

Cara Aileen Rockwell
Department of Earth and Environment
Florida International University
Miami, FL, USA 33199
crockwel@fiu.edu

EDUCATION

- 2011 Ph.D. Tropical Forestry, School of Forest Resources and Conservation,
University of Florida, Adviser Dr. Karen Kainer
- 2005 M.S. Tropical Forestry, School of Forest Resources and Conservation, concentration
in Tropical Conservation and Development, University of Florida, Adviser Dr. Karen
Kainer
- 1994 B.S. Biological Sciences, Department of Biological Science, Florida State University

ACADEMIC EXPERIENCE

Assistant Professor, Department of Earth and Environment, Florida International University
(January 2023-present), Miami, FL, USA

- Supervising federal and foundational research projects
- Teaching and mentoring undergraduate and graduate students in agroecology and the environmental sciences

Research Assistant Professor, Institute of Environment, Florida International University (August 2015-present), Miami, FL, USA

- Supervising federal and foundational research projects
- Teaching and mentoring undergraduate and graduate students in agroecology and the environmental sciences
- Engaging community interest in environmental sustainability and conservation

Postdoctoral Fellow, Center for International Forestry Research (November 2012–December 2014)
Puerto Maldonado, Madre de Dios, Peru

- Developed research design and methods, analyzed data, and supervised field team of sixteen undergraduate students for USAID-funded project assessing the effects of selective logging on Brazil nut production in Madre de Dios, Peru
- Managed data base for cross-organizational collaborative research efforts

PROFESSIONAL EXPERIENCE

Research Consultant, Center for International Forestry Research (June-September 2012)
Bogor, Indonesia

- Designed, implemented and managed series of semi-structured interviews on organizational and individual research interests with Consultative Group on International Agricultural Research (CGIAR) partners in Peru, Brazil, Bolivia, and Colombia
- Developed report that examines existing scientific literature and associated research activities on multiple-use forest management in the Western Amazon region

Conservation Coffee Program Intern, Conservation International (September 2002-April 2003)
Washington, DC, USA

- Created natural resource management and conservation organization database
- Identified potential funding sources and strategies

Environment Sector Coordinator, Peace Corps (December 2000-January 2002)
Asuncion, Paraguay

- Organized capacity-building workshops to train volunteers and their community counterparts in agroforestry techniques and environmental education curricula
- Identified potential resources for project development with volunteers and Paraguayan counterparts

Agroforestry Extension Volunteer, Peace Corps (Dec 1998 – December 2000)
María Auxiliadora, Caagazú, Paraguay

- Trained community counterparts in tree planting techniques and established agroforestry systems and community nursery to enhance crop yields and conserve local biodiversity
- Developed and implemented agroforestry workshops and improved farmer-to-farmer and community participatory skills

Conservation Worker, Ann Arbor Department of Parks and Recreation Natural Area Preservation Program (March 1996-June 1998)

Ann Arbor, MI, USA

- Collaborated on natural area restoration projects with program managers
- Coordinated volunteer workdays in city parks and native plant garden

PUBLICATIONS

Refereed

Lange, J., Gann, G.D., Liu, H., Wendelberger, K., Revuelta, E., Marino Lemus, A.A., **Rockwell, C.A.** *In print*. Decline of *Euphorbia garberi* Engelm. ex Chapm., a federally listed threatened species, and shifts in a coastal plant community at Northwest Cape, Everglades National Park. *Natural Areas Journal*.

Salisbury, A. B., Koeser, A. K., Andreu, M. G., Chen, Y., Freeman, Z., Miesbauer, J. W., Herrera-Montes, A., Kua C-S., Higashiguchi Nukina, R., **Rockwell, C.A.**... & Hauer, R. J., 2023. Predictors of tropical cyclone-induced urban tree failure: an international scoping. *Frontiers in Forests and Global Change* 6:1168495.

