



SESYNC Feedbacks

News from the National Socio-Environmental Synthesis Center



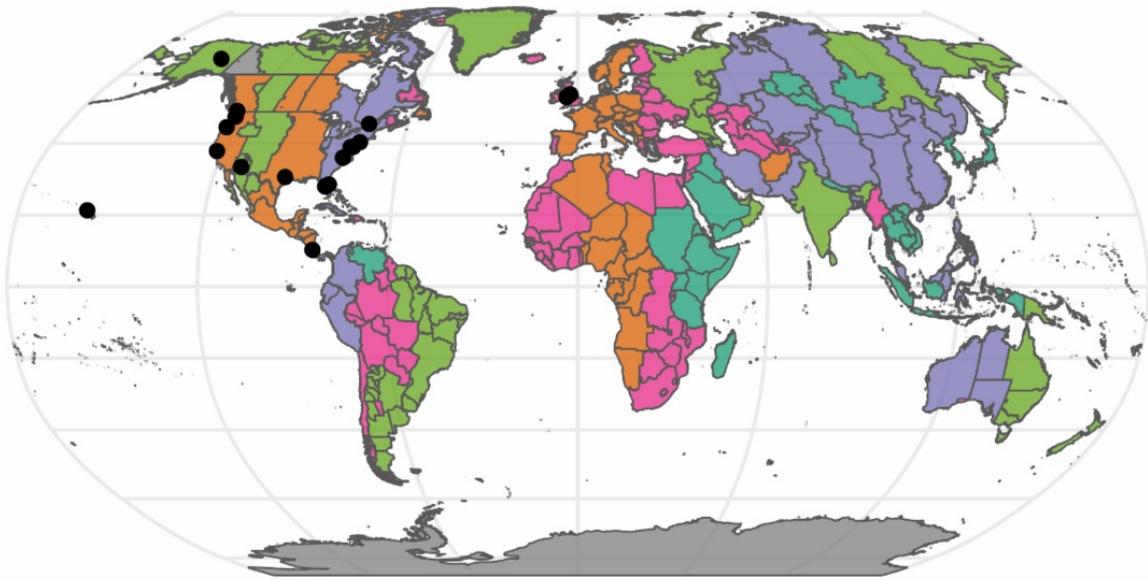
CYBER BLOG | Virtual Computational Summer Institute Returns

Summer Institute 2021: A Year Older and Wiser

By: Quentin Read

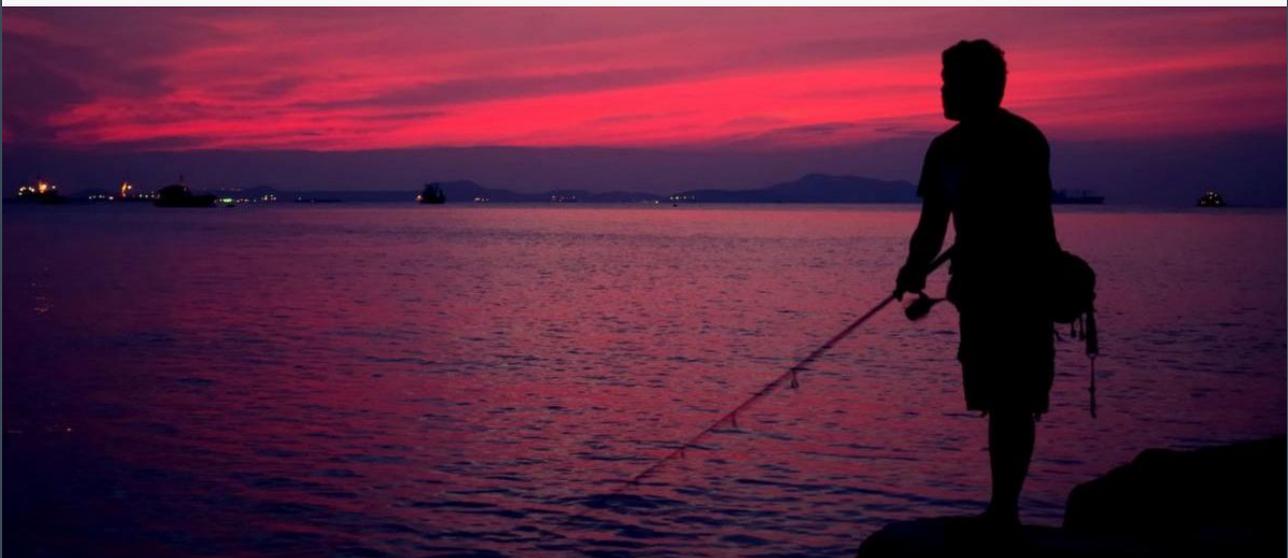
A few weeks ago, 30 researchers from 11 teams made their virtual way to SESYNC for the 2021 Computational Summer Institute. It was a pleasure to interact with researchers from diverse backgrounds working on an array of interesting questions in socio-environmental synthesis. In this blog post, I'll go over some of the highlights of the week and the lessons we as instructors learned.

