**Levi T. Helm**

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**PhD, Ecology, Economics, and Ethics of the Environment** *expected 2024*

Arizona State University, School of Life Sciences, Tempe AZ

GPA: 4.0

**B.S. Environmental Science, Anthropology (*highest distinction*)** *2018*

University of Virginia, Charlottesville, VA

Thesis*: Measuring Photosynthetic Response to Drought Stress using Active and Passive Fluorescence*

Phi Beta Kappa, GPA: 3.96

**AWARDS & HONORS**

Graduate College Fellowship ($10,000) *2022-23*

GPSA Teaching Excellence Award ($750) *2022*

Center For Biology and Society Travel Award ($1000) *2022*

GPSA Travel Award ($950) *2022*

Center for Biology and Society Research Award ($5000) *2021*

School of Life Sciences Research Advancement Fellowship ($2000) *2021*

GPSA Research Grant ($2000) *2021*

Doctoral Recruitment Fellowship ($10,000) *2018*

Mahlon G. Kelly Award for outstanding Ecology student *2018*

College Science Scholar *2015-18*

**RESEARCH & TEACHING EXPERIENCE**

**Arizona State University** *2018-present*

*Ph.D. Candidate*

* Researching the impacts of plastic alternatives on global land use
* Developed research thesis proposal and secured funding to conduct research and work with international collaborators

*Instructor, School of Life Sciences*

* Co-designed and co-created BIO 307 and BIO 314, two courses teaching students how to design and conduct academic research
* Led the development and creation of BIO 414, a course teaching students research communication
* Teach BIO 414 as the instructor of record
* Support instruction of BIO 307 and BIO 314 as teaching assistant

*Teaching Assistant, School of Life Sciences*

* Assisted teaching of multiple courses, including environmental ethics, bioethics, ecology, and biology

**Vrije Universiteit Amsterdam** *2021-22*

*Visiting Researcher*

* Re-designed global land-use model for use in global land-change assessments
* Updated datasets required for use in global land-use modeling

**University of Virginia** *2017-18*

*Research Assistant, Department of Environmental Science*

* Developed project studying remote sensing applications for measuring photosynthesis
* Designed and installed instruments at field sites in Virginia and Alaska
* Led research project relating remote sensing techniques to plant physiology
* Coordinated team of volunteer researchers on months-long project

**PUBLICATIONS**

**Helm, L. T.,** Murphy, E. L., McGivern, A., & Borrelle, S. B. (2022). Impacts of plastic waste management strategies. *Environmental Reviews*. <https://doi.org/10.1139/er-2021-0117>

**Helm, L. T**., Shi, H., Lerdau, M., & Yang, X. (2020). Solar-induced chlorophyll fluorescence and short-term photosynthetic response to drought. Ecological Applications. <https://doi.org/10.1002/eap.2101>

Murphy, E.L., Bernard, M.L., **Helm, L.T.,** Hill, I., Tu**ñ**as-Corzón, Á. (2020). Policy Recommendations to Reinvigorate Recycling in Arizona. Journal of Science Policy and Governance. <https://doi.org/10.38126/JSPG170115>

**PRESENTATIONS**

**Helm, L.T**., Murphy, E., McGivern, A., & Borrelle, S. (2022, December). Avoiding the Unintended Consequences of Plastic Pollution Policy. In *Fall Meeting 2022*. AGU.

**Helm, L.T.** (2021) Solar-induced Chlorophyll Fluorescence and short-term photosynthetic response to draught. Invited talk, NASA conference on SIF research.

**Helm, L**.**T**, Lerdau, M., Wang, W., Yang, X., (2017), Measuring Photosynthetic Response to Drought Stress using Active and Passive Fluorescence, Abstract (B43L-06) presented at 2017 AGU Fall Meeting, New Orleans, La., 11–15 Dec.

**MEDIA, BLOGS, & PUBLIC AUDIENCE PUBLICATIONS**

**Helm, L.T.** (*accepted, forthcoming*) The East Palestine Train Derailment and the Perils of Plastic. Slate

Kahn, N., McColley, C., **Helm, L.T.,** (2021) Ep 17: Policy- Science Outside the Lab discussion with Levi Helm and Campbell McColley. Talk Green to Me Podcast. *Invited guest*

**Helm, L.T. (2020)** Environmental Mitigation: A Values Issue. SciPolBites blog. <https://scipolnetwork.org/news/334558>

Murphy, E.L., Bernard, M.L., **Helm, L.T.,** Hill, I., Tu**ñ**as-Corzón, Á. (2020). Arizona should take steps to reinvigorate recycling. Arizona Capitol Times <https://azcapitoltimes.com/news/2020/12/04/arizona-should-take-steps-to-reinvigorate-recycling/>

Murphy, E.L., **Helm, L.T.** (2020) Lawmakers raided funds meant for recycling, raising fees or scaling back programs. Arizona Republic. <https://www.azcentral.com/story/opinion/op-ed/2021/02/05/arizona-recycling-fund-raided-lawmakers-hurt-progams/4377908001/>

**LEADERSHIP, OUTREACH, & SERVICE**

**Arizona State University**

*Executive Board, Arizona Science Policy Network 2019-present*

* Meet with state legislators to discuss policy issues of scientific concern
* Developed policy campaign to advocate for policy change
* Host and attend Science Day, where scientists go to the state capitol to meet with legislators and discuss science policy

*American Geophysical Union Voices for Science – Policy Program 2023-present*

* Provides scientists with specialized training in science communication and science policy
* Work directly with elected officials and AGU staff on science outreach
* During the program year, will host 12 science outreach events

*Foreign Policy for America NextGen Fellow 2022-present*

* Selected as member due to expertise in science policy and the tradeoffs in international environmental policy. The NextGen initiative spotlights and supports young policy experts and leaders

*Science Diplomacy Fellow, National Science Policy Network*   *2021-2022*

* In partnership with the Diplo Foundation, designed a course on Science for Sustainable development that will be offered to diplomacy practitioners around the world
* Attended trainings and learn from Science Diplomacy practitioners

*Vice President, Sustainability Committee for School of Life Sciences 2019-2021*

* Developed, discussed, and implemented sustainable practices for the school

**University of Virginia**

*Co-Founder, Friends of Appalachia 2017-pres*

* Founded student organization to build capacity for Appalachian students at the University of Virginia, and increase coordination between the region and the University with regards to education, outreach, research, and economic development programs
* Consulted University of Virginia’s admissions office to develop strategies for recruitment of rural students, leading to increased enrollment from key counties in the state
* Visited Appalachian High Schools to discuss college and college applications
* Created network of alumni, regional partners, faculty, researchers, and donors.

**MENTORSHIP**

2020-2022 – Adwoa Kumi Afoakwa, LEAP Scholar Research Mentor