SESYNC Feedbacks

News from the National Socio-Environmental Synthesis Center

NAVIGATING SESYNC'S SITE | Tips for Finding Useful Info.

Resources

Search & Browse

CLEAR FILTERS

For an exact search, surround your words with double quotes.

Enter Keywords...

Use the dropdown filters to refine results (e.g., I Want...to Learn & Teach Socio-Environmental Topics or by Type of content like lessons, explainer articles, etc.).

I Want To...

Focus Area

Type

Contains

Topic

Q SEARCH

Looking to Conduct Effective Team Science?

Select **Conduct Team Science** from SESYNC's "I Want To" menu to find resources that will help you design effective interdisciplinary team research. Resources include things like:

- **Best Practices for Interdisciplinary Team Research: Shaping a Team's Social Environment**
  The environment that teams collectively create as they interact—their social environment—has a significant influence on how positive and productive their experience will be. This resource explains what influences collaborative environments and provides practical suggestions to enhance them.

- **What Is a Shared Mental Model? Why Are Mental Models Useful for Interdisciplinary Research?**
  Shared mental models are representations (usually visual ones) that represent a research team's joint understanding of how something works or how they think about it. This resource explains why creating a shared mental model is highly valuable for interdisciplinary research teams; describes the steps in creating one; and offers links to additional info.

- **First Meeting Guide**
  This step-by-step guide walks through some of the best practices for designing an effective first team meeting, including actions to build rapport, create connection, and increase shared understanding.

- **Who Are Stakeholders? What Is the Role of Stakeholders in Convergent Research?**
  Convergent research is research that has societal relevance, leads to useful outcomes (i.e., actionable), and requires integrative interdisciplinary team research. Engaging with stakeholders helps ensure each of these outcomes. As the need increases for convergent research, research teams must learn to identify and understand how to successfully engage stakeholders. This explainer aims to help researchers do just that.

Interested in Finding Resources and Research on Specific Socio-Environmental Topics?

Select **Explore Featured Research** from SESYNC's "I Want To" menu and then choose from "Focus Areas," such as: **Food Systems and the Environment, Built Environment,** and **Vulnerability and Risk.**

There you'll find SESYNC research projects, publications, and resources on specific socio-environmental topics. Explore research products like:

Food Systems and the Environment

- **Audio Interview: Food Waste**
  In this SESYNC audio interview, Erin Duffy talks to former postdoc Quentin D. Read about his research on reducing food waste and creating a more sustainable food system.

- **COVID-19 Economic Impact on Fisheries Workers Seminar Recording**
  In a video recording of this SESYNC seminar, Dr. Tu Nguyen presents her

research on the economic impacts of the COVID-19 pandemic on fisheries workers. Here, she explains how findings from her research provide insight into workers' current economic situation and inform crisis management policy.

Built Environment

- **Why Go Green? Comparing Rationales and Planning Criteria for Green Infrastructure in U.S. City Plans**
  In this *Journal of Landscape and Urban Planning* article, the authors examined 120 planning documents from 19 U.S. cities to identify if and how the stated benefits that cities use within their rationales for green infrastructure programs (rationale statements) align with the criteria used to site green infrastructure at the neighborhood scale.

- **Green Infrastructure Lesson: Urban Metabolism and Smart Cities**
  This lesson, designed for classroom and workshop instruction, uses the concepts of urban metabolism and smart cities to have learners explore initiatives that bring tomorrow's cities closer to human equality and ecological balance with their surroundings.
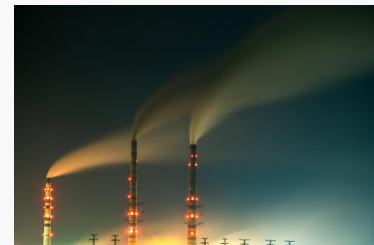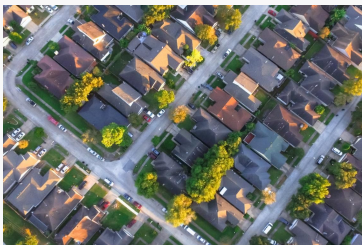
Vulnerability and Risk

- **Typologies of Multiple Vulnerabilities and Climate Gentrification across the East Coast of the United States**
  The authors of this *Urban Climate* article used unsupervised machine learning to look at 51 counties along the United States East Coast to examine how climate change interacts with community demographics, housing, and socioeconomic characteristics in coastal communities.

