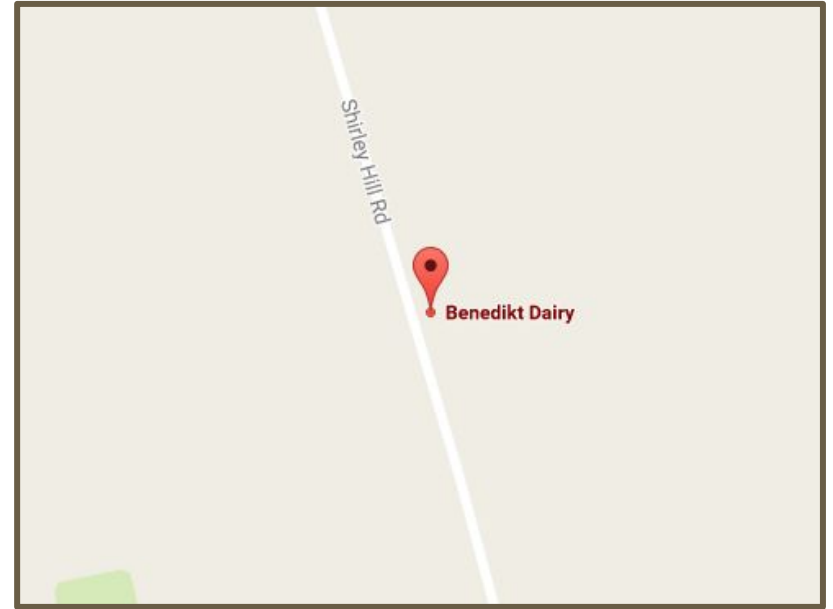
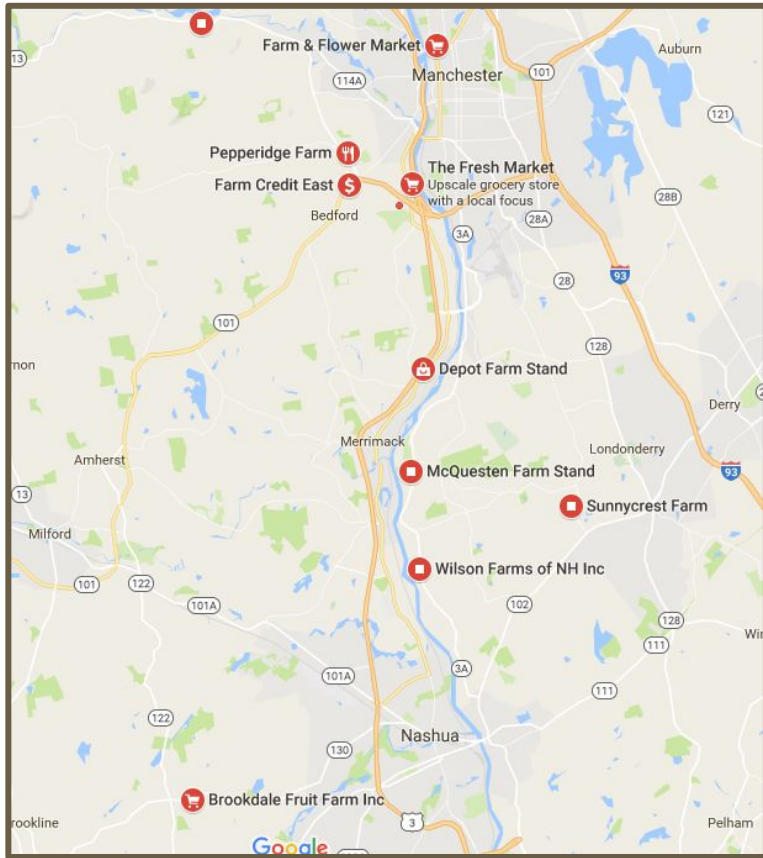

My Local Foodshed

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Local Foodshed and Benedikt Dairy Farm (upper top left)

Local Foodshed

Farm and Flower Market: 15 Webster Street, Manchester

Farmer's market with an assortment of farmers selling produce

Pepperidge Farm: 548 Donald Street, Bedford

Local wholesale bakery with all organic goods from local farmers

Fresh Market: 79 South River Road, Bedford

Organic grocery store chain with local producers.

Depot Farm Stand: 668 Daniel Webster Highway, Merrimack

Local farm stand that sells seasonal produce with a friendly staff



Local Foodshed



McQuestern Farm Stand: Charles Bancroft Highway, Litchfield

Farm stand of McQuestern farms that sells their produce

Sunnycrest Farm: 59 Highrange Road, Londonderry

Local farm that sells homemade and organic products such as maple syrup, doughnuts, and more

Wilson Farms of NH Inc.: 144 Charles Bancroft Highway, Litchfield

A wide assortment of fruits and vegetables along with baked goods

Brookedale Fruit Farm Inc: 41 Broad Street, Hollis

Local store stocked with fruit and vegetables from nearby farms

Benedikt Dairy Farm

97 Shirley Hill Road, Goffstown

A local farm stand that sells meat, dairy products, eggs, and a few different types of vegetables. A lot of their products are USDA organic certified and they are currently working on certifying their other products. Their animals are treated well and there were even a few chickens walking around the stand! Overall, they are a farm who believe in organics, animal care, and the local ecosystem.



The Interview

What is your vision for a sustainable farming:

https://www.youtube.com/watch?v=jPTlgDPt-_s

Methods of humane animal treatment:

https://www.youtube.com/watch?v=Bp_lstp-3GM

How do they make their organic products:

<https://www.youtube.com/watch?v=Rkdrfy944Ns>

These are the three questions I asked Melissa, one of the two farmers who own the farm. The other, Max, is Melissa's husband and was not available for the interview.



Other Conversation Topics

After recording a few of the questions I asked Melissa, there were a couple other interesting facts about the farm that I learned.

About crop growth: Benedikt Dairy never grow their crops in the same place every year because there is a bigger chance for pests and diseases if they stay stationary every year. So, using a yearly system, every crop switches place which helps maintain a healthier crop and a less disturbed ecosystem.

Water conservation: There was a recent project on the farm to change their ruoff system because, in the old system, water often trickled out into the streets or lost. Now, because of the new method they use, there is more reuse of water and less waste.

