

# Tomasz B. Falkowski

University of New Mexico  
Honors College  
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## EDUCATION

- 2018 Ph.D. of Environmental and Forest Biology  
State University of New York College of Environmental Science and Forestry,  
Syracuse, NY
- 2014 M.S. of Environmental Resources Engineering  
State University of New York College of Environmental Science and Forestry,  
Syracuse, NY
- 2012 B.S. of Bioengineering (Summa cum laude and with departmental distinction)  
Environmental Studies Minor  
Scholars Program Minor  
Binghamton University, Binghamton, NY

## PROFESSIONAL APPOINTMENTS AND EMPLOYMENT

- 2024-Current Assistant Professor  
Honors College  
University of New Mexico, Albuquerque, NM
- 2021-2024 Assistant Professor  
Department of Forestry  
New Mexico Highlands University, Las Vegas, NM
- 2019-2021 Postdoctoral Fellow  
David R. Atkinson Center for a Sustainable Future  
Cornell University, Ithaca, NY
- 2018-2019 Postdoctoral Associate  
School of Integrative Plant Science/College of Agriculture and Life Sciences  
Cornell University, Ithaca, NY

## PUBLICATIONS

### *Books and Chapters*

**Falkowski, Tomasz B.**, Diemont, S.A.W. (2021). *Cultural Ecosystem Services in Agroforests*,  
in: *Ecosystem Services of Agroforestry*. Springer.

**Falkowski, Tomasz B.**, Drinkwater, L. (2019). *Problem-solving and innovation on the farm: A  
how-to manual*. Ithaca, NY: Sustainable Agriculture Research and Education.

### *Peer-reviewed Journal Articles*

Adhikari, R., **Falkowski, T.B.**, Sloan, J. (2024). "Identifying optimal locations for biochar  
production facilities to reduce wildfire risk and bolster rural economies: A New Mexico case  
study." *Forest Policy and Economics*. 169: e103313.

Soriano Ynfante, Rosa Maria, Falkowski, T.B., Stricker, E., Cespedes, B. (2024). Biochar production  
in northern New Mexico: Identifying challenges and opportunities. *Journal of Environmental  
Management*. 367: e122072.

Garcia-Polo, Jorge, Diemont, S.A.W., **Falkowski, T.B.**, Leopold, D.J. (2024) A wetland condition

- assessment to consider ecological relationships of a Maya cultural keystone species within the Lake Atitlan, Guatemala littoral zone. *Wetlands*. 44(39).
- Falkowski, Tomasz**, Chankin, A., Lehmann, J., Drinkwater, L.E., Diemont, S.A.W., Nigh, R. (2023) Socioecological effects of swidden management in traditional Maya agroforests in the Selva Lacandona of Chiapas, Mexico. *Journal of Environmental Management*. 341.
- Falkowski, Tomasz**, Jorgensen, B., Rakow, D.A., Das, A., Selfa, T., Diemont, S.A.W. (2022) “Connecting With Good People and Good Plants”: Community Gardener Experiences in New York State During the COVID-19 Pandemic.” *Frontiers in Sustainable Food Systems*.
- Garcia Polo, Jorge Jose, **Falkowski, T.B.**, Law, E., Mokashi, S.A., Fix, A. (2021). “Restoring Ecosystem Services and Eating Them Too: Integrating agroecology and ecosystem restoration.” *Restoration Ecology*. 28(8): e13509.
- Falkowski, Tomasz B.**, Vazquez Pérez, J.R., Diemont, S.A.W., Chankin, A., Rangel Salazar, J.L., Cohen, JB, Campos, A. (2020). “Assessing avian diversity and community composition along a successional gradient in traditional Lacandon Maya agroforests.” *Biotropica*. 52(6): 1242-1252
- Falkowski, Tomasz B.**, Diemont, S.A.W., Chankin, A. (2019). “Successional changes in vegetation and leaf litter structure in Lacandon Maya agroforests.” *Agroecology and Sustainable Food Systems*. 44(6): 747-767.
- Falkowski, Tomasz B.**, Diemont, S.A.W., Chankin, A., Pédian, R.W. (2019). “More than just corn and calories: a comprehensive assessment of the yield and nutritional content of a traditional Lacandon Maya *milpa*<sup>1</sup>.” *Food Security*. 92: 210-217.
- Falkowski, Tomasz B.**, Diemont, S.A.W., Chankin, A., Douterlugne, D. (2018). “Effects of five Lacandon Maya agroforestry trees on soil nematode trophic group composition.” *Agroforestry Systems*. 93: 2121–2133.
- Falkowski, Tomasz B.**, Diemont, S.A.W., Chankin, A., Douterlugne, D. (2016). “Traditional ecological knowledge and forest restoration: Soil quality beneath Lacandon Maya agroforestry system trees.” *Ecological Engineering*, 92: 210-217.
- Falkowski, Tomasz B.**, Martinez-Bautista, Isaias, Diemont, S.A.W. (2015). “How valuable could traditional ecological knowledge (TEK) be for a resource-limited future?: An emergy evaluation of TEK learning in two Mexican villages.” *Ecological Modeling*, 300: 40-49.