Rockwell, C.A., Crow, A., Guimarães, E.R., Recinos, E., La Belle, D., 2022. Tree species richness, stem density, and canopy coverage in food forests: Potential contributions to ecosystem services in a subtropical urban environment. *Urban Planning (Special Issue: From Smart Urban Forests to Edible Cities: New Approaches in Urban Planning and Design)* 7: 139-154

Herrera, B., Frank, A. R., **Rockwell, C.A.**, 2021. Sacred weeds: common ritual plants from the urban *botánicas* of Miami-Dade County, Florida. *Ethnobotany Research and Applications* 22: 1-15.

Fadrique, B., Veldman, J.W., Dalling, J.W., Clark, L.G., Montti, L., Ruiz-Sanchez, E., Rother, D.C., Ely, F., Farfan-Rios, W., Gagnon, P., Prada, C.M., Camargo Garcia, J.C., Saha, S., Veblen, T.T., Londoño, X., Feeley, K.J., **Rockwell, C.A.**, 2020. Guidelines for including bamboos in tropical ecosystem monitoring. *Biotropica* 52 : 427-443.

Rockwell, C.A., Guariguata, M.R., Menton, M., Arroyo Quispe, E., Quaedvlieg, J., Warren Thomas, E., Fernandez Silva, H., Jurado Rojas, E.E., Kohagura Arrunategui, J.A.H., Meza Vega, L.A., Revilla Vera, O., Quenta Hanco, R., Valera Tito, J.F., Villarroel Panduro, B.T., Yucra Salas, J.J., 2017. Spatial distribution of *Bertholletia excelsa* in selectively logged forests of the Peruvian Amazon. Journal of Tropical Ecology, 33: 114-127.

Baraloto, C., Alverga, P., Brasil da Silva, I., Castro, W., Consuelo, E., Souza, H. da, Elizabeth de Souza Moll, I.E., Kenji, D., Dueñas Linares, H., Medeiros, H., Murphy, S., Ramos, H., **Rockwell, C.A.**, Shenkin, A., Silveira, M., Vasquez, G., Barnes, G., Southworth, J., and Perz, S., 2015. Forest value in southwestern Amazonian forests disturbed by road paving. Biological Conservation 191: 674-681.

Rockwell, C.A., Guariguata, M.R., Menton, M.C.S., Arroyo Quispe, E., Quaedvlieg, J., Warren Thomas, E., Fernandez Silva, H., Jurado Rojas, E.E., Kohagura Arrunategui, J.A.H., Meza Vega, L.A., Revilla Vera, O., Quenta Hanco, R., Valera Tito, J.F., Villarroel Panduro, B.T., Yucra Salas, J.J., 2015. Nut production in *Bertholletia excelsa* across a logged forest mosaic: Implications for multiple use. PLOS One 10: e0135464.

Rockwell, C.A., Kainer, K.A., 2015. Local and scientific perspectives on the bamboo-dominated forest in Acre, Brazil: A complementary knowledge base for multiple-use forest management, International Forestry Review 17: 51-64.

Baraloto, C., Alverga, P., Brasil da Silva, I., Castro, W., Consuelo, E., Souza, H. da, Souza Moll, I.E., Kenji, D., Dueñas Linares, H., Medeiros, H., Murphy, S., Ramos, H., **Rockwell, C.A.**, Shenkin, A., Silveira, M., Vasquez, G., Barnes, G., Southworth, J., and Perz, S., 2014. Contrasting forest value metrics in community forests of southwestern Amazonia. Ecology & Society 19: 56
<http://dx.doi.org/10.5751/ES-06911-190456>.

Rockwell, C.A., Kainer, K.A., d'Oliveira, M.V.N., Staudhammer, C.L., Baraloto, C., 2014. Logging in bamboo-dominated forests in southwestern Amazonia: Caveats and opportunities for smallholder forest management. Forest Ecology and Management 315: 202-210. [DOI: 10.1016/j.foreco.2013.12.022](https://doi.org/10.1016/j.foreco.2013.12.022)

Rockwell, C.A., Kainer, K. A., Marcondes, N., Baraloto, C. 2007. Ecological limitations of reduced-impact logging at the smallholder scale. Forest Ecology and Management 238: 365-374. [DOI: 10.1016/j.foreco.2006.12.028](https://doi.org/10.1016/j.foreco.2006.12.028)