2021 was the first summer institute that was intended to be virtual from the get-go, in contrast to 2020 when the pandemic threw a wrench into our plans when we had already begun to prepare. This year, 11 teams participated. Half of them were SESYNC-funded — but even among the folks on other teams there were a lot of SESYNC connections. The coaching staff consisted of data scientists Rachael and Quentin, plus postdoc Renee and guest instructor/coach Mary. We had to juggle time zones stretching from the U.K. to Hawaii, an 11-hour difference. We're experts in that by now! [Read more.](#)



2021 CSI participants logged in from lots of different time zones! (Map in Robinson projection)

TALKING SCIENCE | SESYNC Featured on Fisheries Podcast



Podcast Episodes Feature SESYNC Graduate Pursuit Work and a Conversation with SESYNC's Nicole Motzer

By: Alaina Gallagher

Lian Guo is one scientist who is using the medium of conversation to explore topics related to diversity, equity, and inclusion (DEI) in her field. **Lian**, a member of the SESYNC Graduate Pursuit, **“Urban ecologies of vulnerability and risk: What is the role of fish consumption advisories?”** is co-host of the **Fisheries Diversity and Inclusion Podcast**, which focuses on exploring a wide variety of topics related to DEI within the context of the fisheries profession.

Clemson University graduate students Aaron Bunch and Deon Kerr created the podcast, later inviting Lian and Cassidy Miles to join as co-hosts. Lian explained that “Our podcast aims to amplify marginalized voices within the fisheries profession and identify resources and solutions, which any fisheries professional can use to bring about impactful change in their workplace.” She continued, “Although humans and their interactions with fish populations are a critical component of fisheries science, our field has struggled to recognize how critical a diverse workforce and inclusive management are to equitable, cutting-edge science.”

Recently, Lian invited her teammates Lauren Drakopoulos, Meghna Marjadi, Sarita Panchang, Dustin Robertson, and Zach Koehn **to speak on the podcast** about their experience participating in a SESYNC Graduate Pursuit. She also invited SESYNC Assistant Director for

Interdisciplinary Science Nicole Motzer to discuss the value of interdisciplinary science on a [follow-up episode](#).

[Read more](#).

INTERVIEW | SESYNC Researcher Talks Reducing Food Waste

Audio Interview: Food Waste Reduction—Harnessing Interdisciplinary Science to Get to Real-World Solutions with Dr. Quentin Read