Favorite Recipe: Zucchini Bake

Ingredients:

2 medium Zucchini, thinly sliced
5 tomatoes, thinly sliced
1 ½ cups mozzarella, grated
½ tsp. fresh oregano,
½ tsp fresh basil,
2 cloves of garlic, minced
⅓ cup parmesan cheese,
salt and pepper,
¼ cup butter,
2 Tbsp onion, chopped
¾ cup of fine breadcrumbs



Cooking: heat oven up to 375, then, in a bowl combine cheeses, oregano, basil, and salt and pepper for taste. In a lightly buttered pan put in zucchini slices. Layer zucchini with the mix from the bowl and set tomato slices on it. Repeat until all of the zucchini and tomatoes are used up. Melt butter and put onion in, after cooking for a couple of minutes add breadcrumbs. Take breadcrumbs and put on top of the casserole. Cover with foil and bake.

Pesticide Use at Derryfield

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Who did I talk to?

I talked to Gary Harper, the Director of Facilities at Derryfield. He is in charge of all of the groundskeeping decisions and infrastructure. He talked to me for a bit after school before my cross country practice. His contact info is gharper@derryfield.org for if I had any more questions about the pesticide use at Derryfield.



Pesticide Use and Different Methods

There is minimal use of any pesticides at our campus, and, when we do use it, it is only for areas overgrown with weed. For insects, we use pyrethroid, which is effective against many of our local insects, and for weeds we use Weed Zap. Both of these have been approved to be used at a school campus and are only sprayed during vacation, days off, or weekends. Currently, we are looking for an organic solution and may start using a hybrid product in the next few years.



Native, Pollinator Plants on Campus



There are many native and pollinator plants at our campus because, when we do plant garden beds, they are either local annual flowers or perennials. In fact, a major project done in the middle school section is that the environmental club in the middle school helps take care of our perennial garden. Derryfield owns around 87 acres of land around the school, and a lot of that land has not been used or has been preserved, leaving the native plants as they were.

Where we get our Plants



We purchase a lot of our flowers from local suppliers: Millican Nurseries (left) and Pleasant Valley Nursery

Where do we grow more neonic free plants?

A lot of areas where plants could be grown have already been used, however, the groundskeepers are still planting a few more flower beds with flowers from local plant nurseries. While talking to Mr. Harper, he said that as Derryfield expands, new pollinator plants will be planted.





An outdoor area of Derryfield, a lot of the land is kept as similar as it was originally and there is also a lot of natural plant growth.

My Experience

I learned a lot about my school's beliefs towards pesticide use, specifically, I learned about their steps to cut back on its use. While talking to Mr. Harper, he mentioned about the money, research, and time they were using to find a hybrid pesticide. At one point, Mr. Harper commented that he hoped we will "completely eliminate chemical pesticides" and "go completely organic". I was surprised by their steps towards organic pesticide use, but not as surprised as I would have been at the beginning of the challenge, because, for each challenge about Derryfield's environmental footprint, I have been pleasantly surprised about their green advancements. The next step I would take for Derryfield is to really make sure that *all* of the plants on campus are pollinator friendly because I know that there are a few that are being used for their aesthetic. The steps I would take is to find other flowers that would be as appealing as the other non pollinator friendly flowers were. When I mentioned this to Mr. Harper, he agreed that it would be an important and easily done task. The investigative experience on Derryfield's pesticide, flowers, and environment helped me learn a lot about the landscape of my school, and, now that I have learned more, will help me take action to help create a pesticide free pollinator friendly campus.

Fair Trade vs. Free Trade

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The Harm of Free Trade

Free trade prices can be lowered to any amount, and, because of the mass production of the products, they are much lower than what small scale farmers can afford.

Free trade does not regulate the health and safety of workers, so when companies outsource their jobs, the farmers put out of business by the competitive pricing need to work in bad conditions for another, larger business.

Overall, free trade leads to small scale businesses and farmers being put out of business because of outsourcing and cheap, mass production.

Taking Action

Go to the government! Whether it is national or local, going to the power means that they know what the people want, and, when enough citizens take action, so does the government.

Buy from fair trade products! After all, the power lies in the consumer, and the more consumers demand fair trade, more companies will make the change.



A coffee fair trade farmer in Uganda, Africa
<http://simonrawles.photoshelter.com/image/I0000ckzz86tIMUk>

Dasani

Negative impact

The manufacturing of Dasani products not only forces the workers into unfair conditions, but also hurts the environment because of the use of plastic.



Positive impact of fair trade version

By purchasing the fair trade version, for example, a reusable water bottle from Bigstock, the use of plastics is greatly reduced.

Honest Tea

Negative impact

Once again, the use of plastics for each bottle of Honest Tea makes the environmental impact of the company much larger than fair trade versions.



Positive impact of fair trade version

Fair trade tea is Imported directly from the farmers, getting rid of the need for plastic and helping to control the pricing of the product, giving the farmer a fair share of their work.

Sun Chips

Negative impact

The creation of Sun Chips requires long hours of work in factories with work conditions that, at times, can be unsafe for the worker.



Positive impact of fair trade version

Every product of fair trade comes with the guarantee that the workers were treated well. Workers in fair trade also get benefits for building up their home's infrastructure, education, and more.

Lay's Chips

Negative impact

Workers in the production of chips need to work long hours in order to earn enough money to survive, due to this, a majority of them work for weeks without rest because, due to their hourly wage, they need to always work to earn what they need.



Positive impact of fair trade version

People working for a fair trade company do not need to work a certain amount of hours in order to survive, in fact, fair trade makes sure that employees get paid days off and paid leaves when they need to.

<http://www.fritolay.com/snacks/product-page/lays>

Powerade

Negative impact

While thought to be a healthy power drink, Powerade can negatively affect the consumer, because of the use of chemicals, and the environment, because of the use of plastic products.



Positive impact of fair trade version

Schekter's organic energy drinks is an example of a fair trade energy drink that uses all organic ingredients with the same positive impact of a normal energy drink. Along with that, Schekter's uses reused plastic and pushes recycling.

Glyphosate and Farming

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About Glyphosate

Glyphosate is a chemical that has been proven by WHO to possibly be cancerous, and, if found true, would lead to many problems due to it being the most heavily used pesticide in the world because of Monsanto's genetically engineered crops which are designed to survive the spraying.

