

SPRING 2021

TIGERS GO GREEN BLOG RECAP



Join us for a fun celebration of all our favorite blog posts from this semester!



Letter from the Lead Editor

Hello and happy end of the semester!

It goes without saying that we've all been through an absolutely crazy spring season. Whether we were on campus, off campus, or spread across the world, whether we were teaching, learning, or working, we've all faced unanticipated and extraordinary challenges in the midst of this semester. However, we've also learned to adapt, protest, process change, and find new ways to connect. For me, the Tigers Go Green blog has offered a way to do all of these things in a less than ideal situation. We've learned to make do with what we have with Level Up You Leftovers. We've learned to call attention to environmental disparities with the Environmental Injustice Series. We've learned to focus on positive progress with Good News Fridays. We've learned to appreciate the people and places around us with the Science of Sustainability and Plant-Based Food Tours. There are so many more amazing articles that I would shout out if I had the space.

But most importantly, I want to thank you, dear reader, for sticking with us through it all. Whether you're a regular reader or this is your first article, I appreciate the time you've taken to be a part of our journey. We'll be taking a semi-break from the blog during the summer, but we'll pick up right where we left off next fall. Here's to hoping that you'll stay around for the next chapter and that it'll be a smoother ride!

Sincerely,
Grace Liu '23
Lead Editor

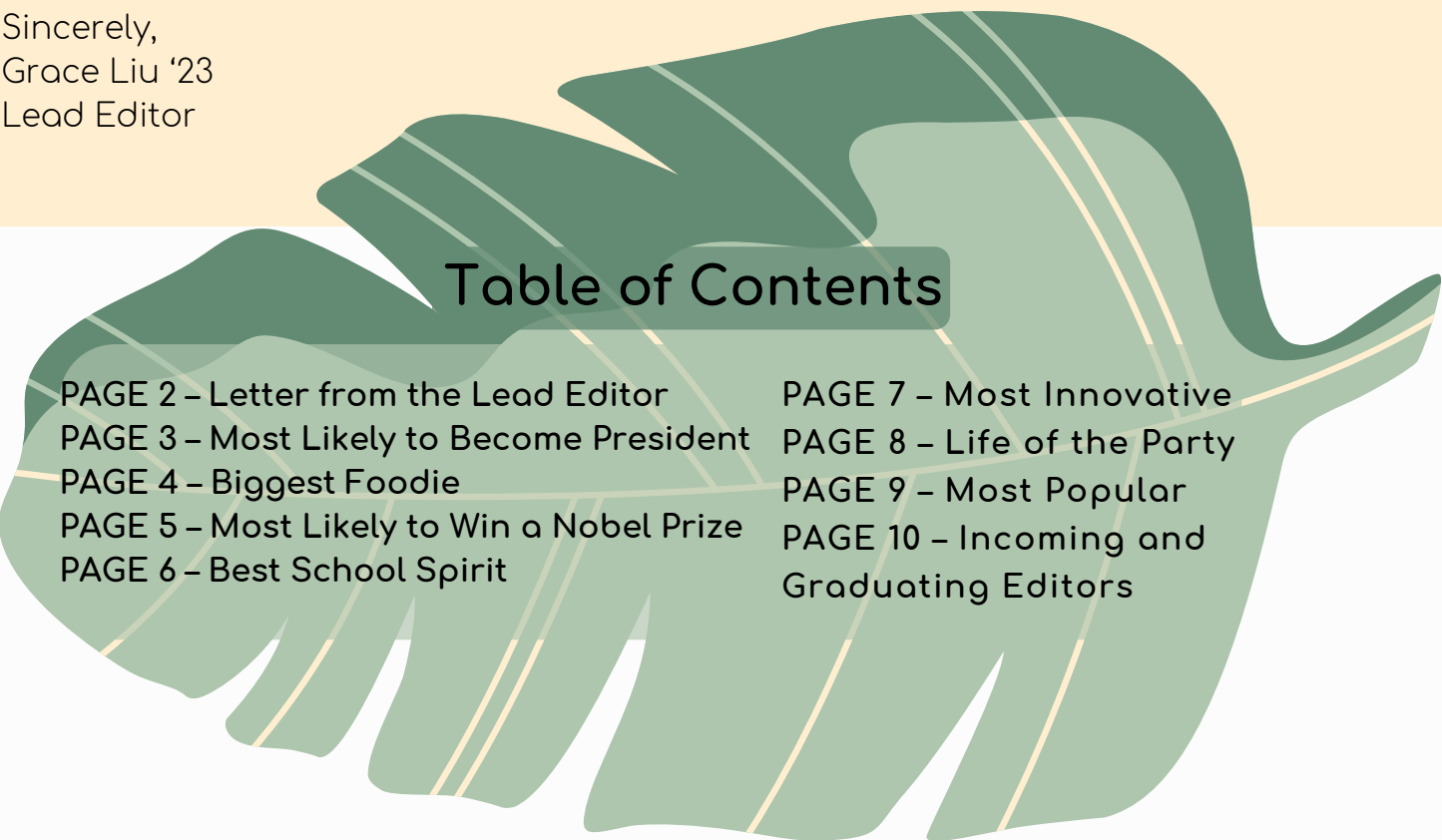


Table of Contents

PAGE 2 – Letter from the Lead Editor
PAGE 3 – Most Likely to Become President
PAGE 4 – Biggest Foodie
PAGE 5 – Most Likely to Win a Nobel Prize
PAGE 6 – Best School Spirit

PAGE 7 – Most Innovative
PAGE 8 – Life of the Party
PAGE 9 – Most Popular
PAGE 10 – Incoming and Graduating Editors

Most Likely to Become President

Environmental Injustice – Disproportionate Environmental Burdens in Princeton and Trenton

Francesca DiMare '23

One of the defining features of environmental injustice is that disadvantaged communities often take on a disproportionate share of environmental impacts, despite not being at fault. This unfortunate trend can be seen on a very local level by comparing Trenton and Princeton.