### ***Selected Popular Press***

- Falkowski, Tomasz B.** “Brave New Normal<sup>2</sup>.” *Uneven Earth*. 2021.
- Falkowski, Tomasz B.**, Drinkwater, L. “Learn to Innovate and Solve Problems on the Farm.” *Small Farms Quarterly*. 2020.
- Falkowski, Tomasz B.** “Abandon All Hope: Moving toward an existentialist environmentalism.” *Resilience.org*. 5 Jul. 2019. Web.
- Falkowski, Tomasz B.** “Cultivating a New Nature: Ecological Agriculture and Traditional Ecological Knowledge<sup>3</sup>.” *Planet Forward*. 27 Feb. 2017. Web.

### **GRANTS AND FELLOWSHIPS**

2024	PI Native Plant Society of New Mexico Jack and Martha Carter Conservation Fund Grant (\$2000)
2023	PI New Mexico Highlands University Faculty Research Committee Grant (\$2,232)
2022	PI United States Department of Agriculture National Institute for Food and Agriculture Equipment Grant (\$35,575)

<sup>1</sup> One of ten articles selected by Food Security Editor-in-Chief’s “Looking Back at Food Security in 2019.”

<sup>2</sup> Republished on Resilience.org

<sup>3</sup> 2017 Planet Forward Storyfest Right Brain Award winner

2022	Co-PI Capacity Building Grant for Non-Land Grant Colleges of Agriculture: Rio Mora Natural Resources Field Skills & Leadership Development Program (\$299,868)
2022	PI New Mexico Highlands University Faculty Research Committee Grant (\$2,616)
2021	Co-PI National Science Foundation CREST Center for Forest Restoration Triangle (\$4,997,141)
2020	Co-PI Atkinson Rapid Response Fund Grant (\$10,000)
2019	PI Atkinson Postdoctoral Fellowship in Sustainability (\$150,000)
2017	PI Bristol-Myers-Squibb Sustainability Fellowship (\$15,000)
2017	PI Garden Club of America Restoration Grant (\$8,000)
2017	PI State University of New York College of Environmental Science and Forestry Office of Graduate Studies Travel Grant (\$250)
2015	PI National Geographic Society Young Explorer Grant #71235 (\$4,999)
2015	PI Tropical Social Forestry Fund Grant (\$2,000)

