

# Kelly Heber Dunning

Auburn University School of Forestry and Wildlife Science | [khd@auburn.edu](mailto:khd@auburn.edu) | <http://kellyheber.com> |

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Dr. Kelly H. Dunning is an early career Assistant Professor of Conservation Governance. Her lab, the Conservation Governance Lab is based at Auburn University School of Forestry and Wildlife. Dr. Dunning published her book, *Managing Coral Reefs*, funded by a U.S. Fulbright Award in July 2018.

## Education

**Massachusetts Institute of Technology** Doctor of Philosophy, Sept. 2012 – May 2016

- Fully-funded Ph.D. in Natural Resources & Environmental Planning and Policy in Dept. of Urban Studies & Planning.
- Winner of **2016 Best Doctoral Thesis “Communities of Coral: an Ecological and Institutional Analysis of Ecosystem Services and Biodiversity Conservation in Southeast Asia”** published as a book by Anthem Press, July 2018.
- **Fulbright Scholar** (Malaysia, 2015), Carroll Wilson Fellow (2013), MIT Presidential Fellow (2012–2016), US-AID Grant for Research Innovation in International Development (2015). U.S. Department of State Critical Language Scholarship, for immersion study of Indonesian (2013).

**University of Oxford, Christ Church College** Master of Science, Sept. 2011 – May 2012

- M.Sc. in **Environmental Policy and Economics** in School of Geography and Environment.
- Thesis: *“Adaptive Management of Natural Resources in Large-scale Socio-ecological Systems: The case of the Florida Everglades”*.

**University of Florida** Bachelor of Arts, Sept. 2005 – May 2009

- B.A. **Political Science specialized in Environmental Policy** (Magna Cum Laude), B.A.
- Florida Bright Futures Scholarship (full funding), member of Phi Beta Kappa Honor Society.

## Experience

**Auburn University School of Forestry and Wildlife Sciences** Assistant Professor August 2019 – present

- Tenure track assistant professor specialized in conservation governance, environmental policy, human dimensions of wildlife, and natural resource management.
- Recipient of 2020 National Academies of Science Early Career Fellowship and National Science Foundation RAPID Award.
- Research interests include: socio-ecological systems, resilience, coastal governance. Specialist in coral reefs, recreational fisheries, stakeholder engagement, tropical rainforests, community-based ecosystem management.

**University of Texas Austin** Research Scientist & Coastal Training Program Director, January 2018 – present

- **Senior management** position overseeing translation of science to policy-makers for equitable and sustainable coastal management.

**Rainforest Foundation UK** Head of Mapping and Research, May 2016 – December 2017

- **Senior management** position that focused on implementing indigenous forestry management programs across the five countries of the Congo Basin.

- Hostile Environment Awareness Training (HEAT) certified to work in countries with instability & conflict.

## MIT Science Impact Collaborative

Research Scientist, Sept. 2012 – May 2016

- Designed, implemented, funded, and managed multi-year coral reef conservation programs in Indonesia and Malaysia.
- Authored a book on reef conservation in July 2018. Title: *Communities of Coral: An Ecological and Institutional Analysis of Ecosystem Services in Southeast Asia* Anthem Press. 2018. <https://amzn.to/2onQ0mP>.

## Woods Hole Oceanographic Institution

Policy Analyst, Sept. 2012 – May 2016

- Analyzed data on a large interdisciplinary team to conduct National Science Foundation-funded research on coastal wetlands and ecosystems.

## Teach for America

Teacher, 2009 – 2011

- TFA is a "national teacher corps of recent college graduates who commit two years to teach and to effect change in under-resourced urban and rural public schools", selected through a highly competitive process.
- Taught in low-income community achieving significant improvements in educational outcomes.
- Received annual bias training and diversity, equity, and inclusion professional development.

## Publications, Reports, and Presentations

### Peer-reviewed books

- **Dunning, Kelly Heber.** (2018) "Communities of Coral: An Ecological and Institutional Analysis of Southeast Asian Coral Reefs". London: Anthem Press. <https://amzn.to/2onQ0mP>.