While the IARC has found evidence for glyphosate being possibly cancerous, the EPA reclassified those findings with dubious input from Monsanto, showing how the EPA, charged with human health, can be pressured from companies.

To avoid glyphosate would be very difficult because of its' presence in food, air, rainfall, and surface water. Whether from the mist spraying into the air or the runoff of the chemical, glyphosate is still spreading its' influence.



<https://gmo-awareness.com/2014/02/25/glyphosate-wheat-linked-gluten-intolerance-celiac-disease-and-irritable-bowel-syndrome/>

Soil Mismanagement

When farmers plow sloped land, remove grass from semi-arid land for dryland farming, allow animals to overgraze, and more, the farmers leave the land bare and speeds us soil erosion.

Because of the faster rate of erosion, the soil is not replaced fast enough by nature, destroying the ecosystem and any future farming in that area.

A soil's properties can be mismanaged through over cultivation, which lowers how much water a soil can hold, or salinization, hurting the productivity of the soil.

Through a lowered amount of water being held by the soil and a lowered productivity because of salinization, the soil can be hurt so badly that no plants can grow, naturally or through farming.

Regenerative Techniques

Farmers can create a permaculture, a system that is designed for the sustainability of communities, based upon their farm and products. To work towards permaculture is to work towards sustainability and self-sufficiency.

Permacultures are more efficient for farmers and, most importantly, it will have a much better functioning ecosystem and water cycle.

Polyculture, or planting many different kinds of crops, instead of monoculture, which is what most farms use and includes on one or two major crops, is much more similar to natural ecosystems.

Polycultures create a better balanced ecosystem so there isn't as much disease, insect imbalances, reduced wildlife, and more. Plants in a polyculture are also much more resilient than those in a monoculture.



ORGANIC

CONVENTIONAL

What Surprised me Most?

The part that was the most surprising to me was not only the widespread use of glyphosate, but also the lack of research after it was identified as a possible cancer risk. Along with that, the presence of corporations in cancer research was also surprising because I didn't realize just how much companies can affect research. Overall, I was surprised by the information regarding glyphosate.



<http://www.gmo-evidence.com/world-health-organization-glyphosate-is-a-probable-human-carcinogen/>



Conscious Living 101

How to live green for less

Taylor Carrobis

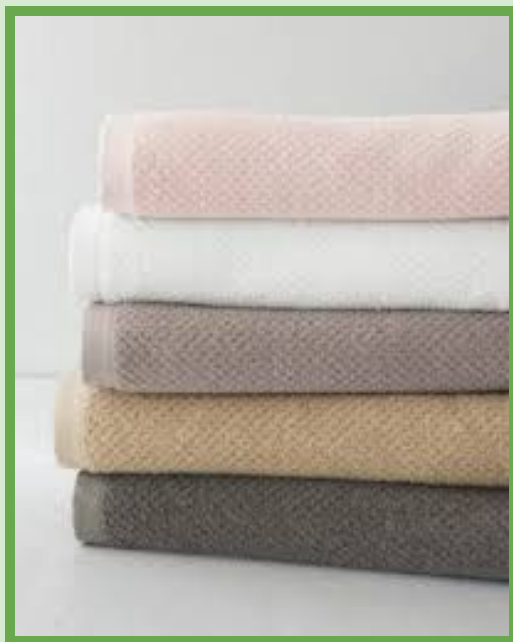
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How to 'Green' Your Dorm

Moving into college is stressful, and when you're buying the necessities for dorm life, most likely you aren't thinking about just what the product is made of. But you should! Toxins and carcinogens plague our everyday conventional products, and switching to organic is not only healthier, but better for the environment as well. The next question is, how can you afford it? There is a deep belief that going organic also means going expensive, but that is not the case. There may be a lot of expensive natural products, but there are also a lot of inexpensive ones! Going green means looking deeper into what you're buying, and, once you get used to shopping organic, it will be as easy as shopping for any other product!



If you have questions about a certain item, look it up! Research is key to living in a green dorm.



Organic blankets (left) for 30

Organic body wash for 16

'Klean Kanteen' reusable water bottle for 20

My Own Checklist

For my dorm, I completed the Project Green checklist which includes all of the major dorm room essentials. You can find my checklist here:

PURPOSE	BRAND	PRICE	LINK	REASON	HEALTH & ENVIRONMENTAL BENEFIT
BEDROOM					
bedsheets	BeaLin	39.9	https://www	Handmade sheets made from 100% organic linen	Material does not require use of pesticides
pillows	BeaLin	9.9	https://www	100% linen homemade	Does not run the risk of being a carcinogen
pillow cases	BeaLin	7.9	https://www	A set of pillowcases made from 100% linen	Does not use any polyester
comforter or duvet cover & insert	BeaLin	84.9	https://www	A duvet cover made from 100% linen in a pretty cover	Handmade so there aren't as many toxins
mattress	FlaxHome	129	https://www	A mattress topper that can be used as a mattress made from 100% organic flax	Flax instead of polyester or another toxic material
mattress topper	DIYNatural B	125	https://www	A comfortable 100% wool mattress topper	No chemicals used in the process
BATHROOM					
towels (6 piece set)	Organic Turk	79.99	https://www	A set of 6 towels made from all organic cotton from Turkey that will last for a very long time	All organic cotton with no other toxic material
body wash	Burt's Bees	6.99	https://www	Organic materials and reliable	Body wash made without the use of pesticides
facewash	Desert Essen	8.99	https://www	All natural and chemical free facewash with no animal testing	Chemical free and did not test on animals
shampoo	Chagrin Valle	8.49	http://www	a bar of shampoo soap made from natural oils and all organic materials	No carcinogens, neurotoxins, and other toxins
conditioner	OGX	7.99	https://www	A conditioner made from coconut oils and other organic materials	Natural oils instead of toxic chemicals to make it last longer
toothpaste	Desert Essen	4.99	https://www	A reliable product made from organic materials	Non-toxic toothpaste used instead
toothbrush (4 pack)	Brush with B	20	https://www	Organic bamboo toothbrushes in a set of 4 that will last for awhile	Requires wood instead of plastic, which is much more harmful to the environment
hand soap	Shea Moistur	4.99	https://www	A hand soap made with natural oils with no animal testing	No animals were harmed in the testing of the product
wash cloth	A part of the towel set above				
shaving razor	Merkur	~35	https://www	I chose this razor because, although it is expensive at first, overall it is the cheap choice because it does not need to be replaced nearly as often as the disposable razors	Do not need to throw it out nearly as often as disposable razors, so less plastic is used
toilet paper	Alibaba	20	https://www	Cheap organic toilet paper that can be bought in bulk	Made from recycled materials
feminine hygiene	Honest Com	5.95	https://www	Organic pads made from all natural materials	No pesticides were used for the materials
KITCHEN					
shopping bags	Lupinette	12.95	https://www	An organic cotton bag with a nice design that will be used in place of plastic grocery bags	Will be used to replace the need for plastic bags
plates & bowls	West Elm	21	http://www	A ceramic set of plates and bowls made with organic materials	Ceramic, so it is not made of plastic or other harmful materials
flatware	Bryson	26	https://www	Made with recycled steel, reliable and long lasting	Reused steel from another product
knife set (6 piece set)	ZenWare	17.99	https://www	A knife set made with ceramics instead of steel	Ceramics are less harmful on the environment
cutting board	Bambecco	16	https://www	Made with wood with no added materials	Made from all natural materials that can be broken down easily instead of plastic or a meta
serving bowls	West Elm	19	http://www	A ceramic set of serving bowls that not only have a sleek look but also include organic materials	Ceramic instead of other harmful alternatives
spice jars	CS Househol	11.95	https://www	Jars that will be used in place of plastic spice containers	Jars can be easily reused and will not be thrown away after use, like the plastic containers
food storage containers(jars)	Hermetic	7.99	http://www	Jars that can be used in place of plastic or trash bags	Easily reusable and less harmful to make than plastic containers
cups & mugs	Emery	12	https://www	Made with recycled glass	Recycled materials means less was used
pot & pans (10 piece set)	GreenPan	200	http://www	Although expensive, it would be an eco friendly buy that would last for more than a decade	Nontoxic, no carcinogens, and uses certified organic materials
cooking utensils	Bambuhome	14.5	https://www	Simple cooking set made with certified organic bamboo wood	Not as much energy used to make and less harmful material
coffee press	Stantonisle	20	https://www	Easy to use single serve coffee press made with recycled materials	Materials were recycled and does not need as much energy
tea kettle	CeramicTabl	29	https://www	A rustic homemade ceramic tea kettle that is reliable and will last for a long time	Homemade, so no chemicals added, and no harm to any workers
dish sponge	ECOLufa	10	https://www	Each sponge is organically grown and handcut	Grown locally by the producer, no pesticides, less to no risk of toxins
dish towels	LinenPearls	11	https://www	Made with 100% linen, handmade, and long lasting	No use of polyesters, known to play a part in breast cancer
dish soap	ItsLoveChar	2.99	https://www	A handmade soap created with all natural and organic ingredients	No pesticides or chemicals used in the soap that you use a lot
CLEANING					
laundry detergent	SoapForYour	11	https://www	Handmade with ingredients like coconut oil, essential oils, and other natural ingredients	Less toxic and natural oils are healthier
vacuum	Black and De	19.99	http://www	Bagless vacuum, uses less energy, small but can be used well	Better for your lungs and less energy than larger vacuums
bathroom cleaner	Lysol	7.43	https://www	Although not as environmentally friendly as other products, lysol is a better alternative than others	Better alternative than other commercial products
all purpose cleaner	MyUrbanGar	8.99	https://www	An organic all purpose cleaner made with products from a local garden	Locally made, no mass production, safer for health
dryer balls	Schnuffelinis	2.99	https://www	A set of dryer balls made of organic wool	All organic wool, no pesticides or other added products
ESSENTIALS					
backpack	wabisabihan	16.91	https://www	An organic, homemade drawstring bag that can fit many school materials	No use of chemicals
laptop	Lenovo	399.99	http://www	Considered to be the most eco friendly laptop by Lenovo, it has better energy use and power saving settings	Does not use as much energy as other options and made from some recycled materials
notebooks	CreativeGlan	7.5	https://www	Made with hemp paper and rice straw paper	Not made from trees
paper	EcoPaper	79	http://www	A box of tree free paper with an amount that will last for a long time	Another product not made from trees
pens/pencils (pencilset of 24)	TreeSmart	9.99	https://www	A set of 24 pencils made entirely with recycled newspaper	Made from recycled materials that would have otherwise been wasted
binder	Terracycle	3.99	https://www	A small binder made from recycled materials	Also made from recycled materials
water bottle	TiareSkinCan	6.25	https://www	Much better than buying plastic water bottles, this is a handmade bottle made from local materials	Can be used instead of plastic water bottles, no plastic
travel mug	Goblinpotter	35	https://www	A ceramic travel mug that will last for a very long time	A long lasting ceramic mug with less added chemicals than the plastic alternative
straw	Brush with B	12	https://www	100% organic bamboo straws in a set of 12	Not made from plastic and can be reused

Why Go Green?

There are many reasons why we should go green, but I believe these five resources best tell why it is essential we change our habits now.

<http://www.ethical.org.au/3.4.2/get-informed/why-shop-ethically/>



<http://www.sustainabletable.org/943/why-buy-sustainable>



http://www.earthisland.org/journal/index.php/elist/eListRead/pesticide_risk_from_conventional_produce_varies_dramatically_new_study_show/



<http://www.drfranklipman.com/risks-from-toxic-ingredients-in-cosmetics-personal-care-products/>

<http://www.prevention.com/food/healthy-eating-tips/top-reasons-choose-organic-foods>

How to be a Conscious Shopper

Quality over Quantity, make sure your buys last a long time!



Go vintage, save money and reuse products

Repair, don't replace

Look deeper than a label, often companies will put a label on their product that is not accurate, so look for reliable certification

Buy homemade products and help your local businesses

Start with one category, you don't need to go all organic at once, ease into it a little at a time!