Rockwell, C.A., Kainer, K.A., Staudhammer, C.L., Baraloto, C. 2007. Future crop tree damage in a certified community forest in southwestern Amazonia. Forest Ecology and Management 242: 108-118. [DOI: 10.1016/j.foreco.2006.11.002](https://doi.org/10.1016/j.foreco.2006.11.002)

Baraloto, C., Ferreira, E., **Rockwell, C.**, Walthier, F. 2007. Limitations and applications of parataxonomy for community forest management in southwestern Amazonia. Ethnobotany Research & Applications 5: 77-84. <http://lib-ojs3.lib.sfu.ca:8114/index.php/era/article/viewArticle/120>

Revisions

Salisbury, A. B., Koeser, A. K., Andreu, M. G., Chen, Y., Freeman, Z., Miesbauer, J. W., Herrera-Montes, A., Kua C-S., Higashiguchi Nukina, R., **Rockwell, C.A.**... & Hauer, R. J. Minor revisions. Predictors of tropical cyclone-induced urban tree failure: an international scoping. Frontiers in Forests and Global Change 6:1168495.

In preparation

Carvalho, A.L. de, D'Oliveira, M.V., Souza Barros, Q., **Rockwell, C.A.** Forest gap, size, frequency and distribution before and after selective logging in the western Brazilian Amazon. *Forest Ecology and Management*.

Cuni, L.M., Ross, M., Liu, H., **Rockwell, C.A.** Environmental drivers of species richness and diversity across an ecotone: Implications for restoration efforts of a fragmented plant community. *Natural Areas Journal*.

Guimarães, E.R., **Rockwell, C.A.** Food forests of Florida: reimagining food security in the subtropical urban environment. *Frontiers in Forests and Global Change*.

Rockwell, C.A., Kleiman, B. Influences of plant diversity on insect abundance and richness in urban food forests. *Frontiers in Ecology and the Environment*.

Rockwell, C.A., Guariguata, M., Almeyda Zambano, A., Broadbent, E., Quaedvlieg, J. What lies beneath: contiguous forest cover and forest degradation in the Peruvian Amazon. *Frontiers in Forests and Global Change*.

Rockwell, C.A., Kainer, K.A., Staudhammer, C.L., Baraloto, C. Post-logging enrichment planting and release treatments of Cumaru (*Dipteryx* cf. *odorata*, Fabaceae) in a bamboo-dominated forest: A potential avenue for community forest managers. *Ecological Restoration*.

Reports and outreach

Lange, J., **Rockwell, C.**, Possley, J., Gann, G., Wendelberger, K., Revuelta, E., Liu, H., Cuni, L., Status survey of Cape Sable thoroughwort (*Chromolaena frustrata*) and Garber's spurge (*Euphorbia garberi*) in the Cape Sable region following Hurricane Irma. Fairchild Tropical Botanic Garden, Miami, Florida.

Rockwell, C.A., Guariguata, M.R., Quaedvlieg, J., 2013. Promoviendo el uso múltiple del bosque en Madre de Dios: Evaluando el impacto de la tala selectiva de la madera en la producción de castaña. CIFOR Fact Sheet, Bogor, Indonesia. http://www.cifor.org/publications/pdf_files/factsheet/4343-factsheet.pdf

Rockwell, C.A., Evaluation of current multiple-use forestry/landscape management trends in Western Amazonia and potential avenues for CRP6 collaborative research. Report for CIFOR, Bogor, Indonesia.

Baraloto, C., Walthier, F., Ferreira, E., **Rockwell, C.** 2005. Arvores madeireiras do Acre, Brasil. Um guia para os mateiros. Field Museum of Chicago Rapid Color Guides Vol. 187. <http://fm2.fieldmuseum.org/plantguides/guideimages.asp?ID=291>

ORAL PRESENTATIONS

Rockwell, C.A., Olivas, P., Revuelta, E., Becerra, C. 2023. Post-logging forest recovery: Legacies of 20th century Natural Resource Exploitation in Big Cypress National Preserve. Ecological Society of America, Annual Meeting, Portland, OR.

