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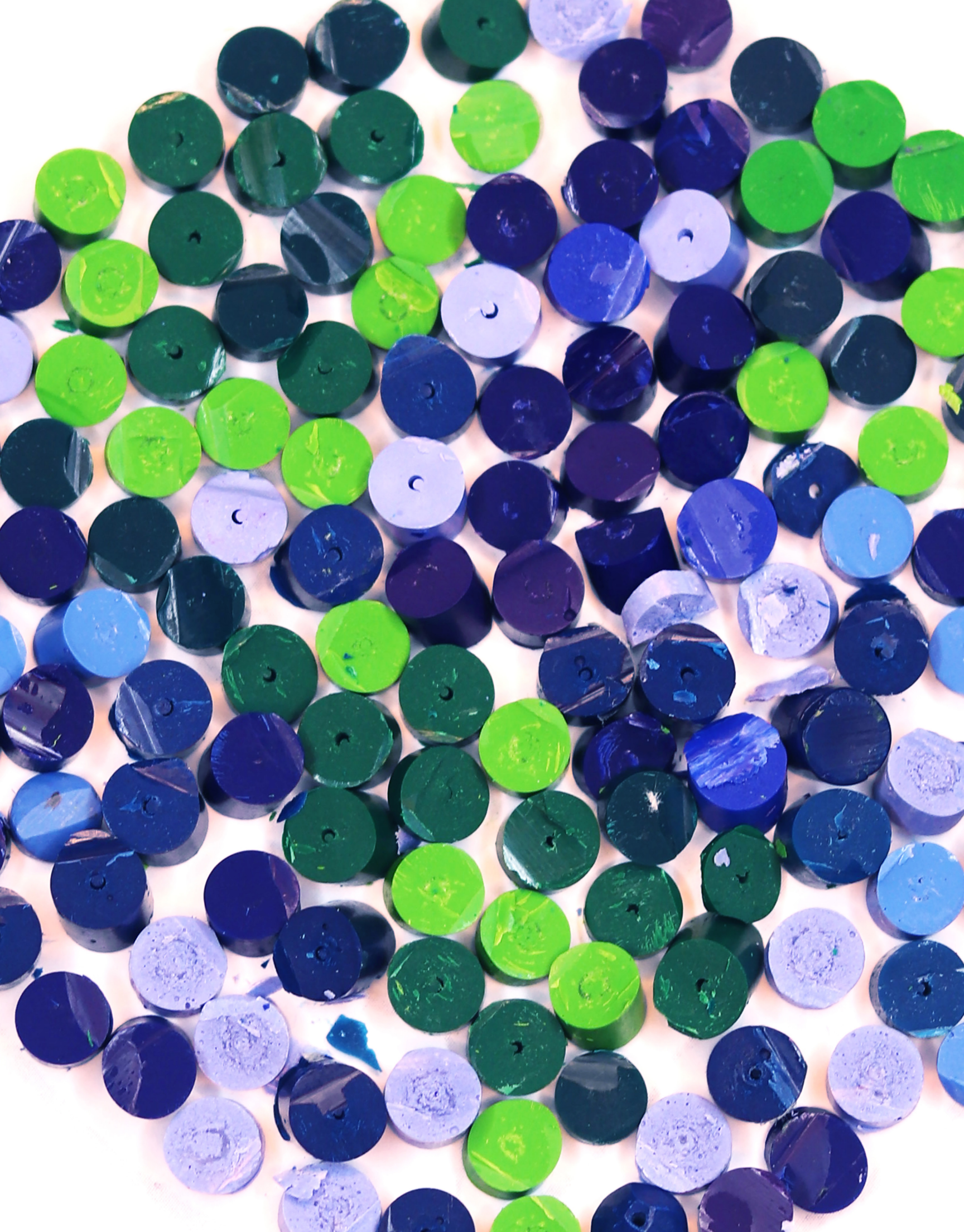
**The Climate and
Environment Edition**



About the Cover

COVER BY CAMMI TIRICO, JORDAN DE PADOVA,
ATTICUS DEWEY AND ISAAC MCKENNA

Our front cover is our representation of climate change. The melting earth symbolizes the overall increase in global temperature and the dangers of melting polar ice caps. We decided to use crayons to symbolize this because, like many issues in the world today, the responsibility of fixing climate change has fallen on youth. Youth activists have taken the lead in the climate movement because eventually they will be the ones dealing with the melting earth. Our environment edition talks about the effects climate change will have on the us, what we are doing to contribute to it and what others, and ourselves, can do to stop it.





The theme of this edition is **climate and the environment.**

As the primary and general elections draw nearer, disagreements around climate policy and belief in scientific consensus are making their way to the debate stages.

These issues can feel way out of the spheres of influence for the majority of people who aren't in control of multinational corporations or holding national political office. But young people are especially affected by the climate crisis; even the prospect of growing up on a deteriorating planet can provoke anxiety about survival and the ability to raise a family.

This anxiety is valid, but there is so much being done to shift the balance of power towards young people and towards a better future. This edition explores all of these aspects, looking deep into the ways that climate change affects every part of life in a shifting world.

ENVIRONMENT

Fast



Fashion



Photography by Ebba Gurney | Polyester, nylon, acrylic and other synthetic fibers — all of which are forms of plastic — are about 60% of the material that makes up our clothes worldwide. According to the Wall Street Journal, everytime these clothes are washed, they shed microfibers into the ocean, the equivalent of 50 billion plastic water bottles.

WHAT IS FAST FASHION?

BY AVANI HOFFNER-SHAH

In recent decades, society has become increasingly obsessed with consumption and fascinated by novelty, especially in terms of clothing. To meet this demand, the fast fashion industry was born. Fast fashion is the rapid production of trendy clothing to meet high demand. Despite appearances, not everything in the world of fast fashion is glamorous: Quickly producing affordable clothing often means brands cut corners when it comes to environmental regulations and labor practices.

The fashion industry is among the most environmentally damaging in the world. According to The United Nations Environment Programme, 10% of carbon emissions are produced by fashion companies, and the industry's carbon dioxide emissions are projected to increase by 60% in the next ten years. The problems arise not only from the production process, but from the material itself as well. Approximately 60% of fabric fibers are synthetic, which causes lasting environmental damage when clothing is thrown away. Thirteen trillion tons of clothing are in landfills in the U.S., and the chemicals used to create the material, such as toxic dyes, can contaminate groundwater.

However, the environmental impacts of the fashion industry have

not stopped consumers from buying more clothing. People purchased 60% more clothing in 2014 than they purchased in 2000 and kept their clothing for half as long, according to a report by McKinsey & Company and the Ellen MacArthur Foundation. Ditching new clothing is done partly from necessity, because fast fashion brands make lower quality apparel. Short-lasting clothing has caused a rapid increase in the amount of waste from fashion – the equivalent of one garbage truck of clothing is thrown away every second.

In order to keep prices low, most companies rely on cheap international labor. As of now, 97% of clothes currently sold in the U.S. are made in other countries. Many of the workers in these developing nations are forced to work for very low wages, long hours and in poor safety conditions. The typical garment worker has to work 14 hours, seven days per week. In Bangladesh, where many of these factories are located, the average worker makes only three dollars a day.