Pay attention to bagging, bring a tote bag to the grocery store and buy products without a lot of plastic

Buy fair trade to support companies who support their employees

Research about where to find the best deal

Go to your local farmer markets for food, not only are the deals good but so is the food



What Brands to Buy

Honest Tea: a tea made with natural ingredients that are relatively cheap

Dr. Bronner's: a fair trade and organic company

Stoneyfield Farms: an organic yogurt company making strides in organic packaging

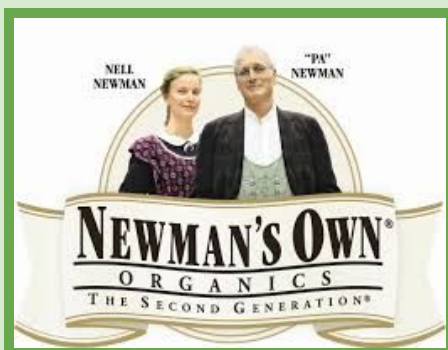
Bambeco: a company selling interior design and furnishings made from sustainable materials

The Reformation: clothing made from recycled material

Desert Essence: organic beauty care with no animal testing

Equal Exchange: a coffee company with an emphasis on fair trade

Grounds for Change: a food retailer who get their products from local farmers



Annie's: an emphasis on homegrown products and food

Newman's Own Organics: a healthy and organic alternative to snack food

THE TRUE COST

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WHO I WATCHED IT WITH

The day we had this challenge happened to be our PSAT testing day, so after the test with all our free time, me and a few of my friends sat at a bench and watched *The True Cost* for the rest of the day.



QUESTIONS TO MY FRIENDS

What are your thoughts on the documentary?

They were all surprised by the conditions that all of the workers survived and worked in, and then, after seeing the conditions, how little they are paid. At one point, Selina remarked: “Our minimum wage for an hour is more than they get for their whole day!” I was also surprised by the conditions, but I was also interested by switches between America and the other countries.

How will you shop now?

“I’m not going to go to any of those big stores anymore” (Kellyn) and everyone else agreed. After talking about this for a couple minutes we all said that there were still really cute clothes in the local, more sustainable stores nearby.

What will you do to spread this message?

We all said that they would talk to our parents or guardians about the messages and stories of the clothing workers. “I might show them the scene where the workers are forced into the building that fell” (Kellyn).

QUESTIONS TO MY FRIENDS: CONTINUED

Do you agree with the pro-factory activists, do you think the fashion industry helps the people in the developing countries?

The overall consensus was a strong no. We all thought that the working conditions hurt the workers too much to be considered 'good', and we agreed that maybe it would help the workers if they were paid enough and not hurt by their employers.

Which part resonated with you most?

Me- the part about the GM crops and pesticides because of the detrimental health impacts, such as cancer, and the impact on the environment, with the fact that the garment industry is the second most polluting industry in the world.

Kellyn- when the workers were forced into a building even though there were signs of structural decay and it ended up toppling down and killing many workers.

Kate- the conditions the workers had to live in. She was also very surprised by how some workers were beaten or shot in some countries.

Selina- she agreed with all of us on our topics, but she also said that she resonated with the effect on American farmers and companies.



The deadliest garment factory incident in history as well as the deadliest structural failure. Building owners ignored warnings about cracks in the building and ended up crushing 1,124 when it fell. This example, I believe, really shows the attitude of the fast fashion industry, choosing economic growth over human lives.

THE RANA PLAZA (KELLYN'S MOMENT THAT RESONATED WITH HER MOST)

Conventional vs. Green Cleaning

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My cleaning products

Laundry detergent- Oxi Clean Arms and Hammer

Multi-surface- Pledge

Dish detergent- Cascade

Wood Cleaner- Minmax

Window/multi cleaner- Windex

Dish detergent- Dawn





Windex Multi Surface

Retail price: \$9.25

Ingredients:

Water
cleaning agents
carriers
wetting agents
pH Adjuster
Fragrance
SCJ Formula #35

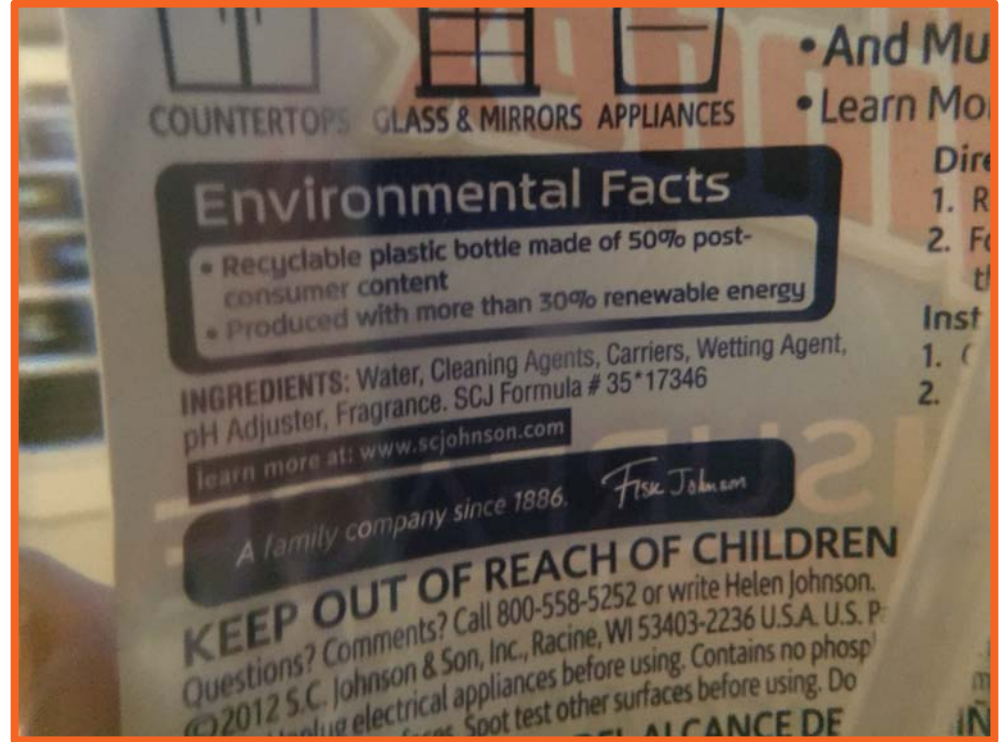
What do the ingredients really mean?

While looking at the product on EWG's website, I noticed that their ingredients were much more exact than what was labelled on the product.