Though only a 20-minute drive apart, these two communities have tremendously different levels of privilege and share very different levels of environmental burden. This post will use US Census Data and the EPA's EJSCREEN – a tool designed to facilitate environmental justice mapping and screening – to explore this trend.

The difference between the number of people of color and the median income in Princeton and Trenton is stark. Some key statistics, including the percentage of Black or African American people, the percent of people of Hispanic or Latino origin, the percent of persons in poverty, and the median family income, have been summarized in the table below.

Princeton and Trenton Demographic Comparison

	Princeton	Trenton
Black or African American, percent	5.7%	49.5%
Hispanic or Latino, percent	7.5%	38.1%
Persons in Poverty, percent	7.8%	28.7%
Median Family Income	\$137,672	\$35,402

Source: [US Census 2019](#)

As seen above, Trenton has more than 8 times a greater Black population than Princeton, and nearly 1/4th the median family income. Unfortunately, it is communities like Trenton that are low income and underrepresented populations which often face the brunt of negative environmental impacts.

EJSCREEN pools publicly available data to explore the intersection of environmental and demographic indicators. Of the program's 11 environmental indicators, 5 revealed immediately visible differences between Princeton and Trenton. I generated maps to highlight these differences, which can be viewed in full at the end of the document.

In short, Trenton residents face an increased potential for lead exposure, an increased risk of being exposed to an accidental chemical release, higher levels of diesel particulate matter in the air, increased negative impacts of living near highly trafficked roads, and an increased chance of encountering hazardous waste due to proximity to a hazardous waste treatment facility. Additional information on these environmental indicators can be found in the technical documentation for EJSCREEN.

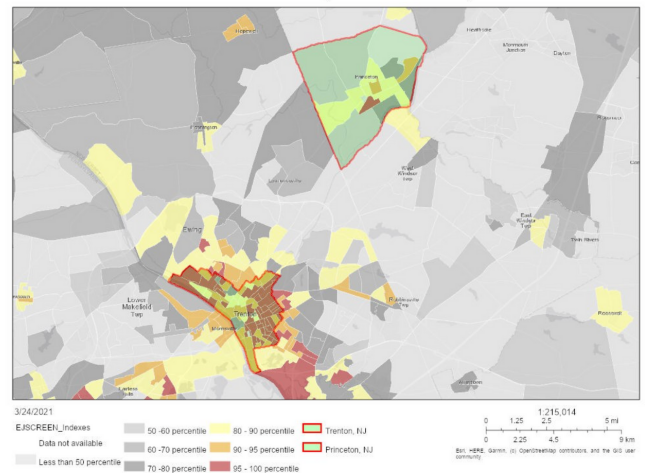
All of the disproportionate environmental burdens mentioned are associated with adverse health effects, such as increased risks of cancer, cardiovascular disease, neurological damage, and more.