Despite these problems, fast fashion continues to be popular. It accounts for 66% of online clothing shopping traffic, and the industry has grown 21% in the past three years. People are buying more clothes than ever, and corporations are thriving. ☉

SYNERGY ECO LUXE

BY SOPHIE KRIZ

Synergy Organic Clothing is another fashion brand that claims to be sustainable. It offers elegant, casual clothing for a slightly more expensive price. The company brands itself as sustainable, ethical and elegant, especially in terms of its “Eco Luxe” collection.

One popular product from this collection is the Metamorphose Cardigan. Available in muted, elegant colors ranging from charcoal to spice brown, this product is a true example of casual luxury. However, perhaps it is misleading to market it as sustainable. According to Synergy Organic Clothing's website, this cardigan is 47% Pashmina wool, 47% nylon, and 6% acrylic. Nylon requires two major chemical compounds to be produced: adipic acid and hexamethylenediamine. Hexamethylenediamine is the base material for nylon and, in the textile industry, is usually extracted from crude oils or fossil fuels. In addition, adipic acid production releases significant amounts of nitrous oxide, which is significantly worse for the environment than pure carbon dioxide emissions. Take into account the large amounts of energy and water needed to produce and cool the fabric, and this product is a far cry from being environmentally sustainable. ☉

FOREVER 21

BY SOPHIE KRIZ

Forever 21 is one of the most prominent fast fashion brands today. It offers a wide variety of playful and trendy products for a very low price. When there are new arrivals every week that nearly anyone can afford, most people will buy a new dress any time they have an event planned. Because of this, Forever 21 is constantly working to create and manufacture new clothes affordably, which, in turn, causes it to produce clothing using less-than-ideal materials. For example, take Forever 21's new Floral Smocked-Waist Mini Dress. With a whimsical flower print pattern, a trendy V-neckline and flounce hem, this dress seems like an amazing option for any event. However, this dress is nearly 100% polyester. Polyester is an all-encompassing term for a large variety of polymers. However, they all have a few things in common: First, they are nearly all petroleum-based and therefore non-renewable. In addition, recent studies have shown that pure polyester fabric releases a major amount of microplastics when washed that end up in the oceans. ☉

H&M CONSCIOUS COLLECTION

BY SOPHIE KRIZ AND LILY SICKMAN-GARNER

Although the fast fashion industry continues to grow, consumers have started to demand more environmentally sustainable goods — and H&M wanted to seem like it was listening. The multinational fashion corporation recently released a “conscious” clothing line. At first glance, it offers a perfect solution. The clothes are barely more expensive than those in H&M’s regular line: jeans for \$29.99, leggings for \$12.99, t-shirts for \$4.99. In addition, these “conscious” items appear in nearly all of H&M’s trending collections, ranging from soft and cuddly sweaters from the Winter Essentials Collection, to delicate crêped flower-print dresses from The Flower Shop Collection. However, these cheap prices raise the question of how the conscious line can truly be sustainable.

H&M’s website is somewhat vague in terms of explaining its conscious line, stating “All our products are made with care and consideration for the people who make them and for the environment. Garments containing more sustainable materials can be found across all our departments all year round — just look out for our green Conscious hang tags! To qualify as conscious, a product must contain at least 50% sustainable materials.” They cite examples of “sustainable materials” as being “organic cotton or recycled polyester.” Based on this description, the only discernible difference between the conscious collection and H&M’s other clothing is that the former contains more environmentally friendly fabric. Although this is a step in the right direction, H&M makes no promises regarding pollution during the actual production of its clothing or the treatment of its factory employees.

One of the most popular products from H&M is its 2-pack Jersey Leggings. For only \$17.99, these leggings seem like quite the steal. According to H&M’s website, they are 50% organic cotton, 46% viscose and 4% elastane. While cotton is biodegradable, it only makes up half of the total material in the leggings. The other half is mostly made up of viscose, which is actually a fairly environmentally friendly fiber. Viscose is natural, easy to dye, and even more biodegradable than cotton. However, during the production of viscose and other types of rayon, a highly toxic chemical called carbon disulfide is used. Although technology has been created to recapture this chemical after the manufacturing process of viscose is complete, it still poses a high risk to the environment. In addition, although viscose is biodegradable, it is fairly water-resistant and could pose a significant threat to marine life and waterways.

Another popular conscious product that might actually be harming the environment is H&M’s comfy Cable-knit Turtleneck Sweater. At only \$29.99, this festive sweater is, for many, a winter must-have. However, like other H&M products, this garment is not as sustainable as it seems. According to the H&M website, this sweater is manufactured from 50% recycled polyester, 45% acrylic and 5% wool. Although the polyester in this product is confirmed to be recycled, it will still end up in a landfill when this sweater starts to pill. After that, it could take more than 100 years to decompose. However, the real killer in this sweater is the acrylic. Making up nearly half of this product, acrylic fibers are one of the least environmentally sustainable fabrics currently in use. First,

acrylic fibers are produced from fossil fuels and require a large amount of energy to manufacture. This results in a substance called polymer polyacrylonitrile, which is a deadly toxin to the human body. In addition, recent studies show that acrylic releases nearly 1.5 times the amount of microplastics that pure polyester releases.

After this line dropped, the Norwegian Consumer Authority accused H&M of misleading its customers by “greenwashing” — making its products seem environmentally sustainable as a marketing ploy — which is considered illegal by the Norwegian government. When companies use labels such as “conscious,” “sustainable” and “green” as blanket statements to describe their products, they are able to make very minimal changes to their production process while leading customers to believe that shopping from them will have a positive effect on the environment. Based on the description on its website, H&M has made no effort to limit water usage during clothing production, pay factory employees a living wage or limit pollution during product transportation. However, since they are using 50% environmentally friendly materials in the clothing for this line, they can call it conscious. In addition, the description of its conscious line is not easy to find on the H&M website. Customers are unlikely to stumble across it and instead have to intentionally seek it out. One of the primary reasons that fast fashion has been so successful for so long is that it’s convenient. Especially in the digital era, buying clothing online often takes only a few minutes. This is why brands like H&M are able to so easily mislead their customers. ●

ENVIRONMENT

THE GETUP VINTAGE

BY LILY SICKMAN-GARNER

After digging through bins upon bins of clothing she knew she wouldn't buy, Kaylan Mitchell found a pair of hand-patched vintage bell-bottom jeans from the 1970s. They were an unexpected treasure, and although she bought nothing else from the woman who owned them, they made her trip worth it. Mitchell is the co-owner of The Getup Vintage, an eclectic vintage clothing store in downtown Ann Arbor that just celebrated its fifteenth anniversary. They find most of their merchandise through private buying appointments in people's homes, and Mitchell cited this as being her favorite part of the job.

"You really never know what you're going to find," she said. "It's a treasure hunt, and that's really the best part. Getting stories and seeing where all the things came from." Many of those looking to avoid the fast fashion industry have turned to vintage clothing as an alternative. Since it has already been produced, it has a much smaller carbon footprint, and buying used clothing can save it from being dumped into a landfill. Most vintage clothing is also better quality than what is produced today.

"Vintage is honestly the best thing that you can do for your wardrobe and for the environment," Mitchell said. "The quality of a 1950s dress is about the same as a couture dress today. These things that have lasted 20 to 70 years, they're going to keep lasting."

The Getup Vintage offers a range of clothing from a variety of fashion eras, spanning from the 1950s to the 1990s, and all of their merchandise is hand-selected by one of the owners or part-time employees. They bring in clothes from all over Michigan and the Midwest, then wash and repair every article of clothing before putting it up for sale. Despite the dangers of fast fashion, Mitchell is hopeful about the future.