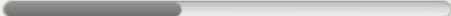

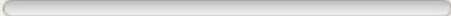

Ethanolamine- an F rating on EWG, this chemical has high concern for respiratory issues, moderate concern for skin allergies, and some concern for the environment

Hexoxyethanol- a D rating, it has a very high concern for skin irritation and skin allergies and general, systemic organ defects

Fragrance- another D rating, fragrance has thousands of chemicals within one with some concern for respiratory issues, skin irritation, and the environment



Ingredients Continued

D Windex Multi-Surface Vinegar Cleaner			
See:	General Purpose Clea...	Brand: Windex	Company: S.C. Jo...
Asthma/Respiratory		Moderate Concern	
Skin Allergies & Irritation		Some Concern	
Developmental & Reproductive Toxicity		Low Concern	
Cancer		Low Concern	
Environment		Low Concern	
How does it rate: Scores for similar cleaners ranged from A to F . Search for a better General Purpose Cleaner			
Top Scoring Factors: Poor disclosure; May contain ingredients with potential for respiratory effects; chronic aquatic toxicity; skin irritation/allergies/damage			

Polyquart Ampho 149 Polymer- rated C, a lot of it is used in the Windex product, however, there have been no studies conducted to see if there are any health impacts.

Disodium cocoamphodipropionate- rated C, this chemical also has very little research on its toxicity, but the few studies that were done find concern for carcinogenicity

Isopropyl alcohol- rated B, there is some concern for respiratory issues and a low concern for the environment.

The rest of the ingredients used in this product were rated A and did not hold any concerns.

Overall: D, moderate concern for respiratory and some concern for skin allergies and irritation.

The Green Product

Retail price: \$14.30

Ingredients:

Lavender oil
Citrus oil
Coco-glucoside
Lauryl glucoside
Alcohol denatured
Water

Overall rating: A, only some concern for respiratory issues, skin irritation, and very little concern for cancer

Green: Yes



The Conventional Product

Retail price: \$9.25

Ingredients:

Ethanolamine
Hexoxyethanol
Fragrance
Polyquart Ampho 149 Polymer
Disodium cocoamphodipropionate
Isopropyl alcohol
Water
Acetic acid
Vinegar

Overall rating: D, moderate concern for respiratory issues and some concern for skin irritation with poor disclosure of ingredients

Green: No



Will I make the switch?

Will I recommend it to friends?
Why?

I think that I am definitely going to switch to greener cleaning products or DIY ones. They are simply much healthier than the conventional alternatives even with the mystery surrounding some of the ingredients in the conventional cleaners. I am also going to recommend to my friends green alternatives, and, if they are concerned with the price, tell them about DIY products that are just as cheap, if not cheaper, than the conventional product. Overall, going green is simply the healthier and, if done correctly, less expensive choice.



Taylor Carrobis

Just now · 👤 ▼

When you use green cleaning projects or DIY cleaners, you are taking out a lot of toxins from your daily life. Conventional products are full of dangerous ingredients that are not told on the ingredients list on the product, but, if you switch to a greener alternative, you are making a change that will not only help the environment, but help you! [Turning Green Ewg](#) [#CleanGreen](#) [#PGC2016](#)

The Green Product

Retail price: \$14.30

Ingredients:

Lavender oil
Citrus oil
Coco-glucoside
Lauryl glucoside
Alcohol denatured
Water

Overall rating: A, only some concern for respiratory issues, skin irritation, and very little concern for cancer

Green: Yes



The Conventional Product

Retail price: \$9.25

Ingredients:

Ethanolamine
Hexoxyethanol
Fragrance
Polyquart Ampho 149 Polymer
Disodium cocoamphodipropionate
Isopropyl alcohol
Water
Acetic acid
Vinegar

Overall rating: D, moderate concern for respiratory issues and some concern for skin irritation with poor disclosure of ingredients

Green: No



My social media post about conventional vs. green cleaning products

Microbeads in our Waterways

Taylor Carrobis

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tcarrobis

The Derryfield School

Why is it important?

A laboratory rack with several test tubes. The tubes contain liquids of various colors: blue, yellow, and red. Some tubes have small particles or bubbles inside. The rack is made of blue metal bars.

Once microbeads enter our waterways they either settle to the ocean floor or are eaten by fish. However, these microbeads soak up toxins very easily and, because of this, the ecosystems where microbeads are found are slowly being poisoned. The fall of this part of the food chain would cause a worldwide impact that would destroy the livelihoods of many, and, even before the ocean's ecosystem dies out, the rest of the food chain, with us at the top, would also be consuming microbeads through because of the ones in fish.

Hand soap

The main ingredients in this soap are aloe and vitamin E. However, after looking closer, I noticed little beads in the soap and, on the ingredients, polyethylene.



Dr. Bronner's does not contain any microbeads that could hurt the environment. It is an organic and fair trade product with natural ingredients.

Acne Cream

Made by Neutrogena and Johnson and Johnson, this product contains polyethylene.



Melvita is a skin care company that favors natural ingredients over chemicals or other methods that could be harmful. Melvita contains no microbeads.

Face Wash

Rite Aid's face wash also contains polyethylene. You can tell that the product contains this because the name of the product, the exfoliating cleanser, warns the consumer of the use of microbeads.



Certified by the USDA as organic, Herbal Choice's face wash does not contain any microbeads or toxins that could harm the consumer.

Thank you for joining the 5 Gyres community...

...and for committing to the fight against plastic pollution. We're located at:

The 5 Gyres Institute
5792 West Jefferson Boulevard
Los Angeles, CA 90016

[Add us to your address book](#)

Please also stay in touch on [Facebook](#), [Twitter](#) and [Instagram](#). We'd love to hear from you. Thanks!

continue to our website »

or

manage your preferences

Joining the pledge



Taylor Carrobis

Just now · 👤 ▼

<http://www.5gyres.org/microbeads/>

All across our oceans there are about 80 trillion microbeads in the water, fish, and ecosystem. I joined this pledge to learn more about what I can do to put a stop to an action that is killing the oceans, a source of oxygen, food, and life. I challenge Brooke Carrobis Nicole Carrobis and Jennifer Winrow Carrobis to join the pledge! #beadfree #pgc2016 Turning Green 5 Gyres

**NO MORE OCEAN
PLASTIC
5 GYRES INSTITUTE**

Challenging family and friends

Water Bottle Ban

Taylor Carrobis

18tcarrobis@derryfield.org

tcarrobis

The Derryfield School

What do we want to do?