Unfortunately, Princeton University is not guiltless when it comes to this environmental justice issue. The waste we produce across campus is sent to the Trenton area landfill, and our tiger transit buses are stored in Trenton overnight without servicing any communities along the way. In this way, we are directly contributing to the disproportionate environmental burden between Princeton and Trenton. To Princeton students, waste magically disappears after it is thrown down a trash chute or collected by Facilities staff. Unfortunately, this is not the case for the people who live near these landfills and must face all associated environmental and health impacts directly – even when it is not their waste.

As the university rapidly develops and expands, it is becoming increasingly urgent to recognize and address our shortcomings when it comes to environmental justice. We should be supporting and uplifting nearby communities – not standing in their way.

There is undoubtedly a long way to go in tackling the disproportionate environmental impacts faced by underrepresented communities. The Office of Sustainability recently released a draft environmental justice framework, which lays out short- and long-term action items for addressing environmental justice issues. The framework also invites feedback from all members of the campus community. This call to action is a start, but we are only at the beginning of a very long road, and making progress will require many different perspectives.

Lead Paint Indicator (National Percentiles)



The potential for lead paint exposure is based on the number of occupied housing units built before 1960. Elevated blood lead levels are a known public health concern that can cause neurological damage and more.

See MORE images here!

<https://tigersogreen.princeton.edu/2021/03/environmental-injustice-disproportionate-environmental-burdens-in-princeton-and-trenton/>

Tiger Noodles – Most Variety of Tofu

Price: \$
Bang For Your Buck: ★★★★★
Creativity: ★★
Plant Forward: ★★
Taste: ★★★★★
Ease of Access: ★★★



My dinner tonight was General Tso's Tofu with steamed rice and a scallion pancake. I wanted a plant-based entrée that had some protein in it, which limited me to rice with tofu. Still, there were a whopping eight (!) tofu options in total to choose from. Luckily, my (ethnically Chinese) roommate quickly came to my rescue and advised me on General Tso's and also told me to try the scallion pancake. I was very happy with the tofu: fried to a perfect golden spot between crunchy and chewy, its crust scooped up the sweet, sour, and slightly spicy sauce, leading to mini flavor-explosions in my mouth as I bit into it. The steamed rice served well to balance out the intense flavor of the sauce. As for the scallion pancake, my roommate – a harsh critic of Chinese cuisine – declared it non-authentic, but it still hit all the right dopamine-triggering buttons in my brain by virtue of being fried dough. I would highly recommend Tiger Noodles if you are looking for a wholesome and tasty, yet inexpensive, lunch or dinner experience, and if you are on campus, you get a nice ten-minute walk in! The restaurant does not seem to be very vegan/vegetarian-oriented though, so maybe not the best if tofu or avocado sushi are not your plant-based thing. Still, dinner at Tiger Noodles was a blast for me, and you should consider coming to support a Princeton business! (I will probably be back to try more varieties of tofu).



Get more PLANT-BASED content!

<https://tigersgogreen.princeton.edu/category/sustainable-living/plant-based-food-tour/>

Biggest Foodie

Plant-Based Food Tour: Noodles and Pasta
Greening Dining

Lil Thai Pin- Most Vegan Options

Price \$\$
Bang For Your Buck: ★★★★★
Creativity: ★★
Plant Forward: ★★★★★
Taste: ★★★
Ease of Access: ★★★★★



I ordered the edamame appetizer, the Vegetable Pad See Lew and the Vegetable Lo Mein Lover. I was super impressed in general with how many vegan/vegetarian options and alternatives there were on this menu! Almost every item has the option of being made vegan and that warms my heart. The edamame appetizer was a classic and for the price, they give you so much! For the entrees, the Vegetable Lo Mein Lover was definitely my favorite of the two. It came with broccoli, onions, and tofu and while the flavor wasn't overwhelming, it was perfect for a grab and go bite that filled me up. The Pad See Lew came with bok choy, baby corn, and Chinese broccoli. Typically, Pad See Lew is one of my favorite dishes to get at Thai restaurants, and while I really appreciated the restaurant having an automatic option to leave out the egg, I don't feel like the dish was packed with strong flavor. The service was super speedy and conveniently located right next to my apartment, and I ordered through the snack pass app which allowed for no waiting time at the restaurant, which is everything I could ask for in COVID times! I really appreciate how conscious Lil Thai Pin is to offer plentiful vegan options, and with its convenience I will definitely be going back!