"Even a few years ago ladies would come into the store and they'd be like, 'This is used clothing?' And I'd be like, 'Yeah, it has to be used because it's 70 years old.' But I'm 35 and the people that are younger than me are starting to be really respectful of the environment, and really understanding a lot more," Mitchell said. "I see it a lot in the conversations I have with people in the store, and how much it is starting to bubble up as an issue that people are concerned about." ©



Photography by Ella Rosewarne | A Getup Vintage employee straightens racks of clothes. The Getup opened their doors 15 years ago in downtown Ann Arbor.



Photography by Ella Rosewarne | Racks of colorful vintage clothing fill the store. Each piece is unique and was hand-selected by Getup employees or owners.

Q&A

BY ELLA ROSEWARNE AND LILY SICKMAN-GARNER

What can you do?

Educate yourself. Avoiding the fast fashion industry completely is unrealistic, but knowing which brands hurt the environment can allow you to make more educated choices and be more aware of how those choices affect other people and the climate.

Shop local. Transportation of goods is a major polluter, so buying clothes from local shops whenever possible can make a big impact. Online stores, especially huge corporations like Amazon, often have little regard for their delivery drivers, and sometimes even force them into dangerous situations to get their products to their customers quickly.

Buy used clothing. Since used clothing has already been produced, the carbon footprint of buying it is much lower than that of new clothes. Also, giving used clothing a second life saves it from ending up in a landfill and causing more pollution.

Donate. Instead of throwing away old clothes, donate them to a local thrift store. Although this isn't a perfect solution — many clothing items that are given away find their way back to landfills anyway — it's a good first step.

How has fast fashion evolved?

The term “fast fashion” was coined in the 1990's. Zara was one of the first companies to be labeled by the New York Times as a “fast fashion” brand because of its rapid production of clothing. This opened the door for other brands and allowed the fast fashion industry to expand. The fast fashion industry grew out of increasing demand and a cultural shift towards shopping becoming entertainment. Now fast fashion brands can be found everywhere. Some examples include Fashion Nova, Shein, H&M, Topshop, Forever 21, Gap Inc., Guess?, and Urban Outfitters.

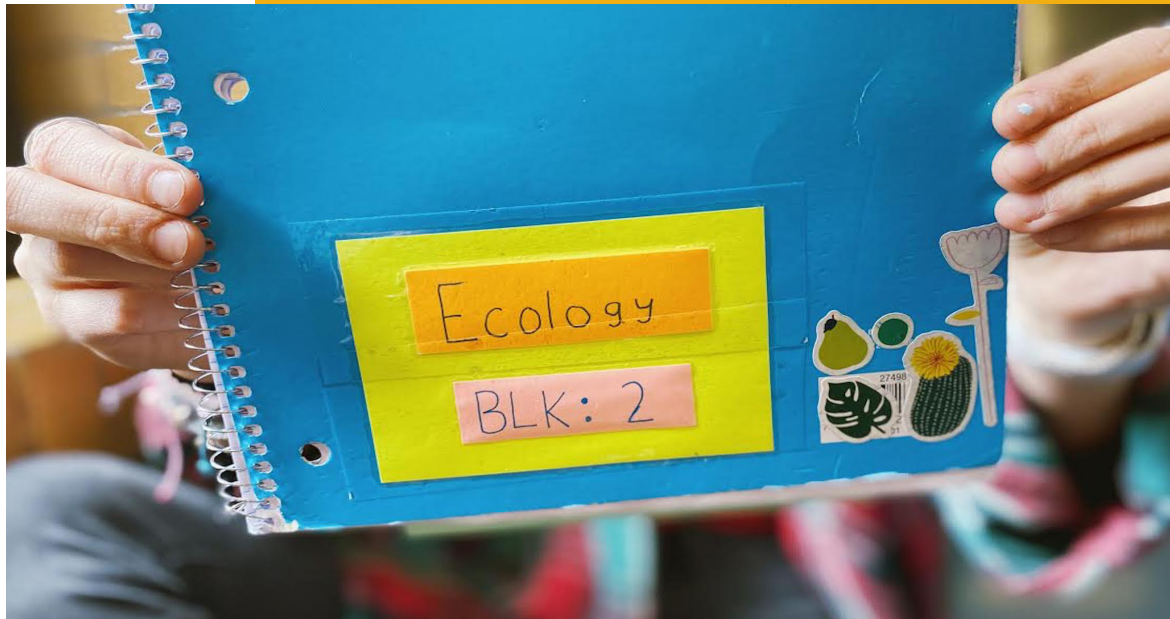
How are Nike products made?

Nike makes almost all of its products out of the U.S. in China. Nike was first accused of having an environmentally harmful production process in the 1970s when consumers became suspicious that Nike produced its goods in sweatshops outside of the U.S. Nike director Todd McKean admitted that the company did use sweatshops for production in a 2001 interview. In 2016, students at Georgetown University protested Nike and the university's contract with the brand. In 2017, they organized a global day of protest against Nike, which led to a revised contract with the university. In recent years, the accusations against Nike have led to investigations of its factories, which have uncovered large numbers of teens and young women working long hours, for low pay, and under dangerous conditions. ©

Will Sustainable Careers Lead to a Sustainable Future?

High schoolers are tackling environmental issues by making life-long commitments.

BY CHAVA MAKMAN-LEVINSON



Nina Beardsley has always had a passion for architecture. Traveling through Germany, she loved admiring the exteriors and interiors of museums, and she felt she may want to study the subject when college rolled around. But when she entered high school, around the same time that she began learning and caring about humans' damage to the environment, her father drove her up north to visit "passive houses." These buildings use 40% to 60% less energy for space conditioning than regular buildings. After touring these intensely energy-efficient spaces created by conservation activists, Beardsley's outlook on studying architecture began to shift.

"The idea of studying green architecture bubbled to the surface this year," Beardsley, now a senior at Community High School, said. "In the future, everything is going to need to be based around environmental science and green design; this is something I know is going to be important for years to come."

Benefits to pursuing "green" careers are becoming increasingly evident. This field is relatively new due to a new urgency of environmental problems. There is a diversity of ways to study the environment: a "green" degree can take you in a direction of environmental science, engineering, law, education or something entirely different. A "green" degree addresses the market demand for professionals who care about environmental issues. While Beardsley may study methods of eco-friendly architectural design, CHS senior Julia Sonen may go a starkly different route, while working on the same issues.

Through her work with a Washtenaw County naturalist organizing a winter solstice hike and her volunteering at the Leslie Science and Nature Center, Sonen has found a passion for sharing her passion.

"Nature has always been my happy place," Sonen said. "Through those activities, I'm sharing my happy place with other people. I'm helping them care more [about the natural world]. I feel like I'm doing something valuable. I want to learn more [in college], so I can share more."

Beardsley and Sonen face similar frustrations when it comes to their peers' actions towards helping the environment. Despite many believing they understand the seriousness of the climate crisis, it can be difficult for people to mobilize, even on a small level.

"The most immediate challenge to consider when dealing with our changing climate is simply getting everyone to be aware that this is impacting everyone," Beardsley said. "Everything you do—driving around, online shopping, producing trash—is impacting the environment, and people need to be more aware of that."