Rockwell, C.A., Lange, J., Possley, J., Gann, G., Wendelberger, K., Revuelta, E., Liu, H., Cuni, L. Post-hurricane shifts in a coastal plant community: assessing the status of a species of special concern and associated taxa in Cape Sable, Everglades National Park. 2022 Rare Plant Task Force Hybrid Meeting.

Rockwell, C.A., Olivas, P., Revuelta, E., Becerra, C. 2022. Post-logging forest recovery: Legacies of 20th century Natural Resource Exploitation in Big Cypress National Preserve. South Florida Natural Resources Center at Everglades National Park.

Rockwell, C., Plant Diagnosis 101, The Education Fund Virtual Expo, Miami, FL, October 24, 2020.

Rockwell, C., Community forest resources. International network for sustainable ecosystem services of a tropical biodiversity hotspot under global change. FIU International Center for Tropical Botany, Miami, FL, February 17-19, 2020.

Rockwell, C.A., Guariguata, M., Almeyda Zambano, A., Broadbent, E., Quaedvlieg, J. What lies beneath: contiguous forest cover and forest degradation in the Peruvian Amazon. Pine Rockland and Tropical Botany Conference, Miami, FL, October 20-November 4, 2018.

Rockwell, C.A., Fadrique, B., Veldman, J., Advancing bamboo ecology, systematics, and conservation in the neotropics: Conclusions and future steps. Annual Meeting of the Association of Tropical Biology and Conservation (ATBC), Merida, Mexico, 9-14 July 2017.

Rockwell, C.A., Guariguata, M.R., Menton, M., Arroyo Quispe, E., Quaedvlieg, J., Warren Thomas, E., Fernandez Silva, H., Jurado Rojas, E.E., Kohagura Arrunategui, J.A.H., Meza Vega, L.A., Revilla Vera, O., Quenta Hanco, R., Valera Tito, J.F., Villarroel Panduro, B.T., Yucra Salas, J.J., Spatial distribution of *Bertholletia excelsa* in selectively logged forests of the Peruvian Amazon. Annual Meeting of the Association of Tropical Biology and Conservation (ATBC), Montpellier, France, 18-23 June 2016.

Guariguata, M.R., **Rockwell, C.A.,** Menton, M., Arroyo Quispe, E., Quaedvlieg, J., Warren-Thomas, E., Multiple-use forest management in Madre de Dios, Peru: The sustainability of Brazil nut production and timber in an integrated system, XXIV IUFRO World Congress 2014 – Salt Lake City, Utah, USA, 5-11 October 2014.

Rockwell, C.A., Kainer, K.A., Traditional perspectives on ecology and timber extraction in a bamboo-dominated forest in Acre, Brazil: A complementary knowledge base for sustainable management, XXIV IUFRO World Congress 2014 – Salt Lake City, Utah, USA, 5-11 October 2014.

Guariguata, M.R., **Rockwell, C.A.,** Menton, M., Arroyo Quispe, E., Quaedvlieg, J., Warren-Thomas, E., Preliminary evaluation of impacts in fruit and nut production of Brazil nut: Implications for forest management in Western Amazonia, presentation for the Programa de Ingeniería Forestal y Medio Ambiente de la Universidad Nacional Amazónica de Madre de Dios, Puerto Maldonado, Madre de Dios, Peru, 15 November, 2013.

Rockwell, C.A., Guariguata, M.R., Menton, M., Arroyo Quispe, E., Quaedvlieg, J., Warren-Thomas, E., Assessing logging impacts on fruit and nut production in the Brazil nut tree (*Bertholletia excelsa*): Implications for multiple-use forest management in Western Amazonia. Annual Meeting of the Association of Tropical Biology and Conservation (ATBC), San José, Costa Rica, 19-23 June 24-27, 2013.

Rockwell, C.A. Timber harvesting and post-logging silvicultural treatments in bamboo-dominated tropical forests of southwestern Amazonia: Enhancing smallholder livelihood options. Annual Meeting of the Association of Tropical Biology and Conservation (ATBC), Arusha, Tanzania, 19-23 June 12-16, 2011.