*** We are not food critics, but food enthusiasts. This is in no way intended to be a formal critique or review of any restaurant in Princeton, merely a way to encourage students to try more plant-based options when dining out.

Most Likely to Win a Nobel Prize

The Science of Sustainability: Paul Chirik Ethan Sontarp '24

In its current state, only a fraction of the plastic types we use on a daily basis is actually recyclable, accounting for an 8.7% recycling rate. While the process may be limited, sustainability researchers have been working to make improvements in the materials we recycle in order to reduce our consumption of single-use plastics. In this interview, I discuss the chemistry of recycling with Paul Chirik, Edwards S. Sanford Professor of Chemistry, whose lab recently discovered a plastic material with the potential to be recycled more effectively.



Image Credit: Paul Chirik via <https://chirik.princeton.edu/>

Could you give a brief overview of your current research?

So, what I do is I study catalysis. That's a key component of sustainability because what catalysis does is by definition it makes chemical processes use less energy. The question we asked is: Is catalysis as sustainable as it can be? That's the cool part of sustainability research – you can always do better. You can always save a little bit more [energy] here and there. One of the big things we've been after for a long time is that we've looked at the way people use catalysts; usually, they're based on rare elements like platinum and palladium (all the stuff in the catalytic converter in your car). Nobody would argue catalytic converters are bad, they've completely cleared up the air and the environment from car exhaust, but at the same time, we're using elements that come out of mines that have really huge carbon footprints. So, the [goal] is to use these great catalysts with iron and try to make all these reactions go better with less energy input [and] generate less waste. I think the most exciting thing is that we started doing this trying to make catalysts to insert into existing processes, and then when you start playing with new metals and catalysts, you discover things you never thought you would see.

What is your favorite source of sustainable energy and why?

If you ask me as a chemist where we need to be in 100 years, we need to rely on the sun. It's free, there's lots of it. The problem is we don't know how to do most of [the chemistry] yet. We have a long way to go but that doesn't mean you give up, because it's a really hard problem.

Plastic packaging is made from seven different types and some are recycled more often than others



Image Credit: BBC News via <https://www.bbc.com/news/science-environment-45496884>

What does the current recycling process for plastics look like? How would you like to further improve it?

I think people are now appreciating how bad it is. You know, I actually feel a little guilty as a chemist, I didn't realize how bad it was until we started studying it. I figured every week we put our milk jugs at the end of the curb and they went away and all is well, and you don't realize the percentage of plastic that gets recycled is so low. That tells me there's a chemistry problem here, the biggest part of it is we need new materials. We use a lot of plastic that it doesn't make sense to recycle.

What does sustainability mean to you? How do you engage with sustainability outside of your scientific work?

Sustainability to me means a way of life, right? I think it should be how you interact with the environment around you. Outside of my job, I try to practice what I preach which is looking at how much stuff I throw away, how much I consume [...]. You have to ask yourself what kind of carbon footprint you think you have and compare that to what you actually have. I think the most impactful thing I can do is educate people, because of the kind of science we do.

What are some common misconceptions about energy?

I think the biggest misconception is that people think that fossil fuel is only for gasoline in their car. They don't realize that you cannot live without interacting with multiple products [of fossil fuels], whether it's your clothes or carpets, [even] the food you eat was grown from fertilizer that was made from fossil fuels. Just about every single product you interact with [...] had an interaction or derivation from fossil fuels.



See more SCIENCE in action!

<https://tigersgoogreen.princeton.edu/category/research-highlights/>

Best School Spirit

Keep Sustainability in Mind During Move-In
Pooja Parmar '22

One of the most exciting and stressful days of college is quickly approaching— Move-In. After being off-campus for 1.5 semesters, many of us are looking forward to moving in and reviving our Princeton experience. Even though campus life will not be the same, I know we are looking forward to seeing new faces and taking random walks throughout campus once again. Going into Move-In day with the right mindset could help you start the semester off with the right foot. This is our first opportunity of the semester to help Princeton achieve its zero-waste goal.