Sonen recognizes the fact that people can contribute to making the world cleaner by making small adjustments in their daily lives. She walks home from school every day, and after noticing an abundance of litter on her walk through town, she decided that she would pick up three pieces of trash every walk home. Her frustration that not everyone does the same traces back to her overall passion for nature.

"We live in an incredibly interconnected world," Sonen said. "The



**"In the future,
everything is going to need to be based around environmental science and green design."**

food we eat comes from crops growing. That relies on the soil having the correct nutrients, and the pollinators' ability and availability. We need soil to keep the water clean, and everything depends on water. And yet, we let the knowledge of how to keep it all safe disappear, and replace it with destruction."

The urgency of environmental destruction brings about many new things, career paths being one of them. High schoolers are beginning to step up to the plate to help our environment, not only through small daily actions, but through life-long commitments. ©

Photography by Chava Makman-Levinson |
ABOVE: Julia Sonen studies notes from Ecology Class. Sonen loves spending time in nature, whether it be educating kids about local woods or leading adults on a hike.

Photography by Chava Makman-Levinson |
LEFT: Nina Beardsley holds her notebook for Ecology class, where she learns about Michigan's environment and native species. Beardsley wants to continue studying the environment in college.

Staying Sustainable

As the activism around the climate crisis grows, so does the panic, and while many people have thrown themselves into activism there are also many people who have been scared off. But every action counts towards this bigger issue, and even the small things matter.

BY AVA KOSINSKI

The global climate crisis has become an increasingly acknowledged issue in the last couple decades, and its real effects are being seen across the world: fires and droughts are spreading across Australia and California; the Arctic is melting out of existence; sea levels are creeping up on islands and coastal cities; oceans are becoming more acidic and polluted every day with coral reefs coming close to extinction. Climate scientists everywhere are warning us that we only have a short amount of time left before our planet is too far gone to save.

As the movement for sustainability grows, more and more people have become involved in their own ways: what they buy, where they work, what corporations they support, how they produce waste and how they advocate for sustainability from others. But as the movement for sustainability grows, the definition of what sustainability is grows along with it. Seeing some people doing so much can make it hard to want to contribute. Seeing people who don't drive cars, make their own solar electricity and dedicate their lives towards advocating for our planet make the small things most people do — bringing a reusable cup or bag— feel insignificant.

Sara Soderstrom is a professor in University of Michigan's Organizational Studies and Program in the Environment. She looks at how different corporations and organisations can work to positively address environmental and social issues, but also shows that sometimes they do bad and not good.

Soderstrom works around sustainability, and for a long time, has felt the confusion and guilt that can surround it.

"It's so easy to feel guilty about it. I'll have a morning where I am [on] campus and I forgot my coffee mug," Soderstrom said. "So do I tear myself up because it was a bad morning, and I am generating waste by getting a disposable coffee mug? Or, do I just expect that stuff happens and I can't be perfect about it and we're just going to go forward?" Soderstrom often feels frozen by the guilt of what feels like a failure to be sustainable, but stressing too much about making a small mistake can stop you from doing more. The important part of sustainability isn't being perfect, it's making an effort to get involved.

Getting involved seems difficult, but even a small action can make a big difference; it's all about finding ways to engage that matter to you. "For some people they bring their prepackaged food and have their reusable coffee mugs. For other people it might be limiting how much meat they're eating. There's all kinds of things that you can do" Soderstrom said. Everyone can get involved in their own way. Soderstrom has seen all kinds of initiatives in sustainability through her University of Michigan Classes; students protesting against fast fashion and only using waste to build their own clothes; students teaming up with larger environmental groups to make the stadium completely waste free and some people joining movements that protests for climate action from government officials.

Whether it's through fashion, food or sports, getting involved through something you are passionate about is the best way to launch yourself into the life of sustainability.

Even as the movement for environmental awareness grows stronger, the fear of climate change does not recede. The main girth of environmental problems are still caused by large industries, which isn't something that is directly in our control; however, the average consumer is essential to the pollution that is being created. When you buy fast fashion, eat fast food, fly in a plane, or even turn on your lights, you're making a choice that impacts the environment. Small things you do every day matter so much, because everyone else does them too, and small things add up.

Unfortunately, learning to shop sustainably isn't easy.

"I think one of the biggest challenges facing business and sustainability right now is that businesses know that consumers want this," Soderstrom said "There are some who are advertising clearly about what they're doing, and some who do what we call 'greenwashing', or trying to pretend that they're being environmental, and it's really hard as a consumer to tell the difference."

The issue is tough, because you can't always tell which companies are truly sustainable and therefore, where your money is going. Soderstrom says the easiest way to shop sustainably is to buy as local as possible. Things like the farmers market are always a good sustainable choice when shopping, as well as local business and handmade products over large chain stores.

When it comes to living a sustainable life, every bit matters. For a long time CHS science teacher Courtney Kiley has worked hard to bring more and more sustainability into her life.

"We're not the only organisms on this planet, and we have to treat it with respect," Kiley said. She has made an extra effort to be sustainable at home with her family and at work with her students. Teaching is one of the most important parts of sustainability, and she makes sure to inform her students of the issues while also setting a good example for them. Kiley's third grade daughter, even though she's still very young, knows how to read labels on plastics to see if she can recycle them.

"I just get my kids outside to teach them about nature so that they respect it from an early age," Kiley said.

Kiley has also made an effort to bring sustainability into Community High School. The school has a recycling program and has compost bins around the school for their food waste. Kiley has even teamed up with other science teachers and other school administration to implement no-waste initiatives for school events, making contests for creating the least waste.

When at home, Kiley does whatever she can to reduce the waste she creates: using cloth napkins instead of paper towels, turning off lights, taking short showers, buying clothes used and not using plastic bags are just a few of the small things Kiley does to lessen her impact on the planet.

"We treat our house like an organism, so whatever we bring in we try to make sure that we donate the same amount of stuff so that our house doesn't get fat," Kiley said.

Kiley does her best to make her daily activities more sustainable as well. Her family doesn't eat red meat, they bike or walk instead of driving and they compost everything they can.

Kiley's efforts to cut her waste are small things anyone can do. Choosing to walk instead of drive, or turning off the water while brushing your teeth are great additions you can make to your routine that will reduce your impact.

"I have little kids, and I work with young people, and I want to make sure that the earth is better than it is now. For you guys and my babies," Kiley said.

Though the recycling of waste has been a great addition, Kiley says that should be a last resort.

"It's definitely worth recycling, but recycling is the last option in the reduce, reuse, recycle," Kiley said. Recycling is important, but the order of the phrase matters, always try to avoid creating any waste before you repurpose it.

The amount of waste that the industrialized era is creating is more than the planet can support, and the only way to save our planet is to try and cut back. Every single small action has an impact on the planet, so turn off your light when you leave the room, go buy that sweater second hand walk or bike instead of driving on a nice day. Find things you love and bring sustainability into them. While we have made great strides as a society to save our planet, we are not there yet. People and governments everywhere need to step up and do their absolute best, because time is running out for our planet, and we don't get a second chance. 🌍

How We Deal With Waste

Zingerman's and CHS work together to reduce waste.

BY JOSH CALDWELL AND MORRAINA TUZINSKY

Photography by Zoe Buhalis

Overflowing dumpsters and the odor of trash in the alleys of downtown Ann Arbor has sadly become the norm. As restaurants have struggled with their waste management, Zingerman's has worked to reduce their waste and make environmentally conscious decisions. With hundreds of customers every day dispersed throughout their many locations, it's undeniable that Zingerman produces waste. However, they have made a commitment to eliminating waste anywhere possible.

