

Leon Mach
Associate Professor in Environmental Policy
School for Field Studies, Panama

Center for Tropical Island Biodiversity Studies,
Bocas del Toro, Panama
Tel.: +507-6810-5632
E-mail: lmach@fieldstudies.org
Skype: leonmach3

I welcome you to also view my interactive online portfolio available at: www.leonmach.com

EMPLOYMENT

- Aug 2019 – present Associate Professor, **School for Field Studies, Bocas del Toro Panama**
- Jan 2017 – Aug 2019 Resident Lecturer, **School for Field Studies, Bocas del Toro Panama**
- 2014 – present Co-Founder and Director of Academic Programs, **Sea State Educational Travel, Encinitas, California**
- 2014 – 2015 Associate Director, **Center for Surf Research, San Diego State University** and Research Specialist/Adjunct Professor, **School of Hospitality and Tourism Management, San Diego State University**
- 2010 – 2014 Teaching Assistant, **College of Arts and Sciences, Energy and Environmental Policy Program, University of Delaware, Newark**
- 2009 – 2010 Instructor (14-day wilderness and leadership courses), **Outward Bound, Costa Rica**

EDUCATION

UNIVERSITY OF DELAWARE, NEWARK, DE
Ph.D. in Environmental Policy, 2014

AMERICAN UNIVERSITY, WASHINGTON D.C.
M.A. International Affairs, 2009

UNIVERSITY FOR PEACE, COSTA RICA
M.A. in Natural Resources & Sustainable Development, 2008

McDANIEL COLLEGE, WESTMINSTER, MD
B.A. Economics & Poly Sci., 2005 (Study Abroad, University of Wollongong, NSW Australia)

RESEARCH INTERESTS

International and Sustainable Development
Tourism Destination Governance
Sustainable Indigenous Tourism
Environmental Justice
Protected Areas Governance
Tourism Management / Sustainable Tourism
Surf Tourism

TEACHING EXPERIENCE

SCHOOL FOR FIELD STUDIES, PANAMA – JAN 2017 - PRESENT

SFS 3020 Environmental Policy and Socioeconomic Values
SFS 4910 Directed Research and Social Science Field Research Methods
SFS 3000 Tourism and Island Ecosystems: Assessing Sustainable Practices

WESTERN STATE COLORADO UNIVERSITY (Credit issuing body, for Sea State study abroad courses)

BUAD 397 Adventure Tourism and Sustainability

SAN DIEGO STATE UNIVERSITY

HTM 404 Cross-cultural Perspectives in Tourism

TEACHING ASSISTANTSHIPS (UNIVERSITY OF DELAWARE, NEWARK)

ENEP 250 Introduction to Energy & Environmental Policy (John Byrne)
ENEP 424 Sustainable Energy Policy and Planning (John Byrne)
ENEP 425/635 Energy Policy and Administration (Young-doo Wang)

SELECTED PUBLICATIONS (*indicates collaboration with undergraduates)

JOURNAL ARTICLES AND BOOK CHAPTERS

*Scott, C., **Mach, L.**, Lucas, K., Myer, A. (2024). Whose cultural ecosystem service values matter? Exploring power inequities in diverse mangrove communities. *Human Ecology*. DOI:10.1007/s10745-023-00462-5

Manero, A., & **Mach, L.** (2023). Valuing surfing ecosystems: an environmental economics and natural resources management perspective. *Tourism Geographies*. doi:10.1080/14616688.2023.2261909.

Mach, L., McPherson, B., & Hayes, R. (2023). Wildlife tourism maps and the governance of environmental collapse. *Tourism Geographies*, 25(5), 1465-1482. doi:10.1080/14616688.2023.2231423

Rojas, C., Boley, B., **Mach, L.**, & Abrams, J. (2023). Expanding protected areas: a case for repairing intergenerational social capital rather than taking the path of least resistance. *Journal of Sustainable Tourism*. doi:10.1080/09669582.2023.2270624

*Mach, L., Connors, J., Uerling, C., Plante, S., Lechtman, B. (2022). Are locals invited to the party? Assessing the impacts of party tourism on local stakeholders. *Anatolia*, 33(2), 222-237. DOI: 10.1080/13032917.2022.2040914.

Mach, L., & Ponting, J. (2022). Ocean Sports and Sustainable Development Goal 14. In B. McCullough, T. Kellison, & N. Melton (Eds.), *Routledge Handbook of Sport and Sustainable Development*. Routledge.