Move-Out 2018

The emergency Move-Out in March 2020 exposed how wasteful dorm life can be. While the Office of Sustainability and Building Services staff tried to collect and organize as much of the leftover furniture and materials as possible, due to the rush of Move-Out, much of it was thrown away. To put this into perspective, during the 2019 Move-Out, over 50 tons (equivalent to the weight of about 7.5 elephants) of dorm materials were left behind on campus by students.



Images from 2019 Move-In Resale

The Office of Sustainability's Greening Move-Out program collected, sorted and cleaned about 13.10 tons of items for reuse through the Move-In Resale and donation to local organizations. The rest (about 70%) was sent to landfill due to the poor condition of the item or damage that could have been caused from any stage between drop-off to when it was picked up for donation as well as lack of storage space. Many items are also not able to be donated or recycled such as pillows and comforters. Therefore, without the organization and Greening Move-Out effort, you can imagine the amount of waste that was produced from the emergency Move-Out and the need to reduce the amount of items brought to campus in the first place.

We can do better by making sure to keep sustainability in mind during Move-In. Here are some tips when preparing for Spring 2021 Move-In:

1. Remember to only bring items that you will need. Be deliberate about whether or not you need the same number of items as you did last year when you expected to be on campus for a full year.
2. Pack reusable items such as reusable mugs, water bottles, silverware, or food storage containers as well as supplies to clean them such as reusable cloths and dish soap. This will help reduce your reliance on single-use disposable items especially during quarantine.
3. Think ahead about storage. If you don't think you will be able to store the item for reuse or donation at the end of the semester, reconsider the purchase or just don't bring that item to campus. Remember, you're only packing for ONE semester!
4. Make sure to coordinate with your roommates to prevent duplicates of an item. Coordinating who brings what will lessen the storage burdens on any one roommate at the end of the semester, making it easier to reuse the item.
5. Shop local and buy secondhand. If you absolutely need a certain item for your room, shop local secondhand sources like the Free and For Sale Facebook group, TigerTrade, and Resource Recovery. There are also several secondhand stores in or near Princeton such as the Habitat for Humanity Restore, Skillman Furniture Store, Elephant in the Room Design, and One of a Kind Consignment.

Sustainability is all about building small and manageable habits that you can incorporate into your lifestyle. Treat Move-In as an opportunity to build some new habits into your life and to explore minimalist living and secondhand shopping.

More information about the Spring 2021 Move-In is available on the Undergraduate Housing website.

Most Innovative

Level Up Your Leftovers #1: Cauliflower Jalapeño Soup Naomi Frim-Abrams '23

Welcome to the inaugural post of Level Up Your Leftovers, a series where I (Naomi) take your leftovers and turn them into a refreshed recipe!

First up, we have a submission from Lisa here at the Office of Sustainability. Lisa laments, "I have half a jalapeño left that I can't figure out what to do with! We made tacos a few nights ago and didn't use the whole thing. Would love some ideas otherwise, I can compost it :)" Well I have some good news, as I think I know a recipe that can ease your worries. It's vegan/vegetarian friendly and is packed with hearty cauliflower!



Image Credits: Isabel Eats <https://www.isabeleats.com/roasted-cauliflower-soup-with-fried-jalapenos/>

ROASTED CAULIFLOWER SOUP WITH FRIED JALAPEÑOS

(adapted from IsabelEats)

Serves: 4

Time: ~30 minutes

You will need:

- 2-3 tbsp olive oil
- 0-3 jalapeños, diced, with or without seeds (can substitute with other peppers/hot sauce if needed)
- One large onion, diced
- 2 heads of cauliflower, cut into florets
- 1 tbsp garlic, minced
- 2 ½ cups vegetable broth
- 1 ½ cups milk of choice
- ½ tsp each: dried sage, cumin, smoked paprika*
- 1 dried bay leaf
- 1 tbsp fresh cilantro, chopped + more for garnish (optional)
- Salt and pepper to taste
- Feta cheese, for garnish

*adjust seasonings as necessary

Instructions:

Heat olive oil in a large pot over medium heat. Add diced jalapeños and cook until brown and crispy, around 3-5 minutes. Transfer the cooked jalapeños to a bowl and set aside.