By: Erin Duffy



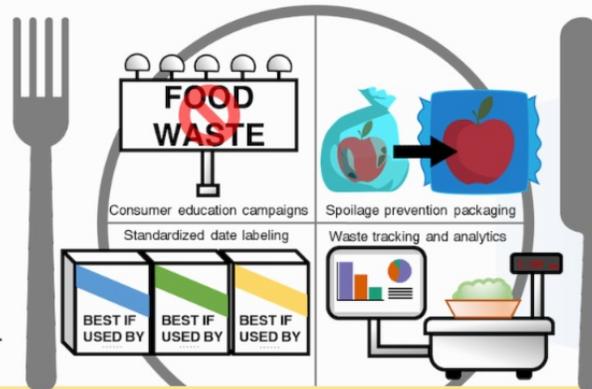
Food. We all need it, and most of us love it. But what about the food that goes uneaten? Today, many people are aware that food waste, especially in the United States, is a problem—both ecologically and economically. So, reducing it should be a win-win for everyone, right? In this audio interview, [Dr. Quentin Read](#), a SESYNC data scientist and former postdoctoral fellow, talks about his research into the true costs and benefits of proposed food-waste-reduction strategies and how we can move toward a more sustainable food system as a whole. [Listen to the full interview here](#).

A menu of interventions to reduce food waste

We know food waste is a problem, but we need to know how to prioritize solutions . . .



. . . so we developed a method to estimate the cost-effectiveness of food waste reduction strategies.



We applied the method to four proposed interventions . . .



Quentin D. Read and Mary K. Muth. "Cost-effectiveness of four food waste interventions: Is food waste reduction a 'win-win?'" *Resources, Conservation and Recycling* 168 (2021).
<https://doi.org/10.1016/j.resconrec.2021.105448>.

VIDEO | Webinar Recording Now Available!

A Recording of the Latest Socio-Environmental Systems (SES) Modeling Webinar is Now Available

If you missed the last webinar in our SES modeling series, "Confronting Issues of Scale in Socio-Environmental Systems Modeling," a recording is now available on SESYNC's YouTube channel.

This webinar explored the types of scale issues likely to arise in each modeling phase, while highlighting how to deal with them, based on the 2021 article, "[Socio-technical scales in socio-environmental modeling: Managing a system-of-systems modeling approach](#)." It is intended for practitioners and scholars who commission, sponsor, or use socio-environmental system models. In her keynote presentation, Hsiao-Hsuan 'Rose' Wang briefly describes the scale issues and paths forward, followed by comments from panelists Val Snow, Derek Robinson, and Volker Grimm. [Learn more about the webinar](#) and watch it below.



Be sure to **subscribe** to SESYNC's YouTube channel to be the first to know when new videos are added!

NEW PUBLICATIONS | SESYNC in the Journals

"What makes a city 'smart' in the Anthropocene? A critical review of smart cities under climate change." Published in *Sustainable Cities and Society* by SESYNC postdoc Renee Obringer and colleague Roshanak Nateghi.

"The increasing global environmental consequences of a weakening US–China crop trade relationship." Published in *Nature Food* by Guolin Yao, Xin Zhang, Eric A. Davidson, and Farzad Taheripour. This paper resulted from the Pursuit, [Understanding dynamic environmental and socio-economic interactions in food systems to support decision-making towards a sustainable and resilient agriculture](#).

"Integrating Programmatic Expertise from across the US and Canada to Model and Guide Leadership Training for Graduate Students in Sustainability." Published in *Sustainability* by SESYNC staff member Nicole Motzer and colleagues Aleta Rudeen Weller, K Curran, Simon Donner, Ronald J. Heustis, Cathy Jordan, Margaret Krebs, Lydia Olandar, Kirsten Rowell, Linda Silka, Diana H. Wall, and Abigail York.

"Uses of History During the First Nine Months of COVID." Published in *Perspectives in Biology and Medicine* by SESYNC postdoc Merle Eisenberg.

"How do farmers adapt to agricultural risks in northern India? An agent-based exploration of alternate theories of decision-making." Published in the *Journal of Environmental Management* by Udit Sanga, Hogeun Park, Courtney Hammond Wagner, Sameer H. Shah, Arika Ligmann-Zielinska. This paper resulted from the Graduate Pursuit, [Agrarian Adaptation](#).

