the community within our school, SCAPA, collecting 1,325 plastic bags and reducing landfill waste. We sold 14 reusable bags at school events, raising \$121 for Bluegrass Greensource, a sustainability-focused non-profit organization based in Lexington, KY. We were also able to reduce the amount of plastic bags used by families in our school by 52,520 per year. The percentage of people that use plastic bags in our school decreased from 63% to 59%, with the percentage of people using reusable bags increasing by 4%. Our project inspired 126 SCAPA students to sign a pledge to begin recycling their plastic bags. At the end of Phase One, our Instagram page had 77 followers, many of whom attended our school.

Source: http://www.theworldcounts.com/counters/waste_pollution_facts/plastic_bags_used_per_year



Sofia, Marianne, Jamie and Nora
with collected disposable bags

Continuing Our Mission



One of our handmade reusable bags

As we enter Phase Two we will make it our primary goal to spread our message to a larger audience. In Phase One we made a substantial impact on our school's community, but during Phase Two we plan to spread our message around the broader Lexington community and beyond. Our goal is to influence a larger audience through collaboration with local businesses and organizations, as well as planning new and exciting events to appeal to a wide variety of people. As we develop our mission, we will continue to collect, recycle, and upcycle disposable plastic bags to keep them out of landfills. Any funds we raise through the sales of our reusable bags will be donated to Bluegrass Greensource, who uses them for environmental efforts similar to our own. We will educate more people on the negative effects of single-use plastic bags, and inform them of ways they can mitigate the damages currently inflicted on the Earth.

SCAPA and Lafayette: Bag Collection and More!



The bag collection bin at SCAPA

As part of our ongoing mission to reduce plastic landfill waste, we decided to continue to collect plastic bags from our SCAPA school community of nearly 300 students and their families. With the bags we collect, we will either recycle them or upcycle them into reusable bags or mats for the homeless.



Sofia, Marianne, and Jayden presenting our project

On January 15th, our school hosted a parent event, so we took this opportunity to educate the 46 attending students and 83 parents about our mission. We also created a kid-friendly presentation and quizzed attending students on what they learned, awarding prizes for correct responses.



Lafayette's Environmental Club

A student and founder of the Environmental Club at Lafayette High School (which has 2,092 students), contacted us and expressed an interest in collaborating with us on our mission to reduce plastic bag use and improper disposal. The club's 20 active members were able to set up a collection bin at the school and collected around 150 bags, while also raising awareness about our mission.

Dixie Magnet Elementary School Science Night & Fayette County's District Science Fair

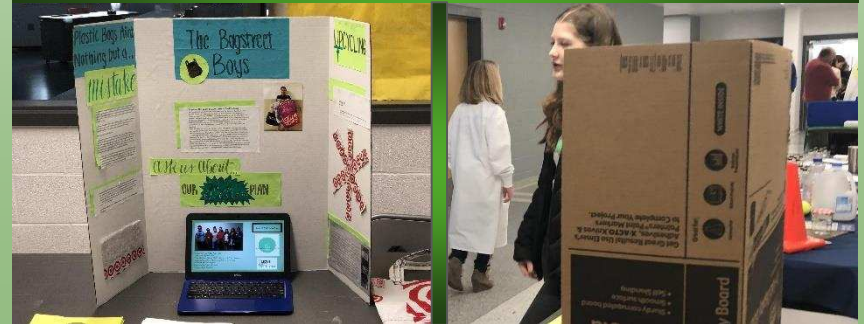
On December 13th, Marianne, Sofia, Nora, and Jayden visited Dixie Elementary's Science Night to teach elementary school students about upcycling. The students were able to use staplers to create mini-versions of our signature reusable bags. We also helped them braid strands of plastic bags into upcycled bracelets. Between 100 and 130 students were at the event and had the opportunity to hear our message.

At the Fayette County District Science fair, hosted on February 2nd, Marianne, Jamie, and Nora presented our project mission to the 1250 attendees (500 students and 750 adults). Our display included our Action Plan, a sample upcycled reusable plastic bag, informational brochures, our social media links, and a pledge for attendees to "reduce, reuse, and recycle" their plastic bags. We obtained 50 pledges and spoke to many other families at this event.