## CONFERENCE PARTICIPATION

- Vázquez Pérez, José Raúl; Enríquez, Paula L.; López Mendoza, Sergio y **Falkowski, Tomasz B.** (2024) “Especies núcleo de las redes de interacción de aves frugívoras en la Selva El Ocote, Chiapas, México.” IX Congreso Mexicano de Ecología. Chiapas, Mexico.
- Falkowski, Tomasz B.**, Shrestha, A., Soriano, R., Adhikari, R., Sloan, J., Cespedes, B., Stricker, E. (2024) “Post-wildfire Restoration and Biochar Production--Identifying Actions to Reduce Wildfire Risk and Bolster Rural Economies.” 4<sup>th</sup> Southwest Fire Ecology Conference. Santa Fe, NM.
- Falkowski, Tomasz B.**, Law, E., Ashal, S., Diemont, S., Corey-Rivas, S., Miller, A., Sloan, J. (2023) “Adapting field research in a time of climate crisis.” Invited plenary presentation. Society for Ecological Restoration-Southwest Chapter Conference. Santa Fe, NM.
- Shrestha, Ashal, **Falkowski, T.B.**, Dixit, A., Sloan, J. (2023) “Herbaceous Seeding for Erosion Control and Restoration After High Severity Wildfire.” Society of American Foresters National Convention. Sacramento, CA.
- Soriano, Rosa, **Falkowski, T.B.**, Stricker, E. (2023) “*Identifying Barriers to and Opportunities for Adopting Biochar Production to Reduce Fire Risk and Improve Soil Health in Northern New Mexico.*” Society of American Foresters National Convention. Sacramento, CA.
- Falkowski, Tomasz B.**, Chankin, A., Lehmann, J., Drinkwater, L.E., Diemont, S.A.W., Nigh, R. (2023) “Socioecological effects of swidden management in traditional Maya agroforests in the Selva Lacandona of Chiapas, Mexico.” NMHU Research Day. Las Vegas, NM.
- Adhikari, Ram, **Falkowski, Tomasz**, Sloan, Joshua. (2023) “Identifying optimal locations for biochar production facilities to reduce wildfire risk and bolster rural economies: A New Mexico case study.” 2023 International Society of Forest Resource Economics Symposium. Houston, TX.
- Vázquez Pérez, José Raúl; Enríquez, Paula L.; López Mendoza, Sergio y **Falkowski, Tomasz B.** (2023) “La pérdida de especies núcleo y su efecto en la robustez de las redes interacción de aves frugívoras en la Selva El Ocote.” III Simposio de Investigación, Manejo, y Prácticas de Conservación de las ANP Complejo Zoque. Chiapas, Mexico.
- Soriano, Rosa, **Falkowski, T.B.**, Stricker, E. (2023) “Identifying Barriers to and Opportunities for Adopting Biochar Production to Reduce Fire Risk and Improve Soil Health in Northern New Mexico.” NMHU Research Day. Las Vegas, NM
- Soriano, Rosa, **Falkowski, T.B.**, Stricker, E. (2022) “*Identifying Barriers to and Opportunities for Adopting Biochar Production to Reduce Fire Risk and Improve Soil Health in Northern New Mexico.*” New Mexico Wildland Urban Fire Summit. Santa Fe, NM.
- Soriano, Rosa, **Falkowski, T.B.**, Stricker, E. (2022) “*Identifying Barriers to and Opportunities for*