"Reducing food waste starts at the buying process," said Rodger Bowser, chair of Planet Zingerman's. "You have to train people how to not mess food up and as a result, reduce waste." Not only does Zingerman's work to reduce waste, but the Delicatessen is a gold level LEED certified building. LEED (Leadership in Energy and Environmental Design) is a green building certification program used all over the world.

"We work on the ladder of our vendors to reduce the actual packaging waste," Bowser said. "Such as reusable totes instead of a bunch of boxes. It ends up working better for the grower in the long run, they don't have to buy a box." Single-use containers are one of the biggest battles for restaurants working to reduce waste. Single-use plastic accounts for half of all plastic thrown away.

One of the most common substitutes is biodegradable containers however they are more expensive and less leak proof than plastic usually.

"We line them (single-use containers) up to find out how much they cost, which ones are compostable and we constantly test to see which containers work the best," Bowser said. Zingerman's is also working on a program to eliminate single-use to go containers for locals.

"We are going to be piloting a reusable to go container, we are working on that for the summer and hopefully it will hit the ground next fall," Bowser said. "We're just trying to find the right packaging for it." This reusable container will only be available for customers who live locally.

Zingerman's is also partnering with the city of Ann Arbor to help reach the carbon-neutral by 2030 goal. The carbon-neutral goal is an aggressive and necessary step the city of Ann Arbor took to combat climate change.

"We are probably one of two restaurants in the entire city to do commercial composting," Bowser said. The city of Ann Arbor doesn't provide a composting service year round, so Zingerman's has to pay to have their compost taken.

The People's Food Co-Op, another local

business downtown, has also been working to reduce their waste. "As far as food waste goes, we donate to food gatherers, and we also let our employees go through anything that is outdated and bring it home," said Ken Davis, the marketing coordinator at the Co-Op. "Anything else we compost to give back to the environment of course." Like Zingerman's, the Co-Op uses commercial recycling. The Co-Op uses a company called My Green Michigan for all of their composting.

Being aware of where you are eating and their practices is important. Reducing waste and being environmentally sustainable is expensive, but the cost of not is far greater.

We do recycle.

By 10:30 in the morning, the trash can in room 303 contained several recyclable items: two coffee cups, a plastic tea container and two yogurt cups with their sides slathered with white yogurt. Unfortunately many recyclables do end up in CHS trash cans. Why? Students responses include: it's easier, there's nowhere to wash recyclables, they don't know what they can recycle. And, then there's the rumor out there: Nothing gets recycled anyways.

However, the rumor isn't true.

Zingerman's and Community High share their trash, recycling and compost. Around 2010, Dean Jen Hein and Zingerman's signed a contract that renews every five years. Zingerman's keeps their dumpsters on the CHS parking lot, and in return, CHS gets to recycle for free.

Nancy Rucker, the facility manager at Zingerman's Delicatessen insists that Community is part of their recycling program, and said emphatically, "We do recycle!" The recycling goes from the CHS lot to a space on Platt Road where it is put in large trailers and hauled to Ohio to be sorted at the Rumpke recycling facility.

Despite there being systems in place, there is still confusion about them within the walls of Community.

"I have no idea where to put glass bottles," said Sam Fader, CHS freshman. "So I just set it next to the recycling bin." This feeling of unclarity when it comes to what you can recycle is common among students and staff at Community. Another CHS freshman, Ava Tiedemann said she just holds onto glass bottles until she gets home.

"Yes, this is the real deal," Rucker said. The recycling that CHS shares with Zingermans is called mixed stream recycling. This means all cardboard, paper, glass and cans can all go in together in the recycling dumpster.

"I don't recycle the little plastic containers [with food in it]," Fader said. "Because then I would have to wash it and I don't want to wash because going into the bathroom with some old food thing is a little weird."

Rucker thinks that it's always been true that recycling needs to be cleaned out. Someone from the city once came to Zingerman's to talk about when one piece of recycling is not clean, it contaminates the whole load of recycling. "It was in the news not that long ago that China was refusing some of our recycling because they were saying it's too dirty. I would hate to think I did that"

Miles Durr, a junior at CHS, thinks that Community does an overall good job on providing the means to recycle, but thinks it needs to be more consistent. "They have many places to be able to recycle, but it's not a set system. I feel like the locations of each recycling bin are always changing." Durr usually stops by the bathroom if he needs to rinse something out, but admits how much extra effort that can be. "I hope that they will be able to find a system that works for everybody, wherever you are in the school." ©

FIVE THINGS YOU CAN'T RECYCLE

Infographic by Loey Jones-Perpich

FOOD WASTE

WHEN IN DOUBT, WASH IT OUT

When food containers are put in the general recycling stream with food waste still on them, they will immediately be thrown out. Even worse, they run the risk of contaminating other items, leading to them being sent to the landfill. If you can wash the food out of the container, always do it, but items like greasy pizza boxes have to be put in the trash.

PLASTIC BAGS AND FILM

SOFT PLASTICS? FIND A SPECIAL BIN

Soft plastics, which include bubble wrap, plastic bags, or plastic wrap — anything you can crumple into a ball— may get caught in the machinery at a recycling plant, and therefore aren't accepted in Ann Arbor curbside recycling. Grocery stores such as Kroger and restaurants like Zingerman's have special soft plastics recycling bins, where you can unload your plastic bags without sending them to the landfill.

STYROFOAM

IF IT CAN BREAK APART, THEY DON'T WANT IT

Styrofoam and other packaging materials can break apart in the recycling stream and actually contaminate other items, therefore sending them to the landfill. To recycle your styrofoam items, you can take them to the Recycle Ann Arbor Drop-Off Station, where they'll be recycled separately.

LIGHT BULBS

LIQUID CHEMICAL CONTAMINATION? NO THANKS

If light bulbs are recycled, they can break apart in the recycling stream and contaminate other items with their chemicals, which include mercury. However, these items should never be put in the trash. You can drop old ones off at the Recycle Ann Arbor Drop-Off Station.

CLOTHING AND FABRIC

KEEP YOUR CLOTHES OUT OF THE RECYCLING

Ann Arbor curbside recycling is meant for clean paper, plastic and glass. Anything else, especially breakable items like textiles, can contaminate the stream. If you don't want your old clothes anymore, it's recommended that you repurpose them or donate them to a local thrift store.

WANT MORE INFORMATION? VISIT RECYCLEANNARBOR.ORG

VISIT THE RECYCLE ANN ARBOR DROP-OFF STATION

2950 E Ellsworth Rd.
Ann Arbor, MI
48108



From the Eyes of a Science Teacher

BY LILY MCCREADY

Marcy McCormick is fearful of the future. She is concerned about her children's futures due to the quickly changing climate.

"I want them to know a world where they're not fearful of the climate and what's to come," McCormick said. "I want to be able to go to Glacier National Park and have them actually walk on glacier ice, as I did growing up when I took a trip to Switzerland and was able to walk in the Swiss Alps. It just brings tears to my eyes to think that my children will grow up in a world where that has all changed."

McCormick teaches her children to take care of their environment and the Earth is not something to be walked all over with-

out giving anything back to; it is a place that should be respected.

