To view this email as a web page, go here.

Center for Biodiversity and Global Change: Spring 2022 Events & Looking Back at 2021

January 2022

Join us this spring for a range of events from the BGC Center and its Max Planck-Yale Center for Biodiversity Movement and Global Change (MPYC). The Center is a hub for linking evidence, insights, tools, and solutions for biodiversity in a changing world. Feel free to check out recent events and the highlights of activities of our core team.

1. **Upcoming Events**
2. **Looking Back: 2021 Research Highlights**
3. **Looking Back: 2021 Events**

**Upcoming Events**

Check out our [Events page](#) for up-to-date information and links to register. All events except the symposium will be virtual.

**February 17, 2022, 4PM ET**
**Workshop: Modelling and mapping the ecological niche from physical first principles**
Dr. Michael Kearney, University of Melbourne

**March 10, 2022, 3:30PM ET**
**Workshop: Geospatial Processing at Scale: Google Earth Engine Basics**
Ajay Ranipeta, Lead Engineer, Map of Life
John Wilshire, Software Engineer, Map of Life
Kalkidan Fekadu Chefira, Postgraduate Associate, Map of Life

**March 17, 2022, 3:30PM ET**
**Impacts of long-term habitat changes on predators and prey**
Dr. Jen Cruz, Boise State University

**March 31, 2022, 3:30PM ET**
**Two steps forward, one step back: the path to spatially explicit species interactions**
Dr. Laura Pollock, McGill University

**April 7, 2022, 1PM ET**
**Understanding the evolution of biodiversity with process-based simulation models**
Dr. Oskar Hagen, German Centre for Integrative Biodiversity Research (iDiv)
Dr. Alex Skeels, ETH Zurich & the Swiss Federal Research Institute for Forest, Snow and Landscape (WSL)

**April 14, 2022, 3:30-5PM ET**
**Workshop: Geospatial Processing at Scale: Image Analysis and Time Series Visualization with Google Earth Engine**
Ajay Ranipeta, Lead Engineer, Map of Life
John Wilshire, Software Engineer, Map of Life
Kalkidan Fekadu Chefira, Postgraduate Associate, Map of Life

**April 21, 2022, 10AM ET**
**Linking Human Mobility and Marine Megafauna Movement**
Dr. David March, University of Exeter

**May 10, 2022, TBC - Save the Date**
Symposium: Biological Earth Observation with Animal Sensors
Looking Back: 2021 Research Highlights

Here is a selection of our favorite highlights of 2021. For all our news see [here](#) and for our published work [here](#).

**MPYC: ICARUS Initiative inspires new documentary**
A new short documentary highlights the ICARUS Initiative, its breakthrough technology, and the potential for revolutionizing how we think about the connections between animals and people.

**BGC: Opportunities for boosting global biodiversity monitoring**
In a new study published in PLOS Biology this past August, BGC researchers Ruth Oliver, Ajay Ranipeta, Kevin Winner, and Walter Jetz present two novel metrics to assess the data coverage and sampling effectiveness of our global store of biodiversity records available through the Global Biodiversity Information Facility (GBIF).

**BGC: New study by BGC postdoc Doug Booher introduces gender neutral suffix to name species**
Because Latin grammatical gender does not translate to those who would want to be identified as non-binary, we provide the use of a new suffix ‘they’ in honoring artist and humans rights activist Jeremy Ayers - a close friend of the BGC Jetz Lab member Doug Booher and R.E.M. lyricist Michael Stipe who co-wrote the etymology.

**BGC|MPYC: Map of Life Data Manager Yanina Sica organizes symposium at TDWG 2021**
Yanina Sica, our Data Manager for Map of Life, recently co-organized a symposium for the TDWG 2021 Virtual Conference on Tuesday, October 19, 2021. The session, titled “From the field, right on to your science table: challenges of sharing ecological data”, featured presenters from Australia, Brazil, Argentina, Germany, and the United States, and drew a crowd of 199 attendees.

**MPYC: Researchers gain insight into variation in individual environmental niches**
Researchers at MPYC, led by graduate student Ben Carlson, published an article this summer in Nature Communication that examines variation in individual environmental niches. This work is significant because it is the first attempt to examine the geometry of individual niches using niche axes such as land cover—conditions that will be directly affected by global change.

Looking Back: 2021 Events
Like everything, last year's events were impacted by COVID-19, but we were able to host a total of 12 seminars and workshops, and a mini-conference. We’d like to thank all our speakers, presenters, and participants for making our all-virtual program a success!

**January 14, 2021**
*Building Better Species Distribution Models by Modeling Nonsense and Imaginary Creatures*
*Dr. Dan Warren, Okinawa Institute of Science and Technology*

**February 4, 2021**
*Building an Antiracist Lab in the Environmental Sciences*
*Dr. Bala Chaudhary, DePaul University*

**February 25, 2021**
*Making Better Conservation Decisions*
*Dr. Jeffrey Hanson, Carleton University*

**April 14, 2021**
*Max Planck-Yale Mini Conference*
*Over 30 participants shared their recent research interests in 3-minute lightning talks and joined small discussion groups.*

**May 6, 2021**
*Plant spectra reveal functional, taxonomic, and phylogenetic dimensions of plant biodiversity*
*Dr. Anna Schweiger, University of Zurich*

**October 7, 2021**
*Host traits, microbes, and disease in intensively managed agricultural landscapes*
*Dr. Lauren C Ponisio, University of Oregon*

**October 28, 2021**
*Animal space use*
*Dr. Chris Fleming, University of Maryland College Park & Smithsonian Conservation Biology Institute*

*Workshop: Continuous-Time Movement Modeling*
*Dr. Chris Fleming, University of Maryland College Park & Smithsonian Conservation Biology Institute*

**November 11, 2021**
*Workshop: Getting to Know Google Earth Engine*
*Ajay Ranipeta, Lead Engineer, Map of Life*
*John Wilshire, Software Engineer, Map of Life*

**November 18, 2021**
*From Penguins to Marine Protected Areas: How to Transform Basic Science into Actionable Science*
*Dr. Mercedes Santos, Marine Protected Areas of Argentina & Scientific Committee on Antarctic Research*

**December 2, 2021**
*Using technology and open data to understand problems and provide solutions in conservation*
*Dr. Rebecca Senior, Princeton University & Durham University*

**December 9, 2021**
*The importance of behavioral ecology in understanding top predator responses to global change*
*Dr. Briana Abrahams, University of Washington*