Children decorating their own bags (left); Sofia and Marianne helping families make their own bags (right)



Our presentation board with our action plan (left); Marianne talking to a family about our mission (right)



Our Partnership with Bluegrass Greensource



Marianne, Sofia, and Nora with a raffle winner

On November 29th, Nora, Sofia, and Marianne attended a Bluegrass Greensource open house. There, we sold raffle tickets for \$2 each, and three lucky winners received their own signature upcycled bag. We repurposed 60 bags to create the three upcycled totes and raised \$234 for Bluegrass Greensource. We spoke to those in attendance and handed out flyers, sharing our message and educating them on how to upcycle and be more environmentally conscious in other ways.

On February 2nd, Violet, Sofia, and Jayden hosted a workshop in collaboration with Bluegrass Greensource, providing 10 people the opportunity to have a hands-on experience by learning how to make our signature reusable bags. Each attendee successfully made their own bag, repurposing a total of 80 bags. Our hope is that each of these participants will make more of these upcycled totes in the future and teach others how to do so as well, furthering the reach of our message.



Workshop attendees pinning and sewing their own reusable bags

GreenCheck Businesses Collection Bins



Bluegrass Greensource runs a program called Greencheck, wherein the organization evaluates and endorses various businesses based on their level of sustainability and environmental consciousness. We decided to place plastic bag collection bins for three weeks in five of these locations: Good Foods Co-Op, Chocolate Holler, A Cup of Commonwealth, Broomwagon, and Unitarian Universalist Church. With these added collection sites, we are able to spread our reach and participation. For example, 300 people are in the congregation at the Unitarian Universalist Church, and we have shared our plan with them to change our environment for the better. The other four businesses see

hundreds of customers on a daily basis, (*Good Foods Co-op* - 1,166; *Broomwagon* - 115; *Chocolate Holler* - 120; *A Cup of Commonwealth* - 200) totalling to 1,601 customers who are exposed to our mission on a daily basis. Over the course of the three weeks that these businesses hosted our collection bins, approximately 33,621 people in the Lexington community have been exposed to our mission. These collection bins were promoted in a few of the interviews we did, and on the LiveGreenLex Facebook and Twitter page, which is a group within the environmental sector of the Lexington-Fayette Urban County Government. ([LiveGreenLex Facebook Post](#) [LiveGreenLex Twitter Post](#)). These promotions and posts expanded our outreach further in the community and allowed other people to hear about our mission.

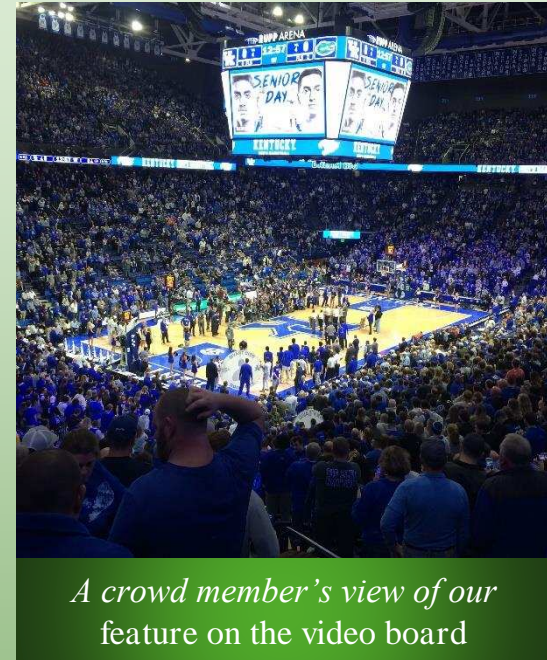
University of Kentucky Basketball Game Recognition