In McCormick's personal life, she is considerate of her own effects on climate change. Whenever it's possible, she takes public transportation, walks or bikes. She gives thought to her personal contributions to carbon dioxide emissions when purchasing cars, among other things. Her family tends to eat a mostly vegetarian diet. On voting day, she votes for people who will make changes and work to combat climate change in Washington.

"I think the more informed people are, the better decisions they can make as they're getting older and ready to start voting," McCormick said. "I think at this point the big-

gest impact people can make is at the ballot box, voting in leaders and politicians who are going to make legislative change."

For years, she has worked to inform students about this pressing issue. Students who have McCormick for FOS 1 spend around a month studying climate change. They learn about how humans influence the climate and the major effects on our society; they then complete an alternative energy plan for a certain region of the U.S.

"I feel like what I can do is emphasize the science is there, the evidence is there," McCormick said. "There's very little or no doubt within the scientific community about human influence on climate change."

McCormick also emphasized how events



that are similar to the ongoing Australia wildfires have been predicted and they are unfortunately not too surprising.

“It’s scary how much devastation is occurring and how much carbon dioxide is being emitted from those fires, and the loss of habitat and animals,” McCormick said.

When it comes to natural disasters, including the Australia wildfires, media coverage seems to dwindle after a week or so. Yet that does not mean the fires have ended, the droughts are over, the floods have disappeared or the earthquakes have stopped. McCormick spoke about how major media outlets will shift from story to story not only to inform but mostly for ratings.

“I think that’s on us as individuals,” Mc-

Cormick said. “We have to demand more from the media and not let them tell us when a story is over or when it’s not important to talk about anymore.”

In today’s world, McCormick points out the current and younger generations will need to step-up in the coming years. While there are things older generations can do to fight climate change, including starting the battle against the fossil fuel industry, there is a need for leadership from younger generations, people who can take charge of the movement to stop our changing climate. ☺

Photography by Theresa Erickson | LEFT: Marcy McCormick and her two children looking out at Lake Michigan in Ludington State Park. McCormick and her family spent four nights backcountry camping. “You are basically on the sand dunes all by yourself,” McCormick said. “There are eight campsites, you feel secluded. It’s great, you are right off Lake Michigan.”

Photography by Theresa Erickson | TOP RIGHT: McCormick and her kids pose for the camera in front of a magical find. They visited Croton-on-Hudson, a town on the Hudson River, where they found this waterfall.

Photography by Theresa Erickson | BOTTOM RIGHT: Marcy McCormick after hiking in Sugarloaf Mountain. “This is some of the oldest exposed bedrock in North America, in the upper peninsula, in Marquette,” McCormick said.

In Action

Naina Agrawal-Hardin

BY ARISTA LUONG AND SCARLETT LONDON

Naina Agrawal-Hardin is a teenage activist from Ann Arbor. After years of local and individual action, she decided to start working at a national level with the Sunrise Movement.



When young Naina Agrawal-Hardin realized there was no recycling bin at Starbucks, she took matters into her own hands. Armed with a cardboard box, she tirelessly stood outside the door, asking customers to put their recyclables inside. All her life, she has composted, recycled, joined sustainability clubs and picked up litter outside her middle school.

“I was doing all this individual action,” Agrawal-Hardin said. “But I knew it was never going to be enough.”

On March 15, 2019, Agrawal-Hardin helped organize the Global Climate Strike. This was her first time organizing such a highly-attended event. Because of her involvement, she was thrown into a whole new world of connections and communication. This is when she first heard about the Sunrise Movement.

The Sunrise Movement involves young people who all have the same goal: stopping climate change. They have created millions of good jobs in the industry of sustainable energy.

“There are over 300 Sunrise clubs in communities across America who are working towards a Green New Deal at the local level,” Agrawal-Hardin said. “There’s also a national team that provides resources to the people organizing on the ground across the country and engages with politics at the national level.”

After attending her first Sunrise meeting, Agrawal-Hardin felt like she wasn’t alone in this fight.

“I felt like I was in a space full of people who had a plan to win against the climate crisis,” Agrawal-Hardin said. “It was so exciting because it finally felt achievable.”

Agrawal-Hardin is a junior in high school and as she is beginning to look at colleges, the looming threat of the climate crisis is always a primary factor in her decisions.

“When I think about where I want to apply, one of the first things I think about is ‘is this place going to be underwater in a couple years?’” Agrawal-Hardin said. “Is this place going to become increasingly dry and have drinking water shortages, or is this place going to have increased earthquake activity or hurricanes in a couple of years?”

The next chapter of Agrawal-Hardin’s life is very much connected to these issues, both on a small scale and a large scale. For example, a warmer planet is a “breeding ground for germs,” and the amount of diseases that will increase with the rising temperature is substantial.

“The consequences of inaction are so far reaching,” Agrawal-Hardin said. “Every as-

pect of our society is going to be so drastically different.”

As the youth movement sweeps over our nation, many older people are left wondering how they can show their support.

“I would say one thing for older people who have more financial privilege to do is donate, because almost all of these organizations that I work with are funded exclusively on grassroots fundraising, so even small donations are helpful,” Agrawal-Hardin said. “When you’re donating to a youth movement, your money is going directly into the hands of someone who’s out knocking [on] doors every single day, or someone who has dropped out of school to fight for their future.”

The other thing that adults can do to help is to talk to youth activists. The youth movement cannot win without some outside support; they need the help of their adult allies to vote for someone who will prioritize climate change.

“We know that young people demographically are more progressive than older people, and we know that young people are more in favor of aggressive climate action,” Agrawal-Hardin said. “But we need older people to get on board in order to win — especially in the lead up to the 2020 election.”

One of the essential tasks in reducing the amount of fossil fuels being used is to stop the influence of fossil fuel funding in politics.

“It’s important to get as many candidates as we can to take the no fossil fuel money pledge saying that they won’t accept contributions from fossil fuel CEOs,” Agrawal-Hardin said. “Statistically what we’ve seen is that politicians who do take money from those corporations are significantly less likely to advocate for policies that are going to stop climate change.”

But once candidates are on board with fighting climate change, what is the next step? Bernie Sanders is the candidate Agrawal-Hardin feels will answer this question.

“I am mobilizing for senator Bernie Sanders,” Agrawal-Hardin said. “This is because of his record of consistency — not only in environmental justice but also racial justice, economic justice and a whole host of other issues that I know are really deeply tied to climate change. I think he also has the most ambitious climate plan.”

The Green New Deal — Sanders’ climate plan — is a proposed package of U.S. legislation that aims to deal with two twin crises of economic inequality and climate change.

“The idea behind it is that we transform our economies from fossil fuels to renewable

energy sources within the next decade,” Agrawal-Hardin said. “And in the process we employ tons and tons of people to do things like retrofitting buildings and building windmills or maintaining solar panels or whatever it might be.”

The strategy of taking workers away from the nonrenewable energy industry and employing them in environment orientated organizations will boost the economy and play a role in stopping climate change. But the Green New Deal will only do so much. A huge amount of individual action is key to ending the climate crisis. This can be hard, as plastics and fossil fuels are such a huge part of the economy today. Many teenagers want to help, but don’t know where to start. Agrawal-Hardin believes that one of the most important things to do, especially this year, is to have conversations with family and friends.