While thinking back on various challenges during PGC, I remember learning about plastic and its detrimental effect on the environment. So, I decided that I wanted to try to change my school to use less plastic. So, along with Andrew, Alex, and Sam, I decided to enforce a water bottle plan. I chose this project because I believe that it can be easily enacted and that there is a big possibility that my school will accept our proposal. If it succeeds, our plastic use would be majorly cut down and would raise more awareness because, while there are a lot of initiatives going on in my school, not many students that aren't a part of the environmental club know about them.

The Timeline

I know that we will not complete the challenge within the 4 days, but we have created a definite timeline before the proposal.

October 28th → research, creation of survey to student body about water bottle use, email Business office about previous water bottle sales and effect on school dining sales, and find alternatives and pricing.

October 29/30th → complete research

Timeline Continued

October 31st through November 4th → use emails, research, and meetings with dining representatives to begin writing part of the research portion of the proposal


November 7th → live survey during assembly to get data about reusable water bottle use and other questions

November 8th through 10th → finish writing proposal using data from the live survey and the methodology to replace the single use water bottles

November 11th → present proposal to Dr. Carter, the Head of School, and hopefully begin preparations to ban plastic water bottles

Who we needed to talk to

To begin the project, we knew that we first had to talk to two people, Mr. Dougherty, the environmental science teacher to start the preparation, and Mr. Soraci, the Head of Business for the data concerning water bottle sales. We were allowed to begin the plan and quickly got data from Mr. Soraci about drink sales.


 **Andrew Lombardozzi** <18alombardozzi@derryfield.org> 8:21 AM (15 minutes ago) ☆ ↶ ↷

to Ross, me, Ben ▾

Hello,

My name is Andrew Lombardozzi and I am a junior in Mr. Dougherty's Environmental Science class. We are currently working on a project that involves plastic water bottle usage at Derryfield and would need to collect some information from you. Would it be possible if you could send me the information about how many plastic water bottles(all brands) have been sold from Celebrations this school year so far. Hope to hear from you soon and thank you for your help!

Thanks,
Andrew Lombardozzi

 **Ross Soraci** <rsoraci@derryfield.org> 3:01 PM (2 hours ago) ☆ ↶ ↷


to Andrew, me, Ben ▾

Andrew, attached is a report of the drink products purchased through the cafeteria from the beginning of school through today (10/28/16).

Let me know if you need anything else.

Regards,
Mr. Soraci

...



Item Id	Item Name	Qty Sold
3	Dasani Water	868
4	Fruit Water	313
5	Honest Tea	366
6	Milk / OJ	653
8	Minute Maid Juice	951
9	Powerade	855
10	Smart Water	175
12	Vitamin Water	484
13	Coffee, Tea, Hot Chocolate	171
83	Gold Peak Tea	454
84	Iced Coffee/Tea	2
87	Naked Smoothie	360
152	Vita Coco	122
1165	Trimino Provien Water	42

Calculations of Water Price

Using the data sent to us, we looked at Dasani water sales and Smart water sales and how much the school spent on buying water.

Dasani Water: 13.82\$ for a 32 pack
.43 per bottle

Total money spent: 373.24\$

Sold for: 2\$

Smart water: 11.88\$ for a 12 pack
.99 per bottle

Total money spent: 173.25\$

Sold for: 2.25\$

Overall: 546.49\$ since beginning of school to 10/28/16

1. How many single-use water bottles do you think we have used so far this school year? (not including vending machine sales)

- 0-150
- 150-300
- 300-450
- 500+

2. Do you use a reusable water bottle?

- Yes
- No

3. How many times a day do you use the water bottle fillers at school?

- 0-1
- 1-2
- >2

4. If you don't use the water bottle fillers, why not?

- I do use them
- I don't have a reusable water bottle
- I don't need to refill my water bottle
- They're gross

The Research

- ★ 81 colleges, universities, and high schools have taken steps towards banning single use water bottles
 - Gonzaga banned them in 2008 and now give reusable water bottles as a part of orientation
 - Olin started a ban in 2009 that has been very successful
 - Sales in water bottles have gone down 39%
 - In 2014-15 they bought 871,776 bottles, down 567,000 from before the ban
 - 46% decrease in syrup than before the ban
- ★ Why are they successful? More filling stations, awareness, and reusable water bottles

Reusable water bottles for each student

Cheaper alternative:

Can be custom made, bought in bulk for \$0.58 each. For 400 students it would be 232\$ however they are low quality.



Premium alternative:

Can also be custom made and are bought in bulk for \$3.65 each. For 400 students it would be \$1,460 and, while more expensive, they are by far a better quality.



How would we start?

We most likely would not enact the ban right away and instead get people into the habit of bringing in reusable water bottles. To begin this cultural change, we plan on creating competition between grades and teams.

Month long Maroon vs. White competition

Every morning in homeroom or advisory water bottles would be counted as a point for whatever team they are on

'Green Cup Challenge' with plastic water bottle sales

Based on past weeks, try to lower plastic water bottle sales each week

HELP
SAVE THE
Earth
use a
Reusable
WATER BOTTLE

how often do you buy
a single use water
bottle?

- a) A couple times a day
- b) Once a day
- c) Once a week
- d) Never**

**KNOW THE RIGHT
ANSWER**

The End Result

What we hope will happen

After raising awareness and creating a culture that uses reusable water bottles whenever they can, we will then enact the water bottle ban. Through this, Derryfield's plastic use will drop drastically and will become a part of our culture which will hopefully expand to many other aspects of the environment.

Dr. James Hansen and the Greenhouse Effect



Taylor Carrobis

18tcarrobis@derryfield.org

tcarrobis

The Derryfield School

Who is he?

Hansen is a doctor and professor at Columbia University that has made a lot of headway into the study of the greenhouse effect and the Earth's future concerning it.



Just what is his story?

