

The Peacock Planet

Saint Peter's University Sustainability Council Newsletter

January 2021



Like you, we have so many hopes for this new year. To name a few: We hope for the rapid distribution of safe, effective COVID vaccines. We hope to hug our family and friends again very soon. We hope that it will soon be safe to return to classrooms. We hope that Jersey City will plant thousands of trees along our neighborhood streets. We hope that our nation will rejoin the Paris Climate Accord and become a world leader in curbing emissions and promoting sustainability.

On a more immediate note, we hope you'll read the insightful article below entitled 'Constructive Battles: Listening in an Age of Polarization' and then join us for a virtual roundtable discussion on this important topic on Wednesday, January 20, 2021 at 4pm. Zoom link can be found below.

Best wishes to you and yours in 2021 from all of us on the Sustainability Council!

January Events: Save the Date

- Saturday, January 9 from 10am to 1pm: [Jersey City Neighborhood Cleanup](#). Click on the link to volunteer for this clean-up event at the underpass of Route 1-9 on Newark Ave (near Journal Square)
- Wednesday, January 20 from 4pm to 5pm: [Virtual Roundtable Discussion on the article Constructive ‘Battles’: Listening in an Age of Polarization](#), hosted by author Dr. John Rupert, Assistant Professor of Biology. The full article appears below.
- Wednesday, January 27: **Undergraduate spring semester begins**

Did you know?



There is a beautiful, iridescent plant common in Malaysian rainforests called a ‘peacock’ fern! It’s scientific name is *Selaginella willdenowii*, and we may just have to adopt it as Saint Peter’s official plant! (Thank you, Dr. Twersky, for sharing this.)

Our Favorite Hikes: **Bear Mountain**

By Dr. Laura Twersky, Professor of Biology



A great place to hike and enjoy the outdoors is [Bear Mountain State Park](#), located near the Hudson River in Rockland County, New York. Not only is there a beautiful lake (pictured above) to hike around and picnic near, but a [Trailside Museum and Zoo](#) that is on the Appalachian Trail (which goes from Georgia to Maine). There are actually bears to see at Bear Mountain! Many hiking trails (all levels) are available, as well as a Merry-Go-Round, an outdoor skating rink and the Bear Mountain Inn, listed on the national register of historic places. In addition to being a gorgeous natural area, Bear Mountain has special meaning to me as family/friends would picnic there when I was a child. Also, I went to Girl Scout camp on Bear Mountain. Later (much), I introduced my daughter and my husband to the area and as advisor/co-advisor to the S.A.V.E. (Students Against Violating the Earth) Club went on fall foliage field trips/hikes at Bear Mountain.

What We're Reading & Watching

Here are some media recommendations from Council Members:

- Carl Sagan's [The Pale Blue Dot Video](#) (3 minute video)
- [The Man Who Stopped a Desert](#) article
- [Eager: The Surprising, Secret Life of Beavers and Why They Matter](#) book

Dr. Brandy Garrett Kluthe writes: "Over the break I spent some time revisiting a book that I found very fascinating. This well researched book looks at the history of beavers in both Europe and the United States. The author, Ben Goldfarb, further explores the history of beaver/human interactions in the US and the impacts those interactions have had on various ecosystems all over the country. The lively writing and host of interesting characters made this an entertaining read. Seriously, parachuting beavers as a reintroduction tool! The book broadened my knowledge and left me a new appreciation

of beavers and their role in a variety of ecosystems. This book was the PEN/E.O. Wilson Literary Science Writing Award winner for 2019.

Summer 2021 Paid Internships in Sustainability

Application deadline: 1/21/2021

PSEG Institute for Sustainability Studies CALL FOR STUDENTS

June 1 – August 5, 2021
Applications Due January 21st, 2021

Paid internship! **All majors desired!**

PURPOSE:
The PSEG Institute for Sustainability Studies (PSEG ISS) plays a transformative role in transdisciplinary research and education to address the real-world sustainability issues of our time. By building academic-corporate-public partnerships, PSEG ISS provides its collaborators vital research and knowledge on how human activity impacts globally-connected communities, ecosystems, and economies, and recommends feasible approaches to achieve the changes needed.

Over ten weeks students work with industry experts to achieve high-level deliverables and present a comprehensive and actionable written report in addition to a group TED-style presentation to their hosting organization.

Why the Green Teams?
Gain valuable hands-on experience, earn a stipend, build a professional network, make life-long friends, & see your work implemented.

SOLUTION:
PSEG ISS offers a team-based, paid internship in collaboration with hosting organizations. Transdisciplinary teams of students complete deliverables to assist a corporation, local business, or government agency with their sustainability challenges.