- Adopting Biochar Production to Reduce Fire Risk and Improve Soil Health in Northern New Mexico.* 16th Biennial Conference of Science & Management on the Colorado Plateau & Southwest Region. Flagstaff, AZ.
- Soriano, Rosa, **Falkowski, T.B.**, Stricker, E. (2022) “*Identifying Barriers to and Opportunities for Adopting Biochar Production to Reduce Fire Risk and Improve Soil Health in Northern New Mexico.*” North American Biochar and Bioenergy Conference. Morgantown, WV.
- Falkowski, Tomasz B.** (2021) “*Investigación participativa para la cocreación de conocimiento y el intercambio recíproco en la Selva Lacandona de Chiapas, México*” Simposio Internacional de Aguas Continentales de las Américas. Cantón El Tablón, Guatemala.
- Falkowski, Tomasz B.** (2020) “Revolutionary Restoration in the Age of Global Capital: Transforming socioeconomic drivers of ecological degradation through restoration” *International Society for Tropical Foresters*. New Haven, CT.
- Falkowski, Tomasz B.** (2019). “An Agricultural Response to Mitigating Greenhouse Gas Emissions” *World on your Plate*. Amherst, NY.
- Falkowski, Tomasz B.**, Drinkwater, L., Bolluyt, J. “The Farmer Is In: Diagnosing and solving problems on your farm” *Connecticut-Northeast Organic Farming Association’s 7<sup>th</sup> Annual Winter Conference*. Bridgeport, CT.
- Falkowski, Tomasz B.** (2018). “Restoring More than Trees: How traditional Lacandon Maya agroforestry can facilitate biocultural restoration.” *International Society for Tropical Foresters*. New Haven, CT.
- Falkowski, Tomasz B.**, Diemont, S.A.W., Chankin, A., Pedian, R. (2017). “A comprehensive assessment of provisioning ecosystem services in Hach Winik *milpas*.” *Association for Tropical Biodiversity and Conservation*. Merida, Yucatán, Mexico.
- Falkowski, Tomasz B.**, Diemont, S.A.W., Chankin, A., Salazar, J.L.R., Vazquez Perez, J.R., Campos, A., Pedian, R. (2017). “Ecological Engineering for the Birds: Changes in avian diversity and community composition along a successional gradient in Hach Winik agroforests.” *Association for Tropical Biodiversity and Conservation*. Merida, Yucatán, Mexico.
- Falkowski, Tomasz B.**, Diemont, Stewart A.W. (2014). “Traditional ecological knowledge and Forest restoration: Soil quality beneath Lacandon Maya agroforestry system trees.” *Designing Resilience in a Changing World: 14<sup>th</sup> Annual American Ecological Engineering Society Meeting*. Clemson University, Clemson, SC.
- Falkowski, Tomasz B.**, Martinez-Bautista, Isaias, Diemont, SAW. (2013). “Re-evaluating traditional ecological knowledge inputs to indigenous farming systems using emergy.” (2013) *Ecosystems for Water and Energy: 13th Annual American Ecological Engineering Society Meeting*. Michigan State University, East Lansing, MI.
- Washington-Allen, Robert A., Davis, K., **Falkowski, T.B.**, Delgado, A., Bagget, J., Moore, G., Tjoelker, M., Gonzalez, E., Houser, C. (2011). “NSF Research Experience for Undergraduates: 3-D Characterization and Comparison of Vegetation Structure in a Tropical Premontane Wet Forest.” *American Geophysical Union (AGU) 2011 Fall Meeting*. San Francisco, CA. [http://costaricareu.tamu.edu/files/agu\\_2011.pdf](http://costaricareu.tamu.edu/files/agu_2011.pdf).

## GUEST LECTURES AND SEMINARS

- Falkowski, Tomasz B.** “A burning question: Why hasn’t biochar caught on in New Mexico?” Adaptive Peaks Seminar Series. SUNY College of Environmental Science and Forestry, Syracuse, NY. 21 September 2023
- Falkowski, Tomasz B.** “The effects of fire management on ecosystem services and geochemical cycling in traditional Maya swidden agroecosystems.” Sustainability Perspectives Series. Wells College, Aurora, NY. 10 February 2020.
- Falkowski, Tomasz B.** “Applying Traditional Ecological Knowledge for Eco-cultural Restoration

in Chiapas, Mexico.” Wells College Science Colloquium. Aurora, NY. 6 February 2015.  
**Falkowski, Tomasz B.** “La Diversidad de Pajaros en Diferentes Sistemas de Manejo de la Tierra en la Región de Montes Azules en Chiapas, México.” Seminario para El Colegio de la Frontera Sur Departamento de Agroecología, Soceidad, y Ambiente. San Cristobal de las Casas, Chiapas, México. 15 May 2014.