“Talk about why you want them to vote for a climate champion in the 2020 election, why you want them to mobilize before the 2020 election,” Agrawal-Hardin said. “And why comprehensive climate action is so important to our generation.”

The other important thing to do is to show up.

“Come to a meeting!” Agrawal-Hardin said. “There’s going to be a coalition of groups, including Sunrise and a bunch of local organizations, starting to meet regularly in the next couple of weeks to start planning the Earth Day climate strike. You can totally join an organization, even if you have limited time!”

Joining the Sunrise Movement made Agrawal-Hardin feel like she was making a difference.

“The strategy that Sunrise uses just clicked so well for me, and I was really able to see how what the organization had done had been effective,” Agrawal-Hardin said. “What we are planning to do in the future is going to be effective, and that was demonstrated really well.”

They have already had several victories. One that was especially empowering for Agrawal-Hardin was the climate town halls, which all of the major candidates attended and spoke at. They were posted because of direct pressure from young activists, like Agrawal-Hardin. This victory for the movement showed how important activism is — even for people that can’t vote. Climate change impacts everyone, and whether it’s joining an organization or putting recycling bins outside of stores, everyone needs to do their part for there to be a future. ☺

Climate Judgement and Justice

Our individual actions won't save the planet, but together we might have a shot.

BY RUBY TAYLOR

Against the backdrop of melting glaciers and raging wildfires, the easiest thing is to be angry. And we should be angry — really angry. But we're angry at the wrong people. The problem isn't the person who uses a paper coffee cup everyday, nor is it the one who brags about their metal straw but eats factory farmed meat. The problem is the big corporations who are burning greenhouse gases and producing single-use plastics, and even more inexcusably, the laws and government that are protecting them.

According to The Natural Resources Defense Council, just 100 companies are responsible for more than 71% of climate change, and the top 15 U.S. food and beverage companies emit more than 630 million tons of greenhouse gases every year. With these statistics in mind, it's easy to feel small and hopeless.

Given that most of us don't come face-to-face with Mike Wirth (CEO of Chevron, net worth of \$28 million, responsible for more than 43 billion tons of CO₂ emissions each year), or Rex Tillerson (former CEO of ExxonMobil and former Secretary of State, net worth of \$300 million, responsible for nearly 42 billion tons of CO₂ emissions each year), we often choose to direct our climate anger at, well, normal people. Non-multi-millionaires who are roped into a system where it feels more expensive to help the planet than to hurt it.

And sure, it can be a little blood-boiling when your friend boasts their reusable coffee cup but drives a gas-guzzling car to school everyday. But the reality is, your friend could

drink solely from a Hydroflask or use 12 throw-away cups a day, and on a larger scale, it wouldn't change a thing. Judging people in your life for the way they address the climate crisis on an individual level is nothing but counterproductive. What you should be judging, and heavily for that matter, is the system which makes this behavior so easy and hard to avoid.

Telling someone that their efforts are too small, that all or nothing is the only way, results in less action, not more. We should be proud of the small efforts people are making, and encourage them to do more — to work together to create systematic change. Pretending that recycling and thrifting will save our planet is detrimental, but undermining the validity of these actions as a starting point is too.

If all that we normal people do is skip a straw or participate in Meatless Mondays, our planet is not going to survive. So what can we do to encourage our well-meaning friends to take bigger, more meaningful steps towards tangible change? Speak out for the Green New Deal. Disrupt business as usual until your representatives can't ignore you. Work together and organize to create a livable future. Educate yourself. Educate others.

So to those of you who slurp through your metal straws everyday, thank you for taking that important first step. Thank you for making that effort. Now let's work together to do more. Let's not judge each other for trying. Let's join each other and try harder. ☺

Vegan Profiles

BY GENEVE THOMAS-PALMER AND ELIZABETH SHAIEB



JONATHAN THOMAS-PALMER

“I had considered going vegan for a while, maybe even up to a year, and just hadn’t done it because it seemed like it was going to be difficult,” Jonathan Thomas-Palmer said. “And honestly, it wasn’t.”

Thomas-Palmer’s entire immediate family is vegan; he was the last one to transition to a vegan diet from one that included animal products about one month ago. He took this step towards veganism because of the positive effects a vegan diet would have on his health and on the planet.

“The truth is that you don’t need any [animal products],” Thomas-Palmer said. “You can get all the nutrients you need from a plant-based diet. If people knew more about where their food comes from and saw how the animals are treated and processed, they would have a different perspective on how [the meat industry] works. I think that as Americans, we are divorced from the way our food is made. [Since] we don’t see it, we don’t think about it, and it doesn’t affect our food choices, but it should.”

Living with people who are also vegan has supported this transition because there are no longer animal products in the house. When he first went vegan, the people in his family had all been vegan for varying lengths of time. They all went vegan “cold turkey” and just stopped eating animal products one day, but this meant there were bits of remaining products like cheese, chicken and eggs left in the house.

“[Since] my choice [to go vegan] was based on planet health, throwing away all the food in our freezer and fridge didn’t make sense to me,” Thomas-Palmer said. “I

slowly ate the foods that were non-vegan. It was really interesting that even though I was eating [the products] slowly, I started to dislike the foods that I was eating and I didn’t finish the cheese or the chicken in our house. By not eating it most of the time I realized that I didn’t want to eat it at all.”

RYAN THOMAS-PALMER

“When I was in Costa Rica, I ordered sushi, and I specifically said no meat and no fish. Sushi doesn’t normally have dairy, so [I thought] it’d be okay, but they gave me chicken because it wasn’t red meat or fish,” Ryan Thomas-Palmer said.

Two months prior, Thomas-Palmer’s mother showed the whole family a documentary on the health benefits of going vegan and how dairy is processed — which Thomas-Palmer said she found “disgusting.” She’s been very strict about eliminating animal products from her diet ever since.

“I’m very picky with eating and basically everything,” Thomas-Palmer said. “And I saw how they make the cheese and what comes out of the animals and the pus and everything that just goes into it, and it really grossed me out.”

Being vegan can make Thomas-Palmer feel socially separated. Food plays an important role in many social events, and not being able to take part in eating can isolate vegans.

“I don’t miss ice cream, but at camp, the first night we have ice cream sundaes for dessert,” Thomas-Palmer said. “If you win camp inspection, then you get to go out for ice cream. And then in the summer it’s a thing to go to Dairy Queen or Washtenaw



Dairy to get ice cream with your friends.”

JERI SCHNEIDER

Jeri Schneider first went vegan in 1997. Over the years, she’s seen the culture of plant-based eating change drastically: There was only one vegan cheese, and it was unappetizing; soy milk was the only non dairy milk; only specialty stores sold vegan ice cream, and it didn’t taste good. Now, there are all sorts of plant-based products for vegans to enjoy.

One of the main reasons that Schneider cut out animal products was to protect the environment and minimize her impact on the climate.

“The environment was a driving factor,” Schneider said. “I think that the animal torture was the biggest [motivator] at that point in time, but going vegan would help not only stop animal suffering, it would also be better for my health, and it had the bonus of being better for the environment.”

Schneider believes that veganism can have a dramatic effect on the planet. If everybody were to go vegan, she said, climate change might not be stopped, but a significant decline in the use of animal products by society will help.

Schneider sees an issue of perspective with some people who decide against veganism.

