

TIM ALAMENCIAK

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Research Positions

- 2024 — Current **Postdoctoral Fellow** – Carleton University
Bennett Lab – Dr. Joseph Bennett
- Collaborate with Ducks Unlimited to research the effectiveness of temporary conservation agreements over time.
 - Plan quantitative and qualitative research approaches to measuring ecological and social outcomes of conservation agreements.
 - Provide mentorship and guidance to students at the PhD, Masters and Honours undergraduate levels.
- 2024 — Current **Adjunct Associate Professor** – University of Waterloo
School of Environment, Resources and Sustainability
- Faculty liaison for the Society for Ecological Restoration student group.
 - Provide mentorship and guidance to students at the PhD, Masters and Honours undergraduate levels, including sitting on thesis committees.
 - Researcher with the *Waterloo Data & Artificial Intelligence Institute*.
- 2024 — Current **Research Fellow** – St. Jerome's University
DRAGEN Lab – Dr. Steven Bednarski
- Collaboratively design transdisciplinary research projects with Medieval environmental history scholars.
 - Provide mentorship and instruction to graduate student historians from the perspective of ecology.
 - Assist with technical development, including the implementation of AI technologies for text parsing and the development of knowledge graphs as a methodology.
- 2024 — Current **Senior Research Scientist** – University of Victoria
Restoration Futures Lab – Nancy Shackelford
- Lead the development of the Restoration and Conservation Ontology (RACOON).
 - Oversee and plan the development of the Toolkit for Restoration Ecology Knowledge (TReK).
 - Supervise and mentor students in the creation and maintenance of a community of practice.
- 2019 — 2024 **Dissertation: “Volunteer Participation in Ecological Restoration: Motivations, Organizations, and Conviviality”**
Advisor: Dr. Stephen D. Murphy
- Conducted a systematic map of literature analyzing the motivations of volunteers to participate in restoration and conservation using R.

- Executed and analyzed a survey of volunteers to assess the relationship between organizational factors and volunteer engagement using structural equation modeling.
- Interviewed volunteers for a community-based project and analyzed interview data using Atlas.Ti 9.

2020 – 2023

Ecological Restoration Knowledge Synthesis Project

University of Victoria (in collaboration with University of Waterloo, Carleton University, and L'Université Laval)

Research associate

Principle investigator: Dr. Eric Higgs

- Conducted the first-ever systematic map of ecological restoration literature in Canada using R, Bibliometrix and Cadima.
- Research outputs include 1 published peer-reviewed paper, 3 conference presentations, and 1 national workshop.

2021 – 2022

Campus EcoMap, University of Waterloo

Project manager

- Secured \$20,000 in funding over two years from the Sustainability Action Fund to map ecological data.
- Supervised five undergraduate research associates in the creation of the map and accompanying report.
- Used ArcGIS and QGIS to create an index and map of available ecological research in the Borealis repository.

Education

2019 – 2024

PhD, Social and Ecological Sustainability, University of Waterloo

Thesis: “Volunteer Participation in Ecological Restoration: Motivations, Organizations, and Conviviality”

Supervisor: Dr. Stephen D. Murphy

2010 – 2012

MA, Journalism, Toronto Metropolitan University

Supervisor: Dr. Gene Allen

2004 – 2010

BA (Hons.), Peace and Conflict Studies, University of Waterloo

Teaching Experience

Fall 2025

Carleton University, Ottawa, Ontario

Supervisor, Honours thesis, Bachelor of Science

See resulting publication Alamenciak et al. 2026

Fall 2024

Carleton University, Ottawa, Ontario

Group mentor, BIOL 5512 - Advances in Applied Ecology

See resulting publication Hodgson et al. 2025 (in press)

Spring 2024

Carleton University, Ottawa, Ontario

Supervisor, Honours thesis (Logan Rehberg), Bachelor of Science

See resulting publication Alamenciak et al. 2025 (in press)