## **TEACHING EXPERIENCE**

### **University of New Mexico**

Albuquerque, NM  
Assistant professor

HNRS 1120: Legacy of Wilderness                      Fall 2024

### **New Mexico Highlands University**

Las Vegas, NM  
Assistant professor

FORS 1010: Ecosystems & Humans	Fall & Spring 2021 (online), 2022, 2023 (face-to-face)
FORS 4260: Professional Ethics	Spring 2021 (online), 2022, 2023 (online)
FORS 4920: Applied Forestry Research	Spring 2022 (online)
FORS 4160/5160: Soil Science	Fall & Spring 2021 (online), 2022, 2023 (hybrid)
FORS 5890: Applied Ecology and Environmental Restoration	Spring 2023 (face-to-face)
FORS 6250: Advanced Quantitative Methods	Fall 2022, 2023 (face-to-face)
FORS 6500: Graduate Seminar	Spring 2021 (online), Spring 2023 (face-to-face)

### **State University of New York College of Environmental Science and Forestry**

Syracuse, NY  
Visiting instructor

ENS 596: Introduction to Agroecology: Principles to Practices	Summer 2020 (online)
EFB 120: Humans and the Global Environment	Spring 2018 (face-to-face)

### **Le Moyne College**

Syracuse, NY  
Adjunct Professor

BIO 225: Poisoning of a Planet                      Spring 2017 (face-to-face)

### **Hamilton College**

Clinton, NY  
Lecturer

BIO/ES 150: Environmental Science and Society                      Fall 2016 (face-to-face)

**RESEARCH EXPERIENCE & FIELD WORK**

- 2021-Current New Mexico Highlands University  
Assistant professor
- Collaborating with Forest Restoration Triangle (NM Highlands University, NM State University, NM Forest and Watershed Restoration Institute) to evaluate feedbacks between microsite environmental conditions and on plant community succession after NM State Land Office thinning efforts
  - Conducting quantitative and qualitative assessments of undergraduate student learning outcomes as a function of research engagement
  - Assessing challenges to and opportunities for biochar adoption among land managers in northern New Mexico
  - Comparing herbaceous seed mixes on erosion control across topographical gradients in post-fire landscapes
- 2019-2020 Cornell University, Ithaca, NY  
Postdoctoral fellow
- Applied biophysical and social science methods in collaboration with indigenous Maya farmers to quantify ecosystem services (including soil carbon sequestration) provided by traditional fire management
  - Used mixed-methods framework to evaluate the challenges COVID-19 posed to community gardeners along a socioeconomic gradient in New York State.
- 2018-2019 Cornell University, Ithaca, NY  
Postdoctoral associate
- Used ethnographic approaches to study farmer knowledge systems and problem-solving on organic farms in the Northeastern United States
- 2016 State University of New York College of Environmental Science and Forestry, Adirondack Ecological Center, Newcomb, NY  
Sage Apprenticeship research analyst
- Developing monitoring program of abiotic, biotic, and socioeconomic indicators of climate change and its effects at Huntington Wildlife Forest and the broader Adirondack region
- 2012-2018 State University of New York College of Environmental Science and Forestry, Syracuse, NY  
Graduate assistant
- Empirically assessed effects of agroforestry tree species on soil fertility and nematode communities
  - Performed point counts and occupancy modeling to quantify bird species diversity along a chronosequence in Lacandon Maya agroforests
  - Used forest mensuration methods to quantify vegetation structure along a chronosequence in Lacandon Maya agroforests.
  - Measured crop yields from traditional Lacandon Maya *milpa* forest gardens
  - Compared restoration treatments (including planting tree saplings, passive restoration, and traditional Maya agroforestry) using a suite of social, economic, and ecological metrics
  - Twelve months of field work conducted over five years in Chiapas, Mexico.