Menton, M., **Rockwell, C.A.** Impactos da exploração de madeira: Escalas de perturbação. Congresso Internacional sobre Manejo de Fauna Silvestre na Amazônia e América Latina. Rio Branco, Brazil, September 2008.

Rockwell, C.A. Manejo florestal na floresta aberta com bambu: aumentando as opções para os pequenos produtores. VI Seminário Anual de Cooperação Universidade Federal do Acre-University of Florida. Rio Branco, Brazil, July 2008.

Rockwell, C.A. Timber harvesting in bamboo-dominated tropical forests. Annual Meeting of the Association of Tropical Biology and Conservation (ATBC), Paramaribo, Suriname, June 9-13, 2008.

GRANTS AND FELLOWSHIPS

- US Forest Service-International Programs (2022; PI, Post-Hurricane Dorian Bahamas Pineyard Ecosystem Monitoring Project) \$900,000 (contract pending)
- Commission for Environmental Cooperation (2022; PI, Enhancing local food security through the farmer-to-farmer model as a rapid response to the COVID-19 pandemic) \$125,000
- Florida Forest Service (2021, PI ; Florida Food Forest Case Study) \$97,000
- USDA-NIFA Agriculture (2021; co-PI; Empowering students in the emerging big data field through multicultural scholar program) \$200,000
- USDA Specialty Crop grant (2021, co-PI ; Nitrogen Management and Plant Quality Monitoring Using Optical Sensor Technology), \$82,677
- Adams Charitable Trust grant (2021, PI ; Hidden History of South Florida Logging), \$15,000
- Florida Alliance for National Parks grant (2021, PI ; Post-logging recovery in Big Cypress), \$15,000
- Florida Forest Service Urban and Community Forestry Grant (2020, PI; Coastal resiliency in urban communities), \$10,000
- USDA Farm-To-Table Grant (2020, co-PI ; Education Fund Food Forests for Schools), \$100,000
- Munson Foundation South Florida Environmental Grant (2020, PI; Post-logging recovery in Big Cypress) \$15,000
- National Park Service South Florida Caribbean Cooperative Ecosystem Studies Unit Short- and medium-term consequences of Hurricane Irma (2020, co-PI) \$186,837
- Environmental Protection Agency Environmental Education Regional Grant (2019, co-PI; Environmental Education and IPM in Food Forests) \$133,000
- National Park Service South Florida Caribbean Cooperative Ecosystem Studies Unit Cape Sable Status Survey (2019, co-PI) \$30,000
- National Science Foundation IRES Biodiversity Training Grant (2019, co-PI) \$252,000
- FIU Tropics Incubator Grant (2019, co-PI), \$9654
- University of Florida Tropical Conservation and Development Practitioner Experience Grant (2011) \$1000
- Working Forests in the Tropics National Science Foundation-funded fellowship (Integrative Graduate Education and Research Traineeship) (2006-2008) \$75000
- University of Florida Tropical Conservation and Development Field Research Grant (2004) \$2000
- Graduate Women in Science Vessa Notchev Fellowship (2004) \$4000
- University of Florida School of Forest Resources and Conservation Research Assistantship (2003-2005) \$37,500

GRADUATE STUDENTS

- Katherine Castrillon, MS, current (committee member, Florida International University)
- Lydia Cuni, MS, 2019 (adviser, Florida International University)
- Lauren Emer, PhD, current (committee member, Florida International University)
- Riley Fortier, PhD, current (committee member, University of Miami)
- Noah Frade, MS, current (adviser, Florida International University)
- Gabrielle Gray-Case, MS, current (committee member, Florida International University)
- Brenna Kays, PhD, current (committee member, Florida International University)
- Blaire Kleiman, PhD, current (co-adviser, Florida International University)
- Lucas Le Fournis, PhD, current (committee member, Florida International University)
- Melinda Paduani, PhD, current (committee member, Florida International University)
- Barbara Pazos Almada, MS, 2016 (committee member, Florida International University)
- Jennifer Quintero, MS, current (committee member, Florida International University)
- Érika Rocha Guimarães, MS, 2024 (adviser, Florida International University)
- Mary Tiedeman, PhD, current (committee member, Florida International University)
- Joseph Navarro, MS, current (co-adviser, Florida International University)
- Latonya Williams, MS, current (adviser, Florida International University)