- Mach, L. & Ponting J. (2021). Establishing a pre-COVID-19 baseline for international surf tourism: Trip expenditure and attitudes, behaviors and willingness to pay for sustainability. *Annals of Tourism Research Empirical Insights*. DOI: 10.1016/j.annale.2021.100011.
- Mach, L. (2021). Surf tourism in uncertain times: Resident perspectives on the sustainability implications of COVID-19. *Societies*. 11(3). DOI: 10.3390/soc11030075.
- Mach, L. & Vahradian, D. (2021). Tourists want to be spooked, not schooled: Sustaining Indigenous Tourism in the Bastimentos Island National Marine Park. *Journal of Ecotourism*, 20(2), 130-144. DOI: 10.1080/14724049.2019.1585439
- *Furnari, A., Gates, R., Lopez, O., & **Mach, L.** (2021). Sustaining Indigenous Tourism in Bocas del Toro, Panamá: An assessment of Indigenous tour operator's and hotel management's perspectives. In P. Choudhary, & S. Walia (Eds.), *Community Based Tourism Management: Concepts, Issues & Implications* (pp. 415-428). Routledge.
- *Mach, L., Winner, C., Rojas, C., & Klemond, M. (2020) Protected area entry fees and governance quality, *Tourism Management*, 77. DOI: 10.1016/j.tourman.2019.104003.
- Atencio, J., Armenta, R., Nessler, J., Schubert, M., Furness, J., Climstein, M., **Mach, L.**, Newcomer, S. (2020). Fluid loss in recreational surfers. *International Journal of Exercise Science*, 14(6), 423-434.
- Mach, L. (2019) Surf-for-development: An exploration of sport-for-development program recipient perspectives in Lobitos, Peru. *Journal of Sport and Social Issues*, 43(6), 438-461. DOI: 10.1177/0193723519850875.
- Mach, L. & Ponting, J. (2018). Governmentality and surf tourism destinations governance. *Journal of Sustainable Tourism*, 26(11), 1845-1863. DOI: 10.1080/09669582.2018.1513008.
- Mach, L., Ponting, J., Brown, J., & Savage, J. (2018). Riding waves of intra-seasonal demand in surf tourism: analysing the nexus of seasonality and 21st century surf forecasting technology. *Annals of Leisure Research*, 23(2), 184-202. DOI: 10.1080/11745398.2018.1491801
- Scott, C., & **Mach, L.** (2018). The role of research and training institutions in tourism destination governance in Bocas del Toro. In D. Suman, & A. K. Spalding (Eds.), *Coastal resources of Bocas del Toro, Panama: Tourism and development pressures and the quest for sustainability* (pp. 105-132). Coral Gables, FL: University of Miami.
- Mach, L. (2017). Surfing in the technological era. In D. Borne, & J. Ponting (Eds), *Surfing and Sustainability* (pp. 41-71). New York: Routledge.
- Mach, L., & Ponting, J. (2017). A nested socio-ecological systems approach to understanding the implications of changing surf-reef governance regimes. In D. Turner, & S. Carnicelli (Eds), *Lifestyle Sports and Public Policy*. New York: Routledge.
- Byrne, J., **Mach, L.**, Taminiu, J., & Wang, Y. 2014. The promise of the green energy economy. In J. Byrne, & YD. Wang (Eds), *Secure and Green Energy Economies*. New Brunswick, New Jersey: Transaction Publishers.
- Mach, L. (2014). *From the Endless Summer to the Surf Spring: Technology and Governance in Developing World Surf Tourism*. Dissertation, University of Delaware, Center for Energy and Environmental Policy.

Budishack, C., Sewell, D., Thomson, H., **Mach, L.**, Veron, D., and Kempton, W. (2013). Cost-Minimized Combinations of Wind Power, Solar Power and Electrochemical Storage, Powering the Grid up to 99.9% of the Time. *Journal of Power Sources*. Volume 225, Pages 60-74, DOI: 10.1016/j.jpowsour.2012.09.054.

CONFERENCE PARTICIPATION

SELECTED PRESENTATIONS

Bitcoin don't surf: Navigating place identity through participatory destination governance in El Zonte, El Salvador." The Stoke Sessions: An international conference on the culture, history and politics of surfing and skateboarding, San Diego State University, April 21, 2023.

"Wildlife tourism maps and the governance of environmental collapse." Smithsonian Tropical Research Institute's symposium celebrating 20 years of integrative research at the Bocas del Toro Research Station, Earl S. Tupper Auditorium Panama City, March 27th, 2023.

"Surf protected area networks: An innovative approach to protect coastal ecosystems harnessing the power of surfing in the Blue Economy." UN Ocean Conference, Lisbon, Portugal, June 29, 2022.

*"Sweet success: Sustainable chocolate and Indigenous tourism in Bocas del Toro, Panama." World Indigenous Tourism Summit, Perth AU, March 13-16, 2023.

*"Understanding tourists' perspectives and perceptions of wildlife tourism attractions in Bocas del Toro, Panama." Southeast Environment and Recreations Research Conference, Asheville, NC, Mach 20-22, 2022.

"Ecotourism and protected areas: Governance, power, community." Southeast Environment and Recreations Research Conference, Asheville, NC, Mach 20-22, 2022.

"Are locals invited to the party? Assessing the impact of party tourism on local stakeholders in Bocas del Toro, Panama." The Caribbean International Tourism Conference, University of the West Indies, Barbados, December 11-13, 2019.