Winter 2024	University of Waterloo , Waterloo, Ontario Sessional lecturer , School of Environment, Resources and Sustainability
	ERS 253 – Communities and sustainability (38 students; in-person) <ul style="list-style-type: none"> • Re-designed course including entirely new readings, structure, assignments, lectures and online space through LEARN. • Incorporated inquiry-based learning and professional guest lectures into course materials.
Spring 2021	University of Waterloo, Waterloo, Ontario Teaching assistant , School of Environment, Resources and Sustainability
	ERS 340 – Ecosystem assessment (31 students; online) <ul style="list-style-type: none"> • Delivered lecture on approaches to ecosystem assessment in ecological restoration. • Graded and provided substantial feedback on field notes. • Assessed completion of assessment protocols including Ontario Benthic Biomonitoring Network (OBBN), Vegetation Sampling Protocol (VSP), and others.
Winter 2021	University of Waterloo , Waterloo, Ontario Teaching assistant , School of Environment, Resources and Sustainability
	ERS 401 – Translational ecology (40 students; online) <ul style="list-style-type: none"> • Delivered guest lecture on volunteer engagement in ecological restoration. • Participated in consultations with students regarding research project directions. • Provided meaningful feedback on research proposals and final projects.
Fall 2020	University of Waterloo , Waterloo, Ontario Teaching assistant , School of Environment, Resources and Sustainability
	ERS 335 – Ecological restoration (40 students; online) <ul style="list-style-type: none"> • Delivered workshop lecture on the use of R for analysis of ecological restoration data. • Graded and provided substantial feedback on restoration plan assignments. • Met individually with students as required during office hours.
September 2019 – August 2020	University of Waterloo , Waterloo, Ontario Teaching assistant , School of Environment, Resources and Sustainability
	Courses: <ul style="list-style-type: none"> • ENVS 200 – Field ecology – Summer 2020 • ERS 402 – Senior research seminar – Winter 2020 • ERS 300 – Systems theory – Fall 2019

Work Experience

2021 – 2023	Reep Green Solutions <i>Communications manager</i>
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- Increase knowledge of sustainability in community members by developing and executing engaging, accessible and effective communications strategies.
- Mobilize knowledge through partnerships with university researchers around climate mapping and flood risk.

Craft public statements on behalf of Reep, including municipal council deputations, press releases and media appearances.

2015 – 2018

TVO

Digital media producer

- Produced and directed Climate Watch Shorts, a series of short documentaries on the impacts of climate change in Ontario.
- Led the creation of TVO's first podcast (#onpoli), including visioning, scripting and direction.

2012 – 2015

Toronto Star

Staff reporter

- Covered major news stories including the Rob Ford scandal, Jian Ghomeshi's trial, the class action lawsuit for survivors of Huronia Regional Centre and the impact of residential schools.
- Managed large-scale, multi-part feature reporting projects, including coordinating photography, interviews and writing.

Publications

2026

Tim Alamenciak, Nancy Shackelford, Logan Rehberg, Ash Baron, Steven D. Murphy, Eric Higgs, Tina Heger, Alina Fisher, Bruno Travassos-Britto, Ryan Stephenson. "Paths to more quickly and effectively bridge science-practice gap in ecosystem restoration in Canada." *Socio-Ecological Practice Research*, <https://doi.org/10.1007/s42532-025-00243-y>

2025

Jeffrey O. Hanson, Jenny L. McCune, **Tim Alamenciak**, Joseph R. Bennett. "Increasing the credibility of conservation plans through citizen science." *Biological Conservation*, <https://doi.org/10.1016/j.biocon.2025.111552>