Add the diced onion to the pot over medium and cook until the edges begin to be translucent, about 5 minutes. Add in the cauliflower florets and sauté until they turn brown.

Stir in the garlic as well as all of the dried seasonings. Sauté until fragrant, stirring frequently for about 1 minute. Add the vegetable broth and milk of choice into the pot, as well as most of the fried jalapeños (reserve some for garnish). Cover with a lid and boil until cauliflower is tender, about 15-20 minutes.

Check the soup for seasoning, and add more if needed. Remove the bay leaf. Add in most of the fresh cilantro (reserve some for garnish) and hot sauce to taste. Using a regular or immersion blender, pulse until smooth.

Plate up the soup with feta cheese sprinkled on top as well as the reserved fried jalapeños and fresh cilantro. Eat with a crusty bread on the side and salad for an impressive meal.

Enjoy!

This recipe can be customized in terms of seasonings and spice levels. It can be made completely vegan with the omission of feta cheese.

Some fun facts about jalapeños:

- They were the first pepper to travel into space on the 1982 Space Shuttle Columbia
- They are an excellent source of vitamin C and contain copper, magnesium, vitamins A, E, and K, folate, manganese, fiber, potassium, and iron.
- Surprisingly, a typical jalapeño pepper packs more vitamin C than an orange!
- Incorporating more plant-based foods into your diet is a great step towards reducing your carbon footprint. According to this Economist article, just going vegetarian could cut your food-related emissions by 30%! It's the small steps that count, and dietary changes can make a big difference in crafting a healthier and more sustainable lifestyle.

If you try this recipe, let us know over on Instagram or Facebook. If you want to try and stump me with your own batch of leftovers, send in a submission here! Your recipe could be the next one featured on the Tigers Go Green Blog. Happy Cooking!
Naomi

Level up YOUR Leftovers by
filling out this form!

<https://forms.gle/QwjSZcEmNVtP3ILFA>



Life of the Party

What is the mission of your group, and how has it changed since the transition to virtual college?

Greening Dining works to make the food we eat at Princeton better for the environment, and to educate students about the sustainability of food options on campus. In a normal year, we work regularly with Campus Dining as well as representatives from the Office of Sustainability to reach our goals. Our biggest projects have included creating The Definitive Guide to Being Plant-Based at Princeton, reducing food waste in the dining halls by rethinking the dish and food drop-off areas, and pushing for more plant-based options. Since the transition to virtual college, we have been focusing on increasing awareness about food sustainability in general through our social media.

What is one recent initiative or event that your group has held that you are most proud of?

Last semester, we started a series on the Tigers Go Green blog called Sustainable Meals for Busy Students. Since many students were cooking for themselves, we wanted to share easy recipes that also featured plant-based and/or seasonal ingredients. Examples of our posts include a Southwest BBQ Portobello Burger, Oven-Baked Sweet Potato Fries, and a Vegan Wawa Gobbler Hoagie.



Graphic by Grace Xu '22

Green Group Highlights – Greening Dining
Karena Yan '23, Co-president of Greening Dining



What is one thing that you're looking forward to doing as a group over the coming months?

Since more students are living on campus now, we are hoping to launch a new project surveying the sustainability of food establishments on Nassau Street. Our tentative plan is to interview a variety of restaurants about their sustainable practices and favorite plant-based options. We hope to also compile this information into a guide on how students can eat sustainably around Princeton.



What do you love most about being a part of this group?

"I love being a part of Greening Dining because I want to advocate for food sustainability in a way that directly benefits members of the Princeton community." - Joe Himmelfarb '24

"I love being a member of Greening Dining because food is a shared experience, and I think it's important that student opinions and concerns are heard by Campus Dining." - Karena Yan '23

Check out all of our
Sustainable Meals for Busy
Students content **HERE!**

<https://tigersgogreen.princeton.edu/category/sustainable-meals/>

Also read our Princeton
Birding Society highlight!

<https://tigersgogreen.princeton.edu/2021/04/green-group-highlights-princeton-birding-society/>



Most Popular

Dining Green in a Pandemic

Adam Elkins '23

For everyone on campus, we're all so excited that the dining halls have opened back up, allowing us to eat hot food and spend time together with friends. Of course, they don't look the same as they did last year. We're still living during a pandemic, and as a result, we're not able to implement many of our former sustainable dining practices. Nevertheless, there are still so many small ways you can practice sustainability while eating. I hope this post gives you some practical and simple ideas for protecting the environment-while you protect yourself!