"Surf tourism destination governance in Bocas del Toro, Panama: Understanding how actors in the surf tourism system shape destination development." National Environment and Recreation Research Symposium, Annapolis, MD, April 7-9, 2019.

* "Assessing the role of entry fees in protected area governance: A qualitative stakeholder analysis in Bocas del Toro, Panama." National Environment and Recreation Research Symposium, Annapolis, MD, April 7-9, 2019.

"Defining communities and their differences: Sustaining Indigenous tourism in Bocas del Toro, Panama." American Association of Geographers Annual Meeting, Washington DC, April 3-7, 2019.

"Surf tourism destination governance: Bridging critical and normative theory using a Foucauldian governmentality framework." Critical Tourism Studies-Asia Pacific Conference, Yogyakarta, Indonesia, March 4-6, 2018 (abstract accepted).

"Bat Cave Tourism in Bocas del Toro, Panama: Can tourists be spooked into financing community development in protected areas?" Awarded \$3,000 to present at the Conference on Sustainable Tourism in Small Island Developing States, Seychelles, November 22-24, 2017.

“The Socio-psychology of Surf Tourism Destination Governance.” Presented at San Diego State University Sustainable Stoke Conference. San Diego, California, September 20, 2015.

“Understanding Tourism Motivations and Impacts in India.” Presented in Thane India, Activists and Academicians Round table, January 16, 2013.

“From the Endless Summer to the Surf Spring: Assessing Surf Tourism Governance in the Techno-sphere.” Presented in Newark DE, University of Delaware Graduate Student Forum, May 12, 2012.

RELEVANT CERTIFICATIONS, AWARDS & SKILLS

CERTIFICATIONS

- 2020 Wilderness Advanced First Aid, Wilderness Medical Associates
- 2014 Higher Education Teaching Certification, Center for Teaching and the Assessment of Learning, University of Delaware Newark
Completed courses in Student Learning (UNIV-600), Pedagogy (UNIV-601) Faculty Roles in Higher Education (UNIV602), and Teaching with Technology (UNIV603).

SELECTED AWARDS & FUNDING

- 2021/22 Institute of International Education/Council for International Exchange of Scholars - Fulbright U.S. Scholar Award (Sri Lanka 2021-2022).
- 2021/22 USAID Economic Competitiveness Project (Grant #075-2021) Sustainability Certification of Two Surf Destinations in El Salvador (\$98,000).
- 2021/22 Ocean Nexus/Nippon Foundation – Research grant to explore mangrove resource equity in Bocas del Toro, Panama - PI Cinda Scott (\$20,000).
- 2019 School for Field Studies Office of Academic Affairs Professional Development Award (\$2,500).
- 2017 School for Field Studies Undergraduate Research Facilitation Grant “Stakeholder assessment of tourism benefits in the Isla Bastimentos Marine Protected Area” (\$8,000).
- 2016 Kalu Yala Institute, Panama, Outdoor Recreation Master Plan Development and Curriculum Consultation Award (\$18,000).
- 2014 Center for Energy & Environmental Policy Leadership Award (\$4,000).

- 2014 University of Delaware Professional Development Award – Funding to present at the Interdisciplinary Tourism Research Conference in Istanbul, Turkey (\$5,000).
- 2012-2013 University of Delaware Faculty Senate Excellence in Teaching Award Nomination
- 2013 Lilly Conference for College & University Teaching & Learning Travel Fellowship (\$2,000).
- 2013 University of Delaware Residence Life Recognition for Positive Impact in Students’ Lives (Student Voted).
- 2013 University of Delaware Office of Graduate and Professional Education Academic Advancement Travel Award, Mumbai, India (\$3,500).
- 2012 University of Delaware Center for Energy and Environmental Policy Leadership Award (\$5,000).
- 2011-2013 University of Delaware College of Engineering Teaching Fellowship (\$50,000).
- 2010-2011 University of Delaware Research Fellowship (\$16,500).
- 2011 Office of Graduate and Professional Education: Global Research Travel Award, Lobitos, Peru (\$5,000).
- 2007-2009 American University School of International Service Academic Scholarship (\$20,000).

SKILLS

- Languages Spanish (Near-fluent), Greek (Basic, Learning), Bahasa Indonesian (Basic, Learning).
- Computer High proficiency with PC and Mac programs (Word Perfect, Microsoft Word, Excel, SPSS, PowerPoint, Dedoose, Terradotta, AtlasTi, Endnote, EViews 9, ArcGIS 10.1, Photoshop, PageMaker).
Familiarity with Internet Programs (web publishing, WordPress, html language, on-line teaching software).

SERVICE

Backbay project advisory board – www.thebackbayproject.com

Foster the Earth advisory board – www.fostertheearth.org

Journal reviewer: Journal of Sustainable Tourism, Tourism Geographies, Plose One, and Tourism Futures