





# SESYNC Feedbacks

**News from the National Socio-Environmental Synthesis Center** 



## **POSTDOCS | Looking Forward to 2021**

While we were glad to see 2020 come to an end, our postdoctoral fellows still managed to accomplish some impressive feats during the past year—especially while working from home. As we look to the new year ahead and a fresh beginning, we asked the SESYNC postdocs to share something they're looking forward to in 2021 and/or a recent achievement that they're proud of. See what they have to say below:

### Dr. Merle Eisenberg

"I am shocked, but pleased that the podcast I started with former postdoc Lee Mordechai Infectious Historians will reach its one-year anniversary episode at the beginning of March. It's been a lot of fun learning how to podcast, but now I'm told I even have a podcast voice."



### Dr. Fushcia-Ann Hoover

"A recent achievement is my invited talk at the Cary Institute that was on December 17. Something I'm looking forward to is hopefully getting a job offer and starting new research and writing collaborations."



### Dr. Rachel Zuercher

"Something that I've really missed in the last year is interacting with students and teaching, so I'm looking forward to several guest lectures that I've agreed to give this semester for Marine Policy-type courses."



### Dr. Rachel Mason

"Several years of work paid off for me in 2020, as I had four papers accepted in the areas of dairy farming and climate change, agricultural modeling, and agro-ecology. In 2021, I'm looking forward to seeing family and friends again for the first time in way too long, and I also plan to spend more time thinking about how I can use my career to do more good in the world."



Hear from the rest of SESYNC's postdocs here.

### **SEMINARS | Virtual Seminar Series Returns**

Our spring virtual seminar series kicks off on January 26, 2021. Join us at 11 a.m. on Tuesdays for talks from socio-environmental researchers working in various fields. Talks are free and open to the public. Registration is required. Full schedule available here.



# Dr. Merle Eisenberg, SESYNC

"The Use and Misuse of Historical Pandemics during Covid: Reflections after One Year"

Dr. Ophélie Couriot, SESYNC "Living in a Changing Arctic: Implications for Barren-Ground Caribou Populations"

Learn more and register HERE.



February 2, 2021

# Dr. John Linnell, Norwegian Institute for Nature Research

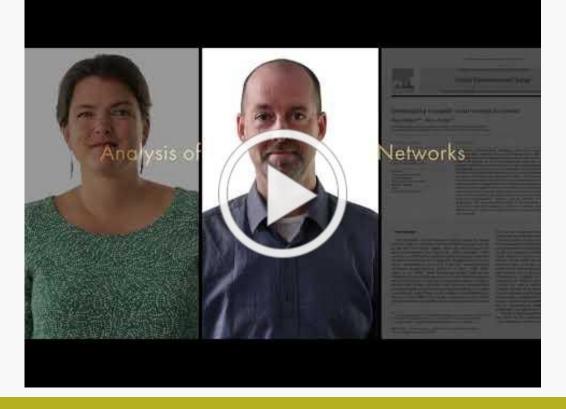
"Conserving Large Carnivores in Europe: How Much Wild Can We Fit into Human-Dominated Landscapes?"

Learn more and register HERE.

# **LATEST VIDEO | Introduction to Social Networks**

Instructors of Our Short Course "Introduction to Social and Ecological Network **Analysis" Share the Basics** 

Our newest SESYNC video, "Introduction to Social Networks," is the companion to Dr. Phillip P.A. Staniczenko's "Introduction to Ecological Networks." Here, Dr. Lorien Jasny presents the history of social networks, important concepts of network structure, their application to environmental management, and an analysis of social-ecological networks. Watch it below.



### **POSTDOC RESEARCH | Examining Croplands in Protected Areas**

### Protected Areas Vulnerable to Growing Emphasis on Food Security

New study shows croplands are prevalent in protected areas, challenging their efficacy in meeting conservation goals.

Protected areas are critical to mitigating extinction of species; however, they may also be in conflict with efforts to feed the growing human population. A new study shows that 6% of all global terrestrial



protected areas are already made up of cropland, a heavily modified habitat that is often not suitable for supporting wildlife. Worse, 22% of this cropland occurs in areas supposedly enjoying the strictest levels of protection, the keystone of global biodiversity protection efforts.

This finding was published in the *Proceedings of the National Academy of Sciences* by researchers at the University of Maryland's National Socio-Environmental Synthesis Center (SESYNC) and National Institute for Mathematical and Biological Synthesis (NIMBioS) at the University of Tennessee. In order to comprehensively examine global cropland impacts in protected areas for the first time, the authors synthesized a number of remotely sensed cropland estimates and diverse socio-environmental datasets. Read more.

## **SESYNC** on YouTube | Videos Perfect for the Classroom

Looking for videos on socio-environmental topics to share in the classroom? Check out our **YouTube channel** for helpful tutorials and lectures, like the video "Different Types of Data" below. And don't forget to **subscribe** to our channel to get updates when new videos are added.











### **NEW PUBLICATIONS | SESYNC in the Journals**

"Pervasive cropland in protected areas highlight trade-offs between conservation and food security." Published in Proceedings of the National Academy of Sciences of the United States of America by former SESYNC postdoc Varsha Vijay and colleague Paul R. Armsworth.

"I am Sapelo': Racialized uneven development and land politics within the Gullah Geechee Corridor." Published in Environment and Planning E: Nature and Space by former SESYNC postdoc Dean Hardy and Nik Heynen.

"Impact of transnational land acquisitions on local food security and dietary diversity." Published in Proceedings of the National Academy of Sciences of the United States of America, by Marc F. Müller, Gopal Penny, Meredith T. Niles, Vincent Ricciardi, Davide Danilo Chiarelli, Kyle Frankel Davis, Jampel Dell'Angelo, Paolo D'Odorico, Lorenzo Rosa, Maria Cristina Rulli, and Nathaniel D. Mueller. This paper resulted from the Pursuit, Food-Energy-Water Interdependencies of the Global Agrarian Transition.

"High uncertainty over the future of tidal marsh birds under current sea-level rise projections." Published in *Biodiversity and Conservation* by former SESYNC postdoc Christopher R. Field and colleagues Brian T. Klingbeil, Jonathan B. Cohen, Maureen D. Correll, Thomas P. Hodgman, Adrienne I. Kovach, Erika E. Lentz, Brian J. Olsen, W. Gregory Shriver, Whitney A. Wiest, and Chris S. Elphick.

"Drivers of compliance monitoring in forest commons." Published in Nature Sustainability by Graham Epstein, Georgina Gurney, Sivee Chawla, John M. Anderies, Jacopo Baggio, Hita Unnikrishnan, Sergio Villamayor Tomas, and Graeme S. Cumming. This paper resulted from the SESYNC Pursuit Testing and extending Ostrom's frameworks: quantitative synthesis and modeling of social-ecological dynamic.

"Towards food supply chain resilience to environmental shocks." Published in Nature Food by Kyle Frankel Davis, Shauna Downs, and former SESYNC postdoc Jessica A. Gephart.

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