“People often think about what they have to give up,” Schneider said. “I think it’s better to focus on what they can take in. So rather than thinking, ‘I can’t eat meat,’ think about all the other non-meat options that are out there: there are all kinds of vegetarian burgers; you could go to Burger King and get a vegan Whopper.” ©

Environmental Consequences



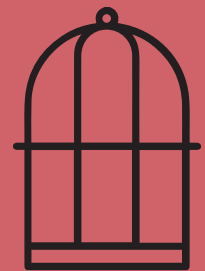
Using up resources: The amount of land being used to raise animals for meat and dairy is disastrously immense. According to the Smithsonian, seven football fields of land are bulldozed to create room for livestock every minute. But land isn't the only resource being used in large proportions to raise animals; in the U.S., pigs raised for slaughter consume tens of millions of feed every year, and each pig drinks an average of 21 gallons of water every day. Water is also used to create other food, but making meat and dairy requires much more water than non-animal products. For example, it takes 2,400 gallons of water to produce one pound of cow flesh, but only 180 gallons of water to make the same amount of whole wheat flour.

Air pollution: According to the Environmental Protection Agency, animal agriculture, forestry and other land use are the cause of 24% of global human-induced greenhouse gas emissions, second only to electricity and heat production at 25%. Factory farming plays an enormous role in speeding up climate change: creating just two pounds of beef generates more greenhouse gas emissions than driving a car for three hours, and a California study found that dairy farms are the largest source of smog-producing gas. But the air pollution caused by factory farming isn't just increasing emissions. Animal feedlots produce dust particles containing bacteria, mold and fungi. A report by the California State Senate said "studies have shown that [animal waste] lagoons emit toxic airborne chemicals that can cause "inflammatory, immune, ... and neurochemical problems in humans."



Water pollution: The largest source of pollution in our waterways is agricultural runoff — manure, often containing dangerous bacteria and drugs, that was used to fertilize crops but runs off into nearby lakes, rivers and drinking water. Runoff floats from farms to the Mississippi River, and is then deposited into the Gulf of Mexico. Nitrogen in the runoff causes an increase in algae, which destroys the ecosystem and eats up large amounts of oxygen, making it harder for other life forms to survive. As a result, a large dead-zone has surfaced in the Gulf of Mexico, where little sea life remains. A report by Princeton University concluded that the dead-zone could be reversed if Americans avoid animal products.

Animal cruelty: Often, factory farms strive to produce the most meat and dairy for the least amount of money, which means that they don't always keep their animals' best interests in mind. Many animals that produce dairy or meat for human consumption are abused: some are kept in small cages where they are unable to turn around and suffer from exercise deprivation, some fed fattening drugs, some genetically manipulated to grow faster and produce more food. Labels such as free-range and organic can be misleading, as they don't track the treatment of animals while they are transported or slaughtered.



Methane: According to Vox, there are currently an estimated 1.4 billion cattle being raised for livestock. All these cows expel a lot of methane in the excess gas they produce during digestion; a single cow produces an average of 155 to 265 pounds of methane every year. Methane is 84 times more potent than carbon dioxide, which means as a greenhouse gas, it is significantly contributing to climate change. A report by the EPA shows that livestock production is responsible for 9% of total greenhouse gas emissions.



RESPONDING TO DISASTER

When environmental tragedy strikes, what do we do?

BY ELIOT KLUS

On Interstate 696 near Madison Heights, a strange, yellow ooze seeped out of the sidewall of the expressway. A dilapidated factory loomed above and residences lay nearby. That morning, commuters began to call Macomb County emergency services, and by the afternoon, first responders had reached the scene. Regulators had already recognized the abandoned factory for mismanagement of toxic industrial chemicals: its owner had been in prison for months. That didn't seem to make a difference, as on Dec. 22, 2019, hexavalent chromium — a toxic and carcinogenic chemical — had reached the groundwater. People demanded answers.

“A lot of time when there’s an immediate problem, people want an immediate solution,” said Dan Sopoci, an associate scientist at environmental agency Tetra Tech. “They want the problem identified today. And they want something done about it today.”

Sopoci has worked on clean-up cases like the hexavalent chromium spill and is familiar with what it is like to deal with the public fallout.

The Flint Water Crisis, a lead poisoning epidemic in Flint, Mich., achieved national recognition as an absolute failure of civic management and government accountability. The lead-contaminated

water had been poisoning the populace for months before it was discovered, affecting school performance and causing several deaths. People inside and outside the community reacted with outrage. The nation demanded a solution and accountability, but science doesn't always work on that timescale.

“It just takes time,” Sopoci said.

Sopoci understands the public's outrage and sympathizes with it, but immediate response isn't always possible. With constant underfunding of environmental causes, the little money allocated for it must be used in the most efficient way. This often means a more methodical approach; rushing it can lead to incomplete or unsatisfactory results. But Sopoci says the public aren't the ones to be blamed for the pressure put on scientists. Speaking on the recent PFAS scare in Washtenaw County, Sopoci explains how the political system allowed it to happen.

“PFAS was developed in a lab back in the 1930s or 1940s, and we found out it's a great water repellent,” Sopoci said. “We just started using these chemicals like crazy unbeknownst to the public. The public often doesn't know what chemicals are being used on a day to day

basis in our products. And it's often the science that catches up later; people start getting sick and then we start asking the question, 'Why are we getting sick?' It takes a long time to pinpoint the molecule that is making us sick, the chemical reaction and how that molecule reacts with us, with all of the different inputs. With all of our daily lives, it's very hard to zero in on a specific chemical compound that is causing this negative effect."

Decades after PFAS was introduced, the effects of the pollution were seen in contaminated wildlife and waterways. The cleanup is expensive and ongoing. When the risk first became known, the government was forced to determine safe PFAS contamination levels, but without long-term studies it is difficult to ascertain what that is, leaving property owners to ask themselves: 'How clean is clean?'

If these considerations were made when PFAS was introduced to the market, it's possible the problems would never have occurred. PFAS was allowed in the public market with minimal testing in order to quickly recoup the investment made in creating it. Industry was the cause of this, but the government allowed it to happen.

"I believe that we, as a culture, value economy over health," said Sopoci.

Profit and environmental safety are often conflicting interests, leading industry to dodge the clinical trials needed to keep the public safe. So how do we ensure the environment and those who depend on it are protected? Sopoci is hopeful in this regard.

"CEOs today, business owners today, are starting to take a longer

view in their calculus and being more proactive and seeing environmental stewardship as an economic gain for that company," Sopoci said.

Sopoci is a frequent mediator between regulators and business leaders and has seen a shift. The balance between environmental consciousness and the want for profit has been, in his experience, gradually improving.

Even with these improvements, Sopoci has no illusions about industry's self-accountability. In the case of the hexavalent chromium spill, the illegal dumping still has the potential to seriously hurt people. According to Sopoci, political engagement is the best way to manage these man-made disasters. Misunderstanding and irresponsibility have characterized human-environment interactions, but the choice to continue these lies with the people.

Regulation is the surest way to keep companies in line, and Sopoci says the best way to get legislators to act in the interest of the people is to make sure the right ones are in office — "Please vote." ©

Photography Courtesy of Dan Sopoci |

LEFT: An asbestos abatement worker demarcates a contamination area in an old manufacturing plant. Many abandoned factories in industrial America were built with toxic materials and abandoned, like in the case of the hexavalent chromium spill.

BELOW: Contaminated soil is removed for road repair. Often toxic material in the groundwater must be removed before work is done.