### Peer-reviewed articles

- **Dunning, K. H.** . (2021) Adaptive Governance: The proposed port expansion in the Cayman Islands and its impacts to coral reefs. *Marine Policy*, 124, 104248. <https://bit.ly/3niyRHp>
- **Dunning, Kelly Heber.** (2020). Building resilience to natural hazards through coastal governance: a case study of Hurricane Harvey recovery in Gulf of Mexico communities. *Ecological Economics*, 176, 106759. <https://www.sciencedirect.com/science/article/abs/pii/S0921800919316799>
- Tunnell, J. W., **Dunning, K. H.**, Scheef, L. P., Swanson, K. M. (2020). Measuring plastic pellet (nurdle) abundance on shorelines throughout the Gulf of Mexico using citizen scientists: Establishing a platform for policy-relevant research. *Marine Pollution Bulletin*, 151, 110794. <https://www.sciencedirect.com/science/article/pii/S0025326X19309506>
- **Dunning, Kelly Heber.** (2016) "Missing the trees for the forest? Bottom-up policy implementation and adaptive management in the US natural resource bureaucracy". *Environmental Policy and Planning*.
- **Dunning, Kelly Heber.** (2014) "Ecosystem Services and Community Based Coral Reef Management Institutions in Post Blast Fishing Indonesia". *Ecosystem Services*. <http://bit.ly/1Km1SJ5>
- **Heber, Kelly.** (2013) "Community-based Coral Reef Management". *Oxford Journal of Human Welfare*. <http://bit.ly/1SzkquR>

### Invited Presentations

- **Dunning, Kelly Heber.** (2019) *Natural and Human Sciences: When the Stars Align or Don't*. Coastal and Estuarine Research Foundation (CERF) Biannual meeting. Mobile, AL.
- **Dunning, Kelly Heber.** (2019) *Pitch: Using NEON for Human Dimensions Research*. University of Colorado at Boulder Earth Institute. "NSF NEON Science Summit." Boulder, CO. (Awarded stipend to attend)
- **Dunning, Kelly Heber.** (2019) *Resilience in Recovery After Hurricane Harvey*. Global Center on Climate Resilience. "US-UK Resilience Forum." Oxford, UK. (Awarded stipend to attend)

- **Dunning, Kelly Heber.** (2019) *Adaptive Policy Response and Coral Reef Management* "Auburn Faculty Research Symposium." Auburn, AL.
- **Dunning, Kelly Heber.** (2019) *Ecosystem Services as a Research Priority* "NSF Coastlines and People (COPE) Meeting." Chicago, IL. (Awarded stipend to attend)
- **Dunning, Kelly Heber.** (2019) *Managing Coral Reefs in Southeast Asia* "Harte Research Institute Seminar." Corpus Christi, TX.
- **Dunning, Kelly Heber.** (2018) *The Mission Aransas NERR and Coastal Resilience.* NASEM Gulf Research Program "Networking and Ideas Conference." Mobile, AL. (Awarded stipend to attend)
- **Dunning, Kelly Heber.** (2017) *Keynote Presentation: "Mapping for Rights: Community based mapping of tropical forests in the Congo Basin."* Participatory GIS (PPGIS) Conference. California Polytechnic State University.
- **Dunning, Kelly Heber.** (2015) *"Socio-ecological systems and community based coral reef management in Indonesia and Malaysia."* Association for European Schools of Planning (AESOP) Young Academics, Palermo, Italy. (Awarded stipend to attend) Third International Marine Conservation Congress, Glasgow, UK.
- **Dunning, K.H., Carr, E., Shiraz, Y.** (2014) *"Ecosystem Services of the Hudson and Delaware Estuaries."* Stanford NatCap Annual Conference and Training, Palo Alto, C.A., USA. (Awarded stipend to attend)