2025

Tim Alamenciak, Carlos Alberto Arnillas, J. Harry Caufield, Katherine Compton, Kian Drew, Robert Frühstückl, Tina Heger, Birgitta König-Ries, Chris Mungall, Sierra Moxon, Justin Reese, Jordan Tardif, Lars Vogt. "Ecolink: Towards a Knowledge Graph Schema for Complex Environmental Systems." Pages 353–366. In: Balke, W-T, Golub, K, Manolopoulos, Y, Stefanidis, K, Zhang, Z, Aalberg, T, & Manghi, P (eds.) *New Trends in Theory and Practice of Digital Libraries*. Springer Nature Switzerland, Cham. https://doi.org/10.1007/978-3-032-06136-2_33

2025

Josie South, Roxana Barbulescu, Rafael L Macêdo, Camille L. Musseau, Simone Guareschi, **Tim Alamenciak**, Gabriella Alberti, Sylvie Allen, Sven Bacher, et al. "Parallels between biological invasions and human migration are flawed and undermine both disciplines. Response to Ahmed et al." *BioScience* <https://doi.org/10.1093/biosci/biaf073>

- 2025 **Tim Alamenciak**, Elise Gornish and Stephen D. Murphy. “Dimensions of Effective Volunteer Restoration Techniques in North America.” *Restoration Ecology* <https://doi.org/10.1111/rec.70028>
- 2024 **Tim Alamenciak**, and Stephen D. Murphy. “What makes a convivial community tool? Investigating grassroots ecological restoration.” *Ecology and Society*, 29(3). <https://doi.org/10.5751/ES-15258-290303>
Audio version: <https://www.researchquals.com/modules/h3gv-g93x>
- 2024 **Tim Alamenciak**, and Stephen D. Murphy. “Motivations for Volunteers to Participate in Ecological Restoration: A Systematic Map.” *Restoration Ecology*, April 19, 2024, e14155. <https://doi.org/10.1111/rec.14155>.
Audio version: <https://www.researchquals.com/modules/hprp-rh02>
- 2023 **Tim Alamenciak**, Dorian Pomezanski, Nancy Shackelford, Stephen D. Murphy, Steven J. Cooke, Line Rochefort, Sonia Voicescu, and Eric Higgs. “Ecological Restoration Research in Canada: Who, What, Where, When, Why, and How?” *FACETS* 8 (January 1, 2023): 1–11. <https://doi.org/10.1139/facets-2022-0157>.
- 2022 Sutherland, William J., Jake M. Robinson, David C. Aldridge, **Tim Alamenciak**, Matthew Armes, Nina Baranduin, Andrew J. Bladon, et al. “EDITORIAL: Creating Testable Questions in Practical Conservation: A Process and 100 Questions.” *Conservation Evidence Journal* 19 (January 1, 2022). <https://doi.org/10.52201/CEJ19XIFF2753>.
- 2020 Anita Lazurko, **Tim Alamenciak**, Lowine Stella Hill, Ella-Kari Muhl, Augustine Kwame Osei, Dorian Pomezanski, Kyle Schang, and Dilruba Fatima Sharmin. “What Will a PhD Look Like in the Future? Perspectives on Emerging Trends in Sustainability Doctoral Programs in a Time of Disruption.” *World Futures Review* 12, no. 4 (December 2020): 369–84. <https://doi.org/10.1177/1946756720976710>.

Preprints and manuscripts in press

- 2025 Ryan Y. Hodgson, Steven A. Robinson, Amélie C. Boutin, Felix K. Chan, Joseph R. Bennett, Rachel T. Buxton, J. Harry Caufield, Dalal E. L. Hanna, **Tim Alamenciak**. “Assessing the Effectiveness of Ontology-Grounded AI Term Extraction Using OntoGPT for Environmental Evidence Synthesis.” *Environmental Evidence*, accepted.
- 2025 Lars Vogt, Birgitta König-Ries, **Tim Alamenciak**, Joshua I. Brian, Carlos Alberto Arnillas, Lotte Korell, Robert Frühstückl, Tina Heger. “A Framework for FAIR and CLEAR Ecological Data and Knowledge: Semantic Units for Synthesis and Causal Modelling.” *arXiv* <https://doi.org/10.48550/arXiv.2508.08959>
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Presentations and invited lectures