UNDERGRADUATE INTERNS

- Alex Crow, “Mapping and documenting of food forests in Miami Dade County Schools”.
- Eric Gonzalez, “The Status of Agroecology in French Universities, Institutions, Research, and Public Opinion”.
- Barbara Herrera, “Sacred weeds: a cross-cultural analysis of the botánica plants of Miami-Dade County, Florida”.
- Laura McCoy, “Mapping food forests”.
- Brielle Murch, “Mesh size and organic mulch interactions with decomposition rates in banana (*Musa* spp.) circles”.
- Andres Salas, “Do extractable nitrogen and portable chlorophyll meter readings of banana (*Musa* spp.) leaves correspond with soil nitrogen availability in banana circles?”.

PROFESSIONAL SOCIETY MEMBERSHIP

- Association for Tropical Biology and Conservation
- International Society of Tropical Foresters
- Ecological Society of America

TEACHING EXPERIENCE

- Undergraduate Senior Seminar
- Food Forests
- Introduction to Environmental Science
- Human Organization and Ecosystem Management
- Sustainable Forests
- Sustainability in Action

Undergraduate mentoring

- Undergraduate mentoring of 3 Universidad Nacional Amazónica de Madre de Dios, Programa de Ingeniería Forestal y Medio Ambiente students, Puerto Maldonado, Madre de Dios, Peru, 2013-present.
- Undergraduate practicum adviser for 16 Universidad Nacional Amazónica de Madre de Dios, Programa de Ingeniería Forestal y Medio Ambiente students, Puerto Maldonado, Madre de Dios, Peru, 2013, 2014

- Adviser, Growth of Leadership Academics and Diversity in Ecological Sciences (GLADES)

Workshops

- FIU Institute of Environment, Earth Month Composting Webinar, Miami, Florida, April 28, 2020.
- LACC Interdisciplinary Faculty Colloquium (Andes-Amazon Climate Change Roundtable), Miami, Florida, January 16, 2020.
- Woman's Club of Coconut Grove Plastic Free Initiative Educational Workshop, Miami, Florida, August 25, 2019.
- Dream In Green Youth Eco-Summit, Miami, Florida, May 30, 2019.
- International Tropical Botany and Pine Rockland Conference, Miami, Florida, October 23-28, 2016.
- Implications of Multiple Use Forest Management: Returning Research Results to Brazil Nut Producer Associations (Asociación de Castañeros de Alegría, Asociación de Productores de Castaña de Alerta), Madre de Dios, Peru 16-18 November, 2013.
- Logging Impacts in the Bamboo-Dominated Forests of Southwestern Amazonia: Implications for Local Forest Managers, Workshop for Returning Research Results, PAE Porto Dias, Acre, Brazil, August 2012.
- Contributions of Scientific Research to Community Forestry Workshop, Instituto de Manejo e Certificação Florestal e Agrícola, PAE Porto Dias, Acre, Brazil, August 2006.
- Centro dos Trabalhadores da Amazônia Parataxonomist Capacity-building Workshop, PAE Porto Dias, Rio Branco, Acre, Brazil, July 2005.

Graduate student enrichment

- Community Forestry Management Teaching Assistant, School of Forest Resources and Conservation, University of Florida, Gainesville, FL, USA, Fall 2011.
- Sustainability and tropical silviculture: The timber situation in the Brazilian Amazon, Global Forests teaching module, School of Forest Resources and Conservation, University of Florida, Gainesville, FL, USA, Spring 2008.
- School of Forest Resources and Conservation Graduate Student Orientation, University of Florida, Gainesville, FL, USA, August 22, 2006.

MANUSCRIPT REVIEWER

Acta Amazonica

Ambio

Biotropica

Environment, Development and Sustainability

Flora

Forests

Forest Ecology and Management

Plant Ecology

PLOS One

FOREIGN LANGUAGE PROFICIENCY

Portuguese

Read, written and spoken fluently

Spanish

Read, written, and spoken fluently

French

Read, written, and spoken very well

Guaraní

Spoken well