PROJECTS CONDUCTED:

- Mapped street trees & evaluated carbon sequestration rates
- Conducted a greenhouse gas inventory
- Integrated technology into agricultural environments
- Modeled a closed-loop food system
- Calculated scope 3 emissions
- Conducted an organic waste reduction feasibility study



PROJECTS
5 Years
50 Weeks
84K Project Hours
144 Completed Projects

PARTICIPATION
26 Organizations
34 Universities
70+ Majors
210 Students

FOR MORE INFORMATION/TO APPLY
bit.ly/PSEGISSGreenTeams2021StudentApp
www.montclair.edu/iss
Dr. Amy R. Tuininga
tuiningaa@montclair.edu

MONTCLAIR STATE UNIVERSITY
PSEG INSTITUTE FOR SUSTAINABILITY STUDIES

NJHEPS SUSTAINABLE DEVELOPMENT GOALS



The PSEG Institute for Sustainability Studies announced that applications are now open to join their summer 2021 GREEN TEAMS internship program running from June 1st - August 5th. This

internship program brings together students of diverse backgrounds and majors to address sustainability challenges for corporations and nonprofits.

Students can [apply online!](#) The application deadline is THURSDAY, JANUARY 21, 2021. If you have any questions about the program or how to apply, please contact Amy Tuininga or Tirzah Mills at psegiss@montclair.edu.

One Small Step

By Dr. Katherine Wydner, Associate Professor of Biology & Health Careers Adviser



Evening grosbeaks visiting Dr. Wydner's backyard in late October 2020. Photo by KS Wydner.

One small step that I take for the sustainability of our planet is to maintain a habitat in my own backyard that is supportive to the local wildlife and birds. You can think of your yard as your own "Homegrown National Park", as described in the 2019 New York Times Bestseller, [Nature's Best Hope – A New Approach to Conservation That Starts in Your Yard](#). Author Douglas W. Tallamy guides readers in the steps they can take to help make the world a better place, one yard or patio at a time. By taking your own environmental steps, you don't have to wait for the government to act and you can help care for the vast spaces lying between our isolated local and national parks.

Although I could considerably expand on this topic, for the sake of brevity, here are a few things that I do. Although we are in the middle of winter, you can start to plan for Spring. If you don't have an actual yard, you might have some space where you can add a potted plant or two, and if you don't have that, you can promote these kinds of activities or actions around you. You don't have to do all of this at once – one step at a time is fine!

- **Reduce the size of your lawn.** Create garden beds for plants, and plant bushes or trees to provide food and cover for wildlife around the edges of your lawn.

- **Don't use weed-killers:** Monoculture lawns became popular in the 1950s, but a lawn that contains a variety of plants is better for birds and pollinators. Consider adding clover to your lawn, for example. Bees and butterflies will visit the clover blossoms.
- **Don't use pesticides!** Allow for natural control of insects. Many bird species eat insects to survive and require them to feed their young in the spring and summer months.
- **Don't keep your yard completely tidy.** By not raking up all your leaves in the fall, leaving some of them to create more foraging possibilities for birds. Create a brush pile in a corner of your yard by placing fallen sticks and small limbs together. This provides shelter for birds and small mammals like chipmunks.
- **Compost and reduce or eliminate fertilizer use.** Many townships offer compost bins, but you can purchase one or create your own compost pile. Add fallen leaves, grass clippings, and vegetable/fruit scraps, and in several months you will have organic nutrients that can be spread over your gardening area. Avoid commercial fertilizers because they wash into surrounding waterways where they can cause problems.
- **Plant native plants.** Native wildlife and plants evolved together. Gradually eliminate nonnative plants in your yard. If a nonnative bush or tree dies, replace it with a native variety. Do some research to find one that provides food such as nutritious berries. Native wildflowers support bees, butterflies, and hummingbirds. Furthermore, most native plants are adapted to nutrient-poor soils and don't require synthetic fertilizers.
- **Provide seed and suet for birds.** By doing this in the winter, you are helping them when natural foods may be scarce. In the spring and summer, you are helping by providing snacks for parents that are exhausted from feeding hungry babies. You will also enjoy the birds by watching them and learning about their habits.

Community Voices: **Constructive 'Battles': Listening in an Age of Polarization**

Dr. John Ruppert, Assistant Professor of Biology

As an Ecologist who comes from an academic discipline that focuses on 'the environment', it is a bias of mine (as well as many of my fellow colleagues) to look at sustainability through a lens of environment. It is important to state up front that pursuing sustainability with this bias as central cannot achieve a genuinely sustainable future; in fact, it may actually make things worse. The reasons why are nested in the complex intersection of environmental, social, and economic factors in 'the real world'. Like my colleagues and I from the environmental world, preferential biases for one 'member' of the sustainability triad (i.e., environment, society, and economy) are commonplace and result in plenty of disagreements that hamper a constructive civic discourse. So, rather than focus on our environmental, social, and economic problems and how to be more sustainable from the lens of our academic worlds, this article focuses on something a bit more to our core. At Saint Peter's University, we aim to help our community be more engaged, compassionate, ethical, citizens of the world. I argue that this core mission at our University is the 'real' foundation of sustainability as it frames a simple set of tasks, *compassionate listening, sacrifice, and constructive engagement*, that build up our neighbors, communities and economies to be more responsive to our changing socio-environmental context.