- 2025 Alamenciak, T. "Three stories of restoration and conservation engagement." Delivered in multiple venues: School of Environment, Resources and Sustainability Salon, Carleton BIOL 5534 (Invited by Dr. Christina Davy), Knowledge Mobilization Community of Practice (Invited by Nadine Quehl), University of Waterloo PSCI 303 (Invited by Sam Routley).
- 2025 Alamenciak, T. "Toolkit for Restoration Ecology Knowledge (TReK)." AI Colloquium, Lamarr Institute, Dortmund, Germany (Invited by Dr. Raphael Fischer).
- 2025 Alamenciak, T., Carlos Alberto Arnillas, J. Harry Caufield, Katherine Compton, Kian Drew, Robert Frühstückl, Tina Heger, Birgitta König-Ries, Chris Mungall, Sierra Moxon, Justin Reese, Jordan Tardif, Lars Vogt. "Ecolink: Towards a Knowledge Graph Schema for Complex Environmental Systems." EcoDL Workshop at the Theory and Practice of Digital Libraries conference, Tampere, Finland.
- 2025 Alamenciak, T. "Mapping Evidence to Theory in Ecology." Workshop participant, University of Bielefeld.
- 2024 Alamenciak, T. "How to recruit and retain more volunteers." Webinar for Carolinian Canada (Invited).
- 2024 Alamenciak, T. "Fuzzy cognitive mapping using knowledge graphs for restoration ecology." Interdisciplinary Perspectives on Knowledge Synthesis in Ecology workshop at University of Bielefeld (invited by Dr. Tina Heger)
- 2024 Alamenciak, T., Ash Baron, Catherine Febria, Eric Higgs, Ryan Stephenson, Stephen Murphy and Nancy Shackelford. "Boots & Suits: Mobilizing knowledge in ecosystem restoration. Society for Ecological Restoration North American Conference, Vancouver – Oct. 30, 2024.
- 2024 Alamenciak, T. "Knowledge Graphs for Land-Based Knowledges: Encoding Restoration Ecology and Environmental History." Summer Research Institute, Quaker Institute for the Future. August 12 to 16, 2024.
- 2024 Alamenciak, T. "Mapping and assessing evidence in ecological restoration" Geomatics and Landscape Ecology Lab (GLEL) at Carleton University. May 31, 2024.
- 2024 Alamenciak, T. "Mapping evidence to theory in ecology: Addressing the challenges of generalization and causality." **Residency** at Centre for Interdisciplinary Research (ZiF) at Bielefeld University. September 1, 2024 to February 28, 2025 (Invited by Dr. Tina Heger)
- 2024 Alamenciak, T. & Steffanie Scott. "Engaging instructors and students in transformative learning amid polycrisis," **University of Waterloo Teaching and Learning Conference** 2024 May 2.
- 2024 Alamenciak, T. "People-powered ecosystem restoration," University of Arizona, **Gornish Lab** – Dr. Elise Gornish. (Invited) 2024 April 4.

