

As this is our last newsletter for the academic year, we kindly request that you share your feedback with us! Can you please take 3 minutes to complete this brief survey? Thank you!!

CLICK THIS LINK TO COMPLETE OUR SURVEY

We congratulate all of our 2021 graduates, including two student members of the Sustainability Council, Marybeth Duong and Deyna Aquino, who are spotlighted below. Thank you for your contributions to the Council!

We would also like to recognize another student member of the council, Stephanie Martinez, who was selected to be a PSEG Institute for Sustainability Studies 2021 Green Teams participant. Congrats, Stephanie!

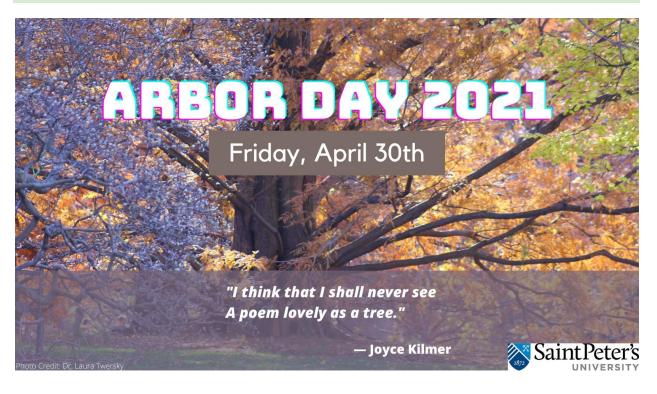
The Sustainability Council is seeking new student members for the next academic year. If you're interested in joining, please contact Dr. Eileen Poiani epoiani@saintpeters.edu.



May Events: Save the Date

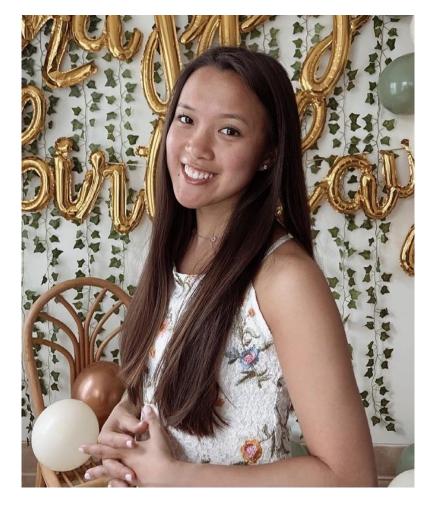
- Tuesday, May 4 from 6:30 to 8pm: <u>Green Business Forum</u>, organized by Sustainable Jersey City
- May 8, 9, 15, 16, 22, 23, 29, 30 (multiple sites) from 10am to 1pm: <u>Jersey City</u>
 <u>Neighborhood Cleanup</u>. Click on the link to volunteer for any one of these local Jersey
 City and Hoboken clean-up events. Trash bags and pickers will be provided.

Arbor Day 2021 Recap



2021 is the 150th anniversary of Arbor Day, and Saint Peter's planted a tree in the quad on Friday, April 30 to commemorate this very special occasion. Thank you, Brightview Landscapers, for donating the tree!

Sustainability Council Member Profiles



Name: Marybeth Duong, Class of 2021

Major: Biology with a minor in Medicinal Chemistry

Hometown: Bridgewater, NJ

Plans after graduation: Gap year: Take the MCAT, work as a Medical Assistant/Scribe, Apply to

Medical Schools

What or who inspired you to become involved in caring for our planet: My 5th grade english teacher was definitely one of my inspirations. She was very much into science and the environment. She was in charge of our afterschool Roots & Shoots Environmental Club and one of her close friends is Jane Goodall. During a number of our classes we'd video call Dr. Goodall, who was in Panama at the time. Our classwork, assignments, and writing covered a lot about wildlife, nature, global effects, etc, which made me love and care more for our planet!

Which environmental cause is most important to you, and why: One that I find most important to me is that of endangered species. Not only am I concerned about a decrease in the number of living organisms, but what causes and leads to the extinction. All in which many people are not aware of, for example pollution, hunting, invasive species, destruction of habitats, decline in reproduction, genetics, and so much more!

Message to the SPU community: It's been such an honor and major opportunity to be a part of and connect with other students, professors, and staff members on campus through the sustainability council. As my journey at Saint Peter's comes to an end, my passion, dedication, and knowledge will only continue to grow, and like mine, yours should too! "Sustainability is important because we all are responsible to nourish our planet. And real food should be delicious, safe, affordable, and accessible to all. All without compromise." ~Denise Morrison



Name: Deyna Aquino, Class of 2021

Major: Biology with a minor in Psychology

Hometown: Linden, NJ

Plans after graduation: Studying for my MCAT and hopefully getting into Medical School

What or who inspired you to become involved in caring for our planet: Not only did this person inspire me to become more caring for our planet but she has inspired me to be the best version of myself and push through all obstacles. It was Dr. Eileen Poiani who has mentored me throughout my undergraduate career and I could not have done anything without her!

Which environmental cause is most important to you, and why: Plastic Pollution! This is one of our biggest environmental problems to date because it affects every single species's health and environment. It has been seen that plastic particles have been slowly coming into our blood system; not to mention the detrimental effect it has on marine species and their habitats. We must learn the right way to recycle and stop the use of single use plastic.