Choose to Reuse

Bring reusable utensils and say no to plastic silverware. Plastic silverware isn't recyclable, is deadly to sea creatures, and takes centuries to decompose. While the dining halls can't offer everyone reusable silverware, bringing your own utensils is perfectly safe, better for the environment, and easy to clean: simply wash in hot water with soap! It's also cheap; the U-store sells metal cutlery for just a few dollars.

Along this vein, try drinking from a reusable water bottle. Just remember to fill it up at your closest filtered water station beforehand, because they can't be filled in the dining hall. In addition, make sure to avoid other unnecessary single-use plastics, such as packaged foods and drink lids, and since student composting isn't active, prevent food waste by only taking what you can eat.

Choose to Reuse

Princeton University's reopening plans require Campus Dining to use disposables in order to meet State rules for higher education.

This use of single-use disposables is short-term and we encourage you to use reusables whenever possible.



Drink Local

While drinking water from a recyclable can is better than using plastic, it's still not as sustainable as a reusable bottle. The water in these cans is often shipped across the country consuming fossil fuels, and there's no guarantee that the cans end up recycled anyway. Instead, try one of the hundreds of filtered bottle-filling stations across campus, which supply water from the local watershed. If you don't have a filling station in your dorm, do not fear! You can request one to be installed; however, tap water from the sinks on campus is perfectly safe and comes from the same place as the filling stations. I drink it every day myself!

Drink Local



There are over 250 water bottle-filling stations on campus!

Tap water is sourced from the local watershed and often meets or exceeds FDA bottled water standards.

sustain.princeton.edu/drinklocal

Recycling

Recycle! ...just be smart about it. Recycling guidelines are different everywhere, and just because you could recycle something in your hometown doesn't mean it can be recycled on campus. On the flip side, you might be able to recycle materials that went to the landfill at home! Download the Recycling on Campus app for more information on what can and can't be recycled. If too many non-recyclable materials, like the dining hall meal cartons, are put in the recycling, they can contaminate the whole batch. In that case, materials that would have been recycled are instead sent to the landfill. So remember: When in doubt, throw it out! Also, there aren't recycling bins in the dining halls yet, but there are typically some just outside. We're working with dining staff to change this, so for now, just make sure to hold onto your cans until you see a bin.

Toward Zero-Waste



We look forward to finding solutions to continue to move us toward a **zero-waste** campus in the future.

To learn more about our waste goals, visit: sustain.princeton.edu/waste

So there you have it! Just remember that the changes in our dining halls are happening for an important reason. While it's a shame to have to pause some of Princeton's most sustainable practices, there are still valuable steps that you can take to make a very real difference.

Incoming and Graduating Editors

New Editors



Ethan Sontarp '24



Adam Elkins '23

Congratulations Wesley!



Wesley Wiggins '21

Wesley has been an amazing blog co-editor; he always brings really insightful and interesting ideas to the table, and he has been great to work with as we started the blog this past year. He was an integral piece in getting the blog started and making it as wonderful as it is, and I've really enjoyed hearing and reading his thoughts on sustainability issues over the past few semesters!

- Camellia Moors '22, Co-editor, EcoReps Coordinator

There are so many things I could say about Wesley, his passion for sustainability and the EcoReps, his dedication to our work. This past year has been extremely challenging due to COVID, and Wesley played an integral leadership role in helping further develop the EcoReps program to train and support newly hired students in this role completely virtually. Wesley provided feedback for the need of a mentor program within EcoReps, which we implemented this semester to great success. While virtual, Wesley served a key role as one of the first Blog editors of our new Tigers Go Green Blog. Wesley was also instrumental in the initial launch of our EcoReps Facebook page, providing content and working with other EcoReps to schedule posts. He's always up for anything from starring in videos to creating takeovers for our social media.

The EcoReps program has grown in part to Wesley's dedication and passion, and the campus has truly benefited from his ongoing contributions to sustainability. I wish Wesley all the best in his future endeavors and am grateful for the opportunity to work with him over the past three years.

- Lisa Nicolaison, Engagement and Communications Coordinator, Office of Sustainability