Interestingly enough, Dr. Hansen's journey to becoming an environmental leader does not follow the norm. Born and raised in Iowa, Hansen was trained in physics and astronomy in the space program at the University of Iowa. Originally, he used his education to study the Venusian atmosphere and started to compare the models from Venus to the Earth, especially in the aerosols and trace gases found in Earth's climate. At the beginning of his studies, his proposition was that Venus' high surface heat comes from the aerosols in the atmosphere, and, after many years, he started to look at the correlation between aerosols in the atmosphere of our very own planet. After his discovery and increased study of Earth's atmosphere, he created some of the most accurate models of the future temperatures and spoke in the Senate. After he started giving speeches, Hansen also started to inspire a greater awareness of the cause of the greenhouse effect, even if it angered very powerful government officials and businessmen. There are many climate leaders that felt Hansen's various speeches and testimonies represented a turning point in the awareness of climate change, for example, Timothy M. O'Donnell said Hansen's testimony was "pivotal" and marked "the official beginning of the global warming policy debate". His first testimony about global warming was mostly about the role of the greenhouse effect and the critical role it is playing in the rising temperatures, sea levels, sea temperature, and more.

Just what is his story?

An important aspect of his first major speech about climate change is seen when he said: "The greenhouse effect has been detected and it is changing our climate now...We already reached the point where the greenhouse effect is important." He even went on to say that NASA was 99% certain of the role that the greenhouse effect had on global warming. After his speech, he became vastly more vocal about the role of the coal industry in the destruction of the environment, a role that no one had yet said the coal industries had. While he acknowledges that burning oil is the same as coal, he is disgusted by the legal loopholes that the coal industry has found by outsourcing the mining to different countries. For every victory that he achieved, though, there were many more failures that he faced. Most notably is the time that he was arrested for participating in a public demonstration in front of the White House against the oil pipeline and the various controversies and slander that is said against him. But he has not allowed this to hold him back, and, through the criticism and controversies, he has gained more notoriety as a powerful and important eco-leader. I chose to write about Dr. Hansen because of his beginning work as a NASA scientist, a job that is my dream. I have always been in love with astronomy, space, and the environment, so, to see someone combine all of my passions and find a way to help the Earth really resonated with me. I would love to be able to talk to him about his early studies at NASA and his more recent environmental ones.

What I would say to him

I was very inspired by your combination of your early career to environmental science and how your history in astronomy and astrophysics only helped your arguments.

How would you say that your experience in NASA helped your current role in the environmental debate?

Are there any other interesting connections you have heard of between astronomy and our Earth?

What was your experience at NASA? How invested are they in environmental study?

How have you raised awareness of environmental issues?

Dr. James E. Hansen

Climate Science, Awareness and Solutions Program

Earth Institute

Columbia University

475 Riverside Drive

New York, NY 10115 USA

E-mail: jeh1@columbia.edu

Questions for the Project Green Challenge



Taylor Carrobis <18tcarrobis@derryfield.org>

10:13 PM (0 minutes ago) ☆



to [jeh1](#)

Dear Dr. Hansen,

I am a junior high school student from The Derryfield School, a small day school in New Hampshire, and I am participating in a challenge for the Project Green Challenge. PGC is a 30 day 'environmental journey' with 3 different challenges of varying difficulty every day. Today's challenge was about environmental leaders that inspired us and, during my research about key figures in the recent environment debate, your story really resonated with me. I have always been divided between studying 'space and the world', often going back and forth between wanting to become a climatologist or an aerospace engineer/astrophysicist, so when I saw how you incorporated your studies on Venus' greenhouse effect to Earth's, combining my two main areas of interest, I immediately chose to start my research on your actions. Although I am not able to spend a lot of time on your various presentations and talks, I enjoyed learning what I did.

As a part of the challenge, I need to ask a few questions about what I would like to know more about, so I would really appreciate it if you could take a bit of your time to answer.

How would you say your that your experience in NASA helped your current stance in the environmental debate?

Have there been any other interesting connections between astronomy and the Earth that you have heard of?

What was your experience like at NASA? How invested are they in the environmental study?

How have you helped raise awareness on the environmental issue?

Once again, thank you very much for your time and consideration, and I hope that I will be able to hear more about your role as an eco-leader.

Thank you,
Taylor Carrobis

Sending the email



James Hansen <jimehansen@gmail.com>

10:48 PM (10 minutes ago) ☆



to me ▾

see below

On Wed, Oct 26, 2016 at 10:13 PM, Taylor Carrobis <18tcarrobis@derryfield.org> wrote:

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How would you say your that your experience in NASA helped your current stance in the environmental debate?
A lot -- the public respects "rocket science", well NASA scientists, because of the successful exploration missions

Have there been any other interesting connections between astronomy and the Earth that you have heard of?
Well the solar system is a product of gravitational collection from interstellar gas and dust.

What was your experience like at NASA? How invested are they in the environmental study?
Increasingly bureaucratic as NASA aged. Well at age 75, I am still "working" at it ~80 hours a week - I guess that says something about investment in it.

How have you helped raise awareness on the environmental issue?
Doing relevant science. Testifying about it. Writing papers. Giving talks. Getting arrested.

...

Once again, thank you very much for your time and consideration, and I hope that I will be able to hear more about your role as an eco-leader.

His response

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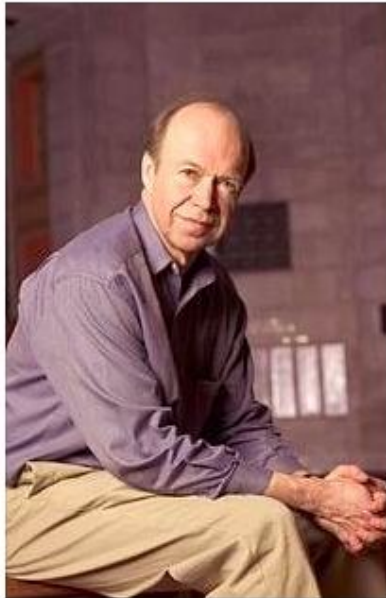
Closer look at answers



Taylor Carrobis

Just now · ·

Dr. Hansen is a former NASA scientist who used a model of Venus' former atmosphere to find a correlations between the runaway greenhouse effect on Venus and on Earth. After finding this connection, he quit NASA after nearly half a century to become an environmentalist and raise awareness on the role of the greenhouse effect and climate change. He has spoken at many venues, such as Senate, about the change that needs to be done, a major cutback on fossil fuels. #pgc2016 #ecohero Turning Green



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