Ashlie Arkwright and Jayden on the video board

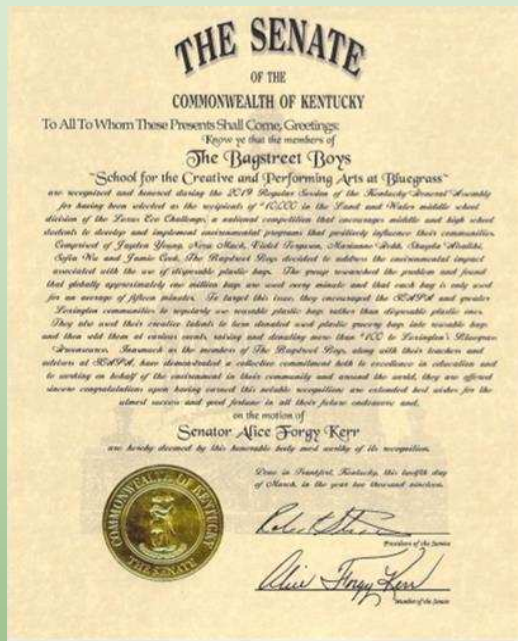
On March 9th, the University of Kentucky faced off against the University of Florida in a basketball game hosted at Rupp Arena, the largest venue in the United States designed specifically for basketball. A member of the University of Kentucky (UK) athletics department contacted our team to feature us in Coach John Calipari's "Everyday Heroes" program, created to recognize people who are making a

positive impact in our community. Before the game, Jayden and our teacher sponsor, Ashlie Arkwright, were recognized on the basketball court, while [a short video](#) was played on the overhead video board for a sold out crowd of 24,456 people.



A crowd member's view of our feature on the video board

Kentucky Senate Recognition



*The Bagstreet Boys with teacher advisor
Ashlie Arkwright and Principal Beth
Randolph, along with Senator Kerr*

On March 12th, we took a trip to our state capitol building in Frankfort, KY, to be recognized by the state senate. Our state senator, Alice Forgy Kerr, sponsored us as her guests and invited us to the senate floor. At her request, the senate adopted a citation commending our group for our achievement in Phase

One of the project and for our efforts towards creating an environmentally sustainable community. The members of our team received a printed citation (*see left*), acknowledging our commitment to the project. Along with being recognized for our efforts, we shared our mission with 38 senators and 140 gallery members, as well as assisting staff and observers, or approximately 200 people in total.

A copy of the citation issued during our recognition

Click here to watch our recognition:

<https://www.ket.org/legislature/?archive&nola=WGAOS+020152> (our group is featured from 18:00 to 20:35 in the video)

Interviews



WLXU - Lexington
Community Radio

On January 18th, we were interviewed for a live, one-hour segment on WLXU (Lexington Community Radio). We discussed the terms “recycling,” “upcycling,” and “single-use,” as well as promoted our upcoming workshop with Bluegrass Greensource. Between 150 and 200 people listened to our broadcast during its live airing at noon.

[Click Here to Listen!](#)



WKYT

On February 18th, we were invited to be interviewed for a segment on WKYT, a Central Kentucky news station. Marianne and Sofia were interviewed for the segment, speaking about the origin of our team name and the organic spread of our mission throughout our community. The segment received 45,212 viewers when it aired at 5:30 that evening.

[Click Here to Watch!](#)



University of Kentucky
Student News Outlet

On February 25th, a journalism student from the University of Kentucky visited our school and interviewed our team for a story for the UK Student News Outlet. We discussed the creation of our project, our teamwork, and the effects of single-use plastics on the Lexington community.

[Click Here to Watch!](#)



LEX18

On March 5th, we extended the reach of our message farther into the community with the evening airing of our interview on LEX18, a local news station in Lexington. Violet and Nora discussed the feeling of making an impact on our community and what our team has done for the environment over the course of our project. Approximately 69,000 households tuned in to watch our segment.

[Click Here to Watch!](#)

Publications

Throughout our project, various news organizations and others have written articles on our project, which are available to the public, educating many people in Kentucky about our mission. Below are links to and excerpts from publications written for the Bluegrass Greensource November Newsletter, the Fayette County Public Schools (FCPS) website, WKYT, and LEX18 (*articles linked below*).

[SCAPA at Bluegrass aims for another game-winner in Eco Challenge](#) (FCPS)

“The Bagstreet Boys have been busy adding Instagram followers and reaching out to local businesses to spread their message about the harmful effects of plastic bags in landfills.”