THE GLOBAL GOALS

For Sustainable Development



Before moving on, it is important to first highlight this changing socio-environmental context and our human relationship with control. Psychologically, our inner selves gravitate toward what we know, and we hold on dearly to the past. As most of us recognize, however, the world around us is always changing and the harder we work to hold onto the past, the more difficult it is to move on. In the world of psychology, when we do these things, we render ourselves with low 'resilience'; that is, our personal 'adaptability' to 'roll with the punches'. The ecological sciences has a similar notion of resilience; that the loose, decentralization of 'control' in complex systems affords adaptive cycles as the system responds to change. These adaptive cycles are not 'pleasant'. In ecology, adaptation is the outcome of death and survival; I repeat, adaptation is the result of death...not exactly the purposeful, 'designed' view we often characterize the process by in our popular culture. Interestingly, all organisms (not just humans) engage in actions to avoid adaptive cycles using 'control' mechanisms with a focus on 'efficiency'. In the end, however, these efficiency measures cannot withstand the forces of change and all systems eventually collapse and reorganize (i.e., die from their current form). When we engage in practices to hold onto the past, we build up larger and larger systems of control that at some point will not handle the forces of change. Unfortunately for us humans, we have invested so heavily in complex systems of control for so long that our human social, economic, and environmental circumstances are ill-prepared for the degree of change headed our way; that is, we lack resilience.



Resilience is the nature of sustainability. While we feel that urge to preserve our preferred member of 'the triad', we must instead turn away from control and determination toward a life of change and personal development. In my work studying scientific reasoning and epistemology (the nature of knowing) in the context of socioscientific issues like sustainability, I have come to find some key cognitive virtues that some use to be part of the sustainability solution as opposed to controllers of our ultimate demise. In no particular order, these include: (a) not assuming that because I didn't know something, 'no one knows', (b) recognizing that even when I develop my own expertise, it is limited to a very small context, (c) knowing that it takes a village to 'sort of' understand a problem, (d) recognizing that while we will never know a 'right answer', we can continue to grow our understanding toward an improved answer, 'for now', (e) assuming that every member of the community has valuable insight and (f) believing that

engaging in legitimate reasoning through other aims may actually lead to more creative means of achieving my own aims.

Practicing these cognitive virtues is no easy feat, and we can never expect ourselves to always use them. That said, they are goal posts for sustainable citizenship and leadership that we should all strive to 'score' in as often as possible. These ideas tell us a clear story; we don't know 'the answers', so let's all try to **listen** a little more legitimately to those around us and try as hard as we can to slow down our judgements.



Listening is more complicated than it seems because we tend to idealize knowledge in ways that immediately bias our judgements into fact and fiction, truth and false, wrong and right. Even those of us that try to use more sophisticated notions like, 'good knowledge' is justified (whether by science, logic, culture, or history) are ultimately idealizing the knowledge produced from this justification. Interestingly, the field of sustainability challenges us to recognize that these 'ideals' are abstracted from the real world (i.e., ideological). In the real world, as E.O. Wilson put it in *Consilience*, "answers are insoluble" to questions at the heart of our own existence and well-being. We must come to be comfortable with this insolubility – that just like life is undergoing an ongoing story of evolution, so is our knowledge. DNA after all is biological knowledge passed on from individual to offspring. Our cultural knowledge, fortunately, is capable of much more rapid 'learning' than that of our biology; it is not restricted to familial transfer. We can **listen and learn**, engage in the ongoing evolution of knowledge together, battling out ideas constructively by building from the talents of all members of our communities.

With this change of perspective on the nature of sustainability, we may see a whole new set of 'solutions' to problems we barely realized existed. We may see the tremendous opportunities for the future. This is achievable if we turn to seeking collaboration, listening to others, and learning instead of wallowing in the problems of the past and yearning for the days that once were. Let us embrace a future of change head on, holding on to our values of *Cura Personalis*, and after a lifetime of engagement with ourselves and our communities be able to say with confidence, 'damn what a ride that was'.

Monthly Challenge:

Practice active listening, even with those you disagree with



Inspired by the article above, please seek each day to listen a little more closely to the reasoning of others and resist the immediate urge to judge. Build.

A thought to leave you with.....

**“The earth is our environment to protect and our garden to tend to.”
- Pope Francis**

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

Saint Peter’s University Sustainability Council
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