- 2024 Alamenciak, T. "Taming Complexity: AI Approaches to Knowledge Synthesis," University of Waterloo, **School of Environment, Resources and Sustainability Salon** 2024 April 1.
- 2024 Alamenciak, Tim. Workshop participation: "**Taming Complexity in Ecology**" Germany (Invited by Dr. Tina Heger)
- 2024 Alamenciak, Tim, "Lowering barriers, changing behaviours." Guest lecture. (Invited by Dr. Christina Davy)
- 2024 Alamenciak, Tim, "Volunteer engagement in ecological restoration." Guest lecture: ENVS 195 – Introduction to Environmental Studies (Invited by Patricia Huynh)
- 2023 Alamenciak, Tim, "Volunteer engagement in ecological restoration." **Environment Graduate Students Association conference**, 2023 September 22. Waterloo, Ontario.
- 2023 Alamenciak, Tim, Ecological Restoration Research in Canada: Who, What, Where, When, Why and How? Symposium: Assessing the State of Ecological Restoration Knowledge in Canada. **RE3 Conference: Reclaim, Restore, Rewild**, 2023 June 11-15. Quebec City, Quebec.
- 2022 Alamenciak, Tim, "Advocacy 101: How to talk about climate change with politicians." **ClimateActionWR** sector committee talk. Virtual. (Invited)
- 2022 Alamenciak, Tim, Guest speaker. **Landscapes of Holistic Sustainability and Wellbeing Retreat**. Wilfrid Laurier University, 2022 October 22. Virtual. (Invited)
- 2022 Alamenciak, Tim, "Championing Change in the Field and Office," **Designing Change for a Living Planet – World Wildlife Fund**, 2022 June 11. Virtual. (Invited)
- 2022 Alamenciak, Tim, "Comparing community-led tree planting programs," University of Waterloo, **ERS 253 – Communities and Sustainability**, Winter 2022. Instructor: Dr. Shefaza Esmail. Waterloo, Ontario. (Invited)
- 2021 Alamenciak, Tim, "Working Together and Giving Back: Building and sustaining volunteer motivation," **Wholistic Restoration – Ignatius Jesuit Centre**, 2021 December 9. Virtual. (Invited)
- 2021 Alamenciak, Tim, "Decolonizing Worldviews: Unpacking nature and wilderness," **Wholistic Restoration – Ignatius Jesuit Centre**, 2021 November 23. Virtual. (Invited)
- 2021 Alamenciak, Tim, Elise Gornish, and Stephen Murphy. How to design techniques for volunteer ecological restoration. **National Extension Conference on Volunteerism-Lite**, 2021 April 26. Virtual.
- 2021 Higgs, Eric, Tim Alamenciak, & Sonia Voicescu. Ecological Restoration: Nature-Based Solutions for Climate Mitigation and Engaging Canadians with Nature. **Living Within the Earth's Carrying Capacity Forum**, 2021 March 25-April 14. Ottawa, Ontario.

- 2021 Alamenciak, Tim, & Dorian Pomezanski. "Analyzing Canadian ecological restoration literature with bibliometric analysis and a systematic map." **Evidence Synthesis & Meta-Analysis in R Conference**, 2021 January 21-22. Virtual.
- 2021 Alamenciak, Tim & Dorian Pomezanski. "Charting the evidence landscape: A systematic map and bibliometric analysis of ecological restoration in Canada." **Society for Ecological Restoration Conference**, 2021 June 21-24. Virtual.
- 2021 Alamenciak, Tim. Facilitator. **Food Systems Summit 2021: Green Growth Dialogue**. Arrell Food Institute at the University of Guelph. 2021 March 5. Virtual.
- 2020 & 2021 Alamenciak, Tim. "Who gets to care for nature? Participation in ecological restoration," Guest Lecture – University of Waterloo, **PACS 310 – Peace and the Environment**, Winter 2020 & 2021. Instructor: Dr. Jennifer Ball. Virtual.
- 2020 & 2021 Alamenciak, Tim. "Assessment in restoration ecology," University of Waterloo, **ERS 342 – Ecosystem assessment**, Spring 2020 & 2021. Instructor: Dr. Shefaza Esmail. Waterloo, Ontario. (Invited)

Workshops and conferences hosted

- 2025 **GLELxSciComm: A Day of Science Communication Learning**
This full day workshop provided science communication training for 40 students and staff at Carleton. It featured Carleton journalism faculty like Chris Russill and Adrian Harewood, Carl Meyer from The Narwhal, and a panel of community environmental organizations.
- 2024 **From Abstract to Action**
This series of three talks was organized by me for members of the Geomatics and Landscape Ecology Lab (GLEL). Approximately 40 faculty and students attended each of the three talks, which were given by then-MP Mike Morrice, journalist Nick Taylor-Vaisey and lobbyist Ashley Csanady.