[Kentucky's 'Bagstreet Boys' compete in national recycling competition](#) (WKYT)

“So, the "Bagstreet Boys" spend their free time sorting, ironing and sewing. They create bags from bags”

[SCAPA's Bagstreet Boys collect \\$10,000 prize in Lexus Eco Challenge](#) (FCPS)

“The SCAPA team also used interactive polls and surveys to engage and educate fellow students on the environmental impact of disposable plastic bags.”

[Lexington Students Highlight the Impact of Single-Use Plastics through Innovative Project](#) (BGGS)

“In the short time since the project started at SCAPA Middle, the students have noticed less plastic bags in the school and in particular in the eighth grade.”

[Making A Difference: The “Bagstreet” Boys Are On A Mission](#) (LEX18)

“They’ve collected more than 4,000 bags from SCAPA and the Lexington community and are turning those bags into...well...bags.”

Social Media

Instagram is our largest social media platform. With 51 posts and 194 followers thus far, we post updates about our project and promote any events in which we participate. Towards the beginning of the Phase Two, we switched our account to a “business account” allowing us access to “Insights” into our content, its reach, our audience, and more.

- An average of 134 unique profiles are reached per post
- Each post is seen an average of 235 times
- An average of 35 likes and comments per post
- 31% of followers come from outside of Lexington
- 10% of followers come from outside of the U.S.
- A majority (88%) of our followers are 18 years or older
- 72% of followers are women, 28% are men
- 117 followers gained since Phase One



Our Impact



SCAPA (red marker) in relation to the various locations where *we've hosted or attended events*. (not pictured: State Capitol Building and Boyd County Homemakers)

In Phase One, we made a substantial impact on the SCAPA community, reducing the percentage of students who use plastic bags by 4%. However, over the course of the Phase Two, we reached the broader Lexington community and beyond. We associated with eighteen locations outside of SCAPA, spanning 131 miles across Kentucky. We've reached 194 individuals through our Instagram, approximately 33,621 customers through our collection bins, and 114,412 viewers and listeners through our various interviews. Around 1,500 people in total were at the events we attended and heard a presentation of our message. In addition to the 200 present at the state capitol during our recognition and the 24,456 people in attendance at the the UK/Florida game, approximately 174,383 unique citizens of our Kentucky community have been exposed to and informed of our mission, equating to 54% of the Lexington population, and 4% of the population of Kentucky.

Our project spread through word of mouth, with our story organically capturing the attention of reporters throughout Lexington. WKYT, LEX18, the UK Student News Outlet, and UK Athletics all contacted us unprompted, as they discovered our mission through social media, word of mouth, or exposure to smaller stories about us.

Our Impact (Continued)

Not only have we impacted the community by way of spreading our mission and educating citizens, but we have made an equally great impact on the environment. We have collected 7,460 single-use plastic bags over the course of Phase Two, which, when added to the 1,325 bags collected in Phase One, totals to 8,785 plastic bags collected throughout the duration of our project as a whole. The majority of the bags will be donated to the [Boyd County Homemakers](#), who upcycle single-use plastic bags into sleeping mats for the homeless. The remaining 200 bags were upcycled into 10 reusable plastic bags made during Phase Two. Natural resources are not used sparingly in the creation of these single-use plastic bags: the amount of fossil fuel that goes into making one plastic bag is equivalent to that which would fuel the average car for 8.7 miles. Our collection of 7,460 bags during Phase Two equates to 64,902 miles worth of fuel, enough for the average car to drive the circumference of the Earth approximately 2.6 times. By increasing the lifespan of the collected bags, we are reducing the need for increased production of plastic bags, thereby reducing our dependence on fossil fuels. We have made a considerable impact on both the Lexington community and the environment as a whole, and we anticipate seeing our influence continue well beyond the project deadline.



Collected plastic bags surrounding a collection bin

Sources: <https://1bagatime.com/learn/plastic-bags-petroleum/>,
<https://1bagatime.com/learn/measuring-plastic-bag-impacts/>,
<https://www.universetoday.com/66515/how-many-miles-around-the-earth/>