Message to the SPU community: Saint Peter's gave me a chance at a higher education and has shaped me into a woman for others. I hope to keep growing and give back to our communities and make a change in this world. I encourage all students to keep fighting for their dreams, it is possible even though at times it may seem a far reach. Lastly I want to extend a virtual hug to all faculty and staff that no matter how much or how little I knew them, they have all made an impact in my life and I thank them wholeheartedly.

What We're Reading & Watching

Here are some media recommendations from Council Members:

- Nurture Nature with these Apps article/list of free apps
- World Water Crisis Explained 18-minute video
- Is Recycling Worth it Anymore? 15-minute video



Monthly Challenge:

Sign Up for Community Solar and Save \$

Did you know that you can help the environment AND save money on your monthly electric bill?

Check out the new <u>Community Solar program here</u>, where you can choose from 2 solar providers, offering similar rates and incentives, including a \$100 Visa gift card!

What to expect: You will begin to receive an allocation of solar electricity produced by local community solar farms. Based on your allocation, PSE&G will apply solar credits onto your monthly bill, offsetting your electricity costs. You then will receive a bill from Solar Landscape for 90% of the value of the solar credits you received: that is a 10% savings. You will not be billed for the solar credits until after you have seen the credits applied toward reducing your PSE&G bill. (For example, your PSE&G bill will be reduced by \$10, and then you'll receive an invoice from your solar provider for only \$9) 10%-15% savings are guaranteed, allowing you to save money and contribute to a more sustainable future.

Feature Article:

The Year of the Cicada: Brood X Returns

By Dr. Kathy Wydner, Professor of Biology



Billions of cicada nymphs are about to tunnel out from their subterranean depths. For seventeen years, they have been feeding on sap from the roots of trees, and now they are ready to mate, lay their eggs, and start the cycle anew. As they emerge, they will climb up any nearby vertical structure, shed their exoskeleton, and inflate their wings. Males will then begin to make a deafening chorus - their mating call. You can listen to cicadas here.

Males sing by flexing little drum-like organs called tymbals on their abdomens. Although they can also make noise by flicking their wings, the flexing of the tymbals by tiny muscles is the source of the characteristic cicada roar. The sound is intensified within their mostly hollow abdomens.

Called Brood X ("Ten"), this cohort of 17-year cicadas is one of the largest groups of periodical cicadas. They will emerge in mid-May in 15 states (and D.C.) from the Midwest to the East Coast. There are actually three species: *Magicicada septendecim*, *Magicicada cassini*, and *Magicicada septendecula*. As all the cicadas emerge together around the same time, they take advantage of a survival strategy called "predator satiation". Birds and mammals have a feast, as cicadas are apparently delicious, but barely make a dent in the overall numbers. See this link for a cicada cookbook prepared by the University of Maryland.

Their emergence is a spectacle of nature – unique in the world. Periodical cicadas are only found in eastern North America. Among these states are New Jersey, New York, and Pennsylvania. Sightings of these cicadas are already being reported in the southern parts of their range in Georgia, North Carolina, Tennessee, and Maryland. Concentrations of cicadas usually occur locally. For example, the Princeton University campus is a hotspot for Brood X. In mid-May 2004, much of Princeton was inundated by shiny black-bodied critters with red eyes swarming over sidewalks and trees.

The tsunami of cicadas is coming. Their trigger to emerge seems to occur when the soil temperature eight inches underground reaches 64 degrees F (18 degrees C). They then begin to appear *en masse* over the next few days to weeks. A warm rain may serve as a portent. By July, they will be gone, although annual species of cicadas will still be around, in smaller numbers.

Within New Jersey, the primary concentrations of Brood X are expected to be found in Burlington, Hunterdon, Mercer, and Salem counties, but also in isolated sections of Middlesex, Morris, Somerset, and Warren. If they don't emerge in your neighborhood, it is worth a trip to see and hear them. They won't be back until 2038. I wonder what the world will be like the next time they surface?

Thanks to citizen science, this event is an opportunity to create the most complete and detailed map ever made of a periodical cicada emergence! You can help by submitting photos or recordings of their sounds to iNaturalist or Cicada Mania. These two websites are combining forces. There is even a free app for your phone called Cicada Safari. Ideally, photos should show the underside (abdomen) and sides of adult cicadas because this is how experts can identify the exact species. Recording the song of a single male is also helpful.

Some localized populations of periodical cicadas have gone extinct, so these marvels of nature are not to be taken for granted! Researchers are concerned about the effects of climate change. For a quick 3 minute summary of more amazing facts about them, <u>listen to this NPR podcast.</u>

References:

Cicada Mania.com.

Fenston, J. (2021, April 27). Here come the cicadas. NPR.

Knapp, K. (2021, March 29). <u>After 17 years, the cicadas will return to Princeton this spring</u>. Planet Princeton.

Melisurgo, L. (2021, April 29). <u>2021 cicadas: When is the big Brood X cicada swarm coming</u>? NJ Advance Media for NJ.com.

A thought to leave you with.....

"Plans to protect air and water, wilderness and wildlife are in fact plans to protect man."
-Stewart Udall

The Saint Peter's University Sustainability Council, founded in 2012, is a group of students, faculty, and staff who strive to make our campus community and our world more sustainable for future generations.

Your feedback, photos, event notices, and story ideas are always welcome. Please email them to skeller1@saintpeter.edu

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