Professional service

Peer-Reviewed Articles for:

Restoration Ecology
Sustainability Science
Society & Natural Resources
Ecology & Society
People & Nature

Grant Reviews:

Digital Research Alliance – EDIA Champions Program
Earth Science Information Partners (ESIP) – Community Resilience RFP

2025 – Current **Member, Knowledge Mobilization Community of Practice (UW)**

2025 – Current **Member, Natural Spaces Working Group (UW)**

2024 — Current	Board Member at-large, Ecological Studies Association of Canada (ESAC)
2024 — 2025	Land Stewardship Committee Member, Ignatius Jesuit Centre
2024 — 2025	Board Member, Emerging Leaders for Biodiversity (ELB)
2021 — 2022	Writing Café Organizer Weekend Warriors Writing Café, University of Waterloo
2020 — 2021	Board Member, Society for Ecological Restoration (Ontario) Provincial chapter of the Society for Ecological Restoration International.
2019 — 2021	Member, Ecological and Environmental Advisory Committee Region of Waterloo

Professional Training

2025	MobilizeU Knowledge Mobilization Certificate Simon Fraser University.
2024	Knowledge Graphs – Foundations and Applications Hasso Plattner Institute, Potsdam, Germany (online)
2024	Mental Health Literacy Certificate Program University of Waterloo.
2021 — 2022	Certificate in University Teaching, University of Waterloo Led workshop: “Inquiry in the Living Lab: How to teach environment students to thrive in complexity, exercise leadership skills and engage in novel research.”
2020	Ontario Master Naturalist Certificate, Lakehead University Lead instructor: Bob Bowles
2020	Data-Driven Ecological Synthesis Summer School Lead instructor: Dr. Timothée Poisot
2019	Ontario Benthic Biomonitoring Network (OBBN) Certificate Lead instructor: Dr. Chris Jones
2019	Common Cause for Conservation Values-Based Communications Training Hosted by the Common Cause Foundation

Funding and awards

2025	University of Waterloo Sustainability Action Fund (collaborator) <i>Amount: \$20,000</i> Funding received to install bird-friendly window decals on the Quantum Nano Centre building.
2025	PSAC 77000 Postdoctoral Fellow Award Finalist

2024	NSERC Alliance fund “Evaluating the potential of temporary conserved areas for biodiversity conservation” with Ducks Unlimited <i>Amount: \$355,000</i>
2021 – 2022	University of Waterloo Sustainability Action Fund <i>Amount: \$20,000</i> Funding to hire students to continue work on the Campus Eco-Map, a map of ecological data and produce a report on campus biodiversity to bridge researchers’ work with grounds maintenance and sustainable campus priorities.
2022	Certificate in University Teaching Award <i>Amount: \$1,000</i> This award is given annually to the graduate student who demonstrates the highest achievement on completion of the Certificate in University Teaching program.
2020	Ontario Trillium Fund <i>Amount: \$70,000</i> Co-created ecological restoration education and engagement programming with Ignatius Jesuit Centre and White Owl Native Ancestry Association, to braid Indigenous and western knowledge about restoration.
2020	Waterloo Environment Students Endowment Fund <i>Amount: \$1,000</i> Funding received to install in-ground hoses at the North Campus Community Garden.
2019	Waterloo Environment Students Endowment Fund <i>Amount: \$300</i> Funding received to operate a native plant greenhouse program for students.

Significant life events

September 2021	Living liver donation surgery and recovery
June 2022	Birth of our first son, Oliver.
April 2023 to February 2024	Parental leave
January 2025	Birth of our second son, Ben.
January 2026 to June 2026	Parental leave