## Conference Presentations

- **Dunning, Kelly Heber.** (2019) *Adaptive Policy Response and Coral Reef Management* "Auburn Faculty Research Symposium." Auburn, AL.
- **Dunning, Kelly Heber.** (2015) *Community based Coral Reef Management: An Ecological and Institutional Analysis of Indonesian and Malaysian Cases.* American Collegiate Schools of Planning (ACSP) Houston, Texas.
- Hoagland, P., Parsons, G., Carr, E., **Dunning, K.H.**, Beet, A., Shirazi, Y. (2015) *"Potential Effects on Ecosystem Services Due to Channel Deepening in the Delaware and Hudson Estuaries."* Coastal and Estuarine Research Foundation (CERF), Providence, R.I., USA.
- Levenson, J., Thompson, M., **Dunning, K.H.**, Grétarsdóttir, R., Rasmussen, M., Harris, E., Hardy, S., Nelson, P. (2014) *"Conservation in the cloud: Leveraging mobile technology to connect marine tourism businesses with resource managers."* Third International Marine Conservation Congress, Glasgow, UK.

## Funded Projects

- Dunning (PI) et al. 2020 National Science Foundation (NSF) RAPID Award. Title: *RAPID: A Participatory Study of How Decision Makers in the U.S. Southeast Communicated Scientific Information to Mitigate COVID-19.* Amount: \$ 150,000.
- Dunning (PI) 2020 National Academies of Science, Engineering, and Medicine (NASEM). Title: *Early Career Fellowship.* Amount: \$ 75,000.
- Dunning (PI) et al. 2020 Auburn University Intramural Development Grants Interdisciplinary Teams Award. Title: *A Participatory Study on Community-based Wildlife Conservation in Sub-Saharan Africa.* Amount: \$ 50,000.
- Anderson et al. 2019. (Dunning co-PI) National Academies of Science, Engineering, and Medicine (NASEM) Healthy Ecosystems Award. Title: *A coupled natural-human framework for risk assessment of coastal communities from land-use and climate change.* Dunning amount: \$ 170,000.

## Media coverage

- 2020 Auburn University professor leads interdisciplinary research on COVID-19 messaging, response in vulnerable communities: [https://ocm.auburn.edu/newsroom/news\\_articles/2020/10/151004-rapid-nsf-covid-project.php](https://ocm.auburn.edu/newsroom/news_articles/2020/10/151004-rapid-nsf-covid-project.php)
- 2020 Meet Dr. Kelly Dunning: <https://aaes.auburn.edu/blog/2020/12/17/meet-dr-kelly-dunning/>

- 2020 Auburn professor helps lead 'Nurdle Patrol,' citizen science project on microplastics: <https://alabamane.wscenter.com/2020/07/19/auburn-professor-helps-lead-nurdle-patrol-citizen-science-project-on-microplastics/>
- 2020 Auburn to study pandemic in Alabama, Louisiana, Mississippi: <https://apnews.com/article/virus-outbreak-sci>
- 2020 Auburn University to study COVID-19 pandemic in Alabama, Louisiana, Mississippi: <https://www.wvtm13.com/article/auburn-to-study-pandemic-in-alabama-louisiana-mississippi/34406574#>
- 2019 Science and the Sea: <https://www.scienceandthesea.org/program/adapting-change>
- 2019 University of Texas training highlight: <https://bit.ly/2VYCXHK>
- 2018 University of Texas book review: <https://bit.ly/2GDD4Dv>
- 2017 REDD Monitor Feature: <http://bit.ly/2t7vJGm>
- 2017 Conservation Watch Feature: <http://bit.ly/2dNjqXt>
- 2016 Vice Feature: <http://bit.ly/2s3judQ>
- 2015 Business and ASEAN feature: <http://bit.ly/240KBq2>
- 2014 Phys.org feature: <http://bit.ly/1mNmZ9e>
- 2014 Oceans at MIT feature: <http://bit.ly/1Km0Dth>
- 2014 MIT News feature: <http://bit.ly/1F9jCCQ>
- 2014 EPA Announcement of Best Paper Prize: <http://1.usa.gov/1FCg6nW>