Jonathan A. Sullivan

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School of Natural Resources and the Environment
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EDUCATION

University of Michigan • Ann Arbor, MI   **2016 - Present**
PhD Pre-Candidate
School of Natural Resources and the Environment
Advisors: Arun Agrawal and Dan Brown

Yale University • New Haven, CT   **2011-2013**
Master of Forestry
School of Forestry and Environmental Studies
Advisor: Mark Ashton

Connecticut College • New London, CT   **2004-2008**
BA Environmental Chemistry, Minor in Public Policy
Honors Thesis: *Asymmetric Synthesis of Seven-Membered Carbocyclic Rings via a Claisen Rearrangement Process*
Advisor: Timo Ovaska

PUBLICATIONS

Sullivan, J., Wrathall, D., Tellman, B., Benessaiah, K., *In Prep.* Cocaine Carbon: narco-deforestation as a threat to REDD+ in Central America.

Ovaska T, **Sullivan J**, Ovaska S, Winegrad J, Fair J. **2009**. Asymmetric Synthesis of Seven-Membered Carbocyclic Rings via a Sequential Oxyanionic 5-Exo-Dig Cyclization/ Claisen Rearrangement Process. Total Synthesis of (-) Frondosin B. *Organic Letters*, 11(12), 2715-2718.

Li X, Keon A, **Sullivan J**, Ovaska T. **2008**. Studies toward Frondosin A and it Analogues. Formal Total Synthesis of (±)-Frondosin A. *Organic Letters*, 10(15), 3287-3290

GRANTS, FELLOWSHIPS & AWARDS

NASA Land Cover and Land Use Change Grant ($300,000) 2016. *Large-Scale Land Transactions as Drivers of Land-Cover Change in Sub-Saharan Africa.* PIs: A. Agrawal, D.G. Brown, J. Southworth; Collaborators: T. Coughlin, S. Jung, A. Kinzer, C. Liao, C. Muir, **J. Sullivan**

Google Earth Engine Research Award ($90,000). 2016. *Development of a Global Database for Historical Flood Events: A Comprehensive Mapping of the Dartmouth Flood Observatory in Google Earth Engine.* PI: R. Brakenridge; Collaborators: **J. Sullivan**, B. Tellman

Google Earth Engine Research Award ($100,000). 2015. *Dynamic Flood Vulnerability Mapping for Climate Affected Areas in the US.* PI: P. Vinck; Collaborators: B. Tellman, B. Schwartz, **J. Sullivan**

Yale F.K. Weyerhaeuser Research Grant ($35,000). 2014. *Addressing Forest Commodity Supply and Deforestation: Inventory Methods and Value Estimation Models of Tropical Bamboo Species* PI: T. Gregoire; Collaborator: **J. Sullivan**

Best Poster Presentation, Society of American Forester National Convention. 2012. *Award for poster on bamboo biomass market potential.*

Jubitz Family Endowment for Research Internships ($2,700). 2012 *for Technical Forestry and Certification Research, EcoPlanet Bamboo, Kowie Farm, Eastern Cape, South Africa*

Yale School of Forestry and Environmental Studies Scholarship ($10,000). 2012. *Annual Tuition*

Research Grant Ovaska Organic Chemistry Laboratory ($3,500). 2007. *Research stipend*

PROFESSIONAL MEMBERSHIP

Columbia University's Sustainable Development Doctoral Society • **Student Member**   **2017**

American Association of Geographers • **Student Member**   **2016 – Present**

TEACHING & TRAINING EXPERIENCE

Google Earth Outreach 2013 • **Trainer**   **July 2013**
        Led training on integrating mobile phone data collection and Google Earth Engine
Yale University • **Teaching Assistant**   **2011-2012**
        General Chemistry Laboratory (Introductory Chemistry for Undergraduates)

INVITED PRESENTATIONS

Forests & Livelihoods: Assessment, Research, and Engagement Annual Meeting 2016. Edinburgh, Scotland.
        December 2-4, 2016, *Poster on "Cocaine Carbon: Narco-Trafficking as a threat to REDD+*
USAID BioREDD Program 2015. Bogota, Colombia. March 19-20, 2015, *Presentation on REDD+ Carbon Accounting in the Pacific Coast of Colombia*
International Society of Tropical Foresters 2014. 20th annual conference, Forests as Capital: Financial Mechanisms for Tropical Forest Conservation. Jan 30th-Feb 1st, Yale University. *Presentation on "Political Risk Insurance for Forestry Investment: Experience from Bamboo Reforestation in Nicaragua"*
Google Earth Outreach 2013. Geo for Higher Ed Summit. July 22nd-24th, Mountain View, CA. *Presentation on "Open Data Kit: Experiences from Forestry and Remote Sensing"*
Society of American Foresters 2012. National Convention: Resilient Forests. Oct 24th-28th, Spokane, WA. *Poster on "Market Potential of Bamboo as a Biomass Material"*
American Chemical Society 2008. National Meeting. April 6th-10th, New Orleans, LA. *Poster on "Synthesis of Optically Active Seven-Membered Carbocyclic Rings"*

PROFESSIONAL EXPERIENCE

Cloud to Street • **Flood Detection Lead – Remote Sensing Specialist (Ann Arbor, MI)**   **2015-Present**
Responsible for designing and implementing methods for detection of flood events using existing and historical satellite imagery. Spatial datasets of historical flood events have been prepared for clients including the World Bank and the French Development Bank (AFD).

ecoPartners Carbon LLC • **Manager of Development Services (Berkeley, CA)**   **2014-2016**
Designed and provided technical support in the development of international REDD+ projects. Clients included national governments, non-profit conservation organizations, national working groups and multiple small corporate clients both in Latin America and Africa.

REDD Systems • **Technical Consultant (Berkeley, CA)**   **2014-2016**
Provided technical support for the conceptualization and design of a novel forest monitoring system based on Planet Labs data, a high temporal and spatial resolution satellite imagery product, to be utilized in jurisdictional REDD+ programs.

World Bank • **Technical Consultant (Washington, D.C.)**   **2013**
Provided an assessment of geomorphological and socio-physical vulnerability flooding in Uttarakhand India using an exploratory Google Earth Engine model and analysis.

EcoPlanet Bamboo • **Vice President of Certification (New Haven, CT)**   **2013-2014**
Responsible for managing and documenting compliance with several land-use certifications including Forest Stewardship Council, Verified Carbon Standard (VCS), and Climate-Community-Biodiversity Alliance for reforestation operations in Nicaragua and South Africa.

<u>Yale School Forest</u> • Community Forester (Eastford, CT)   **2013**
Member of forest crew team that contributed to the sustainable management of +10,000 acres of the Yale School Forest landholdings through road and trail maintenance, inventory design and execution, implementing silvicultural prescriptions, timber marking, and community engagement.

TECHNICAL SKILLS

Remote sensing*: ENVI, Google Earth Engine, Google Earth Engine API
Mapping: ArcGIS, QGIS
Coding Languages: Python, R, Javascript
Mobile Data Collection: Open Data Kit, Formhub, Collect
Language: Spanish (intermediate)