- **Socio-Hydrology: Including Human Behavior in Flood Risk Models**
  This socio-environmental modeling case study provides examples of the use of socio-hydrological modeling to understand the difficult social and environmental problems associated with flooding.

NEWEST LESSON | Parasitism vs. Mutualism

Our Latest Lesson Has Learners Re-Think Humans' Relationship with Earth

Lesson: Moving Human Societies from Parasitism to Mutualism with Earth
In this lesson, learners consider how specific human activities tend toward a parasitic or mutualistic relationship with Earth. This lesson's focus on humans as parasites of nature is provocative, even controversial. Importantly, the group activities focus on positive change and/or overcoming or reducing parasitic behaviors for better environmental outcomes. **Read more.**

NEW PUBLICATIONS | SESYNC in the Journals

"Urban water and electricity demand data for understanding climate change impacts on the water-energy nexus." Published in *Nature* by former SESYNC postdoctoral fellow Renee Obringer and colleagues Roshanak Nateghi, Jessica Knee, Kaveh Madani, and Rohini Kumar.

"Potential impacts of reduced seafood consumption on myocardial infarction among coastal First Nations in British Columbia, Canada." Published in *FACETS* by Lesya Marushka, Xue Feng Hu, Tiff-Annie Kenny, Malek Batal, Karen Fediuk, Tonio Sadik, Christopher D. Golden, William W. L. Cheung, Anne K. Salomon, and Hing Man Chan. This paper resulted from the Pursuit Global Fishery Collapse.

"Life history scaling in a tropical forest." Published in the *Journal of Ecology* by former SESYNC postdoc Quentin D. Read and colleagues John M. Grady, Sydne Record, Nadja Rüger, Phoebe L. Zarnetske, Anthony I. Dell, Stephen P. Hubbell, Sean T. Michaletz, and Brian J. Enquis.

"Experiments in Visigothic Rulership." Published in the book *Rome and Byzantium in the Visigothic Kingdom* by former SESYNC postdoc Merle Eisenberg.

"The Problem of Institutional Fit: Uncovering Patterns with Boosted Decision Trees." Published in the *International Journal of the Commons* by Graham Epstein, Cristina I. Apetrei, Jacopo Baggio, Sivee Chawla, Graeme Cumming, Georgina Gurney, Tiffany Morrison, Hita Unnikrishnan, and Sergio Villamayor Tomas. This paper resulted from the Pursuit Testing Ostrom's Frameworks.

"The geography of social vulnerability and wildfire occurrence (1984–2018) in the conterminous USA." Published in *Natural Hazards* by Ronald L. Schumann III, Christopher T. Emrich, Van Butsic, Miranda H. Mockrin, Yao Zhou, Cassandra Johnson Gaither, Owen Price, Alexandra D. Syphard, Joshua Whittaker, and Sanam K. Aksha. This paper resulted from the Pursuit Post-Wildfire Adaptation.

"Asymmetrical insect invasions between three world regions." Published in *Neobiota* by Rylee Isitt, Andrew M. Liebhold, Rebecca M. Turner, Andrea Battisti, Cleo Bertelsmeier, Rachael Blake, Eckehard G. Brockerhoff, Stephen B. Heard, Paal Krokene, Bjørn Økland, Helen F. Nahrung, Davide Rassati, Alain Roques, Takehiko Yamanaka, and Deepa S. Pureswaran. This paper resulted from the Pursuit Insect Invasions.

"Design and Use of a Spatial Harmful Algal Bloom Vulnerability Index for Informing Environmental Policy and Advancing Environmental Justice." Published in *Applied Spatial Analysis and Policy* by Rui Zhang, Arika Ligmann-Zielinska, Mark Axelrod, and Semra A. Aytur. This paper resulted from the Pursuit, Water, Risk, Policy.

"Rural forested community shocks as perceived by in-migrants versus long-term residents." Published in *Journal of Rural Studies* Margaret C. Walrath, Anita T. Morzillo, Kathleen P. Bell, Chris R. Colocousis, Mindy S. Crandall, Michaela I. Poppick, and Darla K. Munroe. This paper resulted from the Pursuit Rural Forests.

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