**GRADUATE ADVISEES**

2022-current	Ganga Little-M.S. of Natural Science committee member (New Mexico Highlands University)
2021-current	José Raúl Vázquez Pérez-Doctoral committee member (Universidad de Ciencias y Artes de Chiapas)
2022-2024	Ashal Shrestha-M.S. of Natural Science primary advisor (New Mexico Highlands University)
2022-2024	Jorge Jose Garcia Polo-Doctoral defense examiner (State University of New York College of Environmental Science and Forestry)
2021-2023	Rosa Soriano-M.S. of Natural Science primary advisor (New Mexico Highlands University)
2021	Ashmita Das-Masters defense examiner (State University of New York College of Environmental Science and Forestry)

**SERVICE TO PROFESSION*****Journal Manuscript Review****Food Security* (7)*Agriculture, Ecosystems and Environment* (3)*Ecological Modelling* (2)*Renewable Agriculture and Food Systems* (3)*Ecological Engineering* (2)*Environment, Development and Sustainability* (1)*International Journal of Biodiversity and Conservation* (1)*The Open Ecology Journal* (1)*Tropical Conservation Science* (3)*Progress in Physical Geography* (2)*Journal of Human Ecology* (1)*Frontiers in Forests and Global Change* (1)*Frontiers in Sustainable Food Systems* (1)*Journal of Environmental Management* (2)***Leadership in Professional Organizations***

2017-2018 Association of Tropical Biodiversity and Conservation Young and Emerging Scientists board graduate student representative at large

2015-2016 Society for Ecological Restoration Mid-Atlantic Chapter board student representative

2014-2015 State University of New York College of Environmental Science and Forestry Society for Ecological Restoration student chapter service chair

***Translations***

Enríquez, Paula L., and José Raúl Vázquez Pérez. 2015. "Los Búhos de México." In *Los Búhos Neotropicales: Diversidad Y Conservación*. San Cristóbal de las Casas, Chiapas, México: El Colegio de la Frontera Sur.

Chankin, Adolfo, Diemont, S.A.W., Diemont, D., Flores, A., Falkowski, T., Ellsworth, K. 2014. "Guía del Campo Lacandón/Lacandon Field Guide."

## **DEPARTMENTAL/UNIVERSITY SERVICE**

2023-2024 Academic Affairs Committee Forestry representative  
2021-2024 New Mexico Highlands University Sustainability and Conservation Committee Chair  
2021-2024 New Mexico Highlands University Faculty Research Committee Forestry representative  
2022 Department of Forestry tenure track faculty search committee chair  
2018-2019 Cornell University Committee on U.S.-Latin America Relations Mexico working group member

## **COMMUNITY INVOLVEMENT/OUTREACH**

2023 NMHU Connects (Las Vegas, NM)  
2023 NSF-Envirothon (Cleveland, NM)  
2023 Mora Friday Field School (Mora, NM)  
2021-2023 STEM Showdown (Las Vegas, NM)  
2021-2022 100% Community Food Group (Las Vegas, NM)

## **PROFESSIONAL DEVELOPMENT**

2023 R Carpentries instructor training  
2023 Center for Teaching Excellence High Impact Practices Learning Community workshop  
2022 New Mexico Forest Worker Safety training  
2021 SomosSTEM CURE development workshop  
2021 ESCALA Educational Services: Culturally Responsive STEM Teaching in Hispanic Serving Institutions 9-hour mini-course  
2020 Cornell Atkinson-Environmental Defense Fund interdisciplinary collaboration workshop  
2019 Cornell Atkinson-Environmental Defense Fund science communication workshop  
2019 Cornell University Center for Teaching Innovation GET SET workshop certificate  
2019 Cornell University Atkinson Center Sustainability Leadership Program  
2019 Cornell University's Center for Teaching Innovation Teaching & Learning in the Diverse Classroom course

## **PROFESSIONAL MEMBERSHIPS**

New Mexico Alliance for Minority Participation Faculty Network  
Fire Adapted New Mexico Learning Network  
International Society of Tropical Foresters

## **RELATED PROFESSIONAL SKILLS**

### ***Computer***

R/RStudio

### ***Languages***

English (ILR Level 5: Native or Bilingual Proficiency)  
Polish (ILR Level 5: Native or Bilingual Proficiency)  
Spanish (ILR Level 4: Full Professional Proficiency)