**Sustainability Research Inventory**

**SUNY Fredonia**

Twelve faculty members out of 250 total, full time faculty, representing nine academic departments, have self-identified as conducting research or engaging in creative endeavors in the area of sustainability.

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| **Faculty Name** | **Department** | **Research Descriptions & Links** |
| William Brown | Biology | Professional Development Award for Teaching and Learning, SUNY Fredonia, April 2011. Partial support for course development “Stewardship of Public Lands: Politics and the Yellowstone Ecosystem” (with Dr. William Brown). <http://ww2.fredonia.edu/news/ArchivesSearch/tabid/1101/ctl/ArticleView/mid/1878/articleId/3613/Yellowstone_is_the_site_for_a_summer_course_in_stewardship_of_public_lands.aspx>Brown, W. D., Muntz, G. & Ladowski, A. 2012. Low mate encounter rate increases male risk taking in a sexual cannibal. PLoS One 7: e35377 (DOI:10.1371/journal.pone.0035377). Covered in Huffington Post April 26, 2012, LiveScience April 25, 2012). Brown, W. D. 2011. Allocation of nuptial gifts in tree crickets changes with both male and female diet. Behavioral Ecology and Sociobiology 65: 1007-1014 (DOI: 10.1007/s00265-010-1105-y).  |
| Ann Deakin | Geosciences; Geographic Information Systems | Ann Deakin has received an award from Fulbright Scholar Program to work on developing technology for geoconservation in Siberia. Dr. Deakin went to the Institute of Natural Resources at Tomsk Polytechnic University for three months during the Spring 2012 semester to complete her project, "Geospatial Technology as a Tool for Geoconservation in Siberia." She worked with Dr. Olga Pasko in the Institute of Natural Resources at TPU and is currently helpginto coordinate a student exchange program with the Department of International Business at Tomsk State University in western Siberia. <http://ww2.fredonia.edu/news/ArchivesSearch/tabid/1101/ctl/ArticleView/mid/1878/articleId/3191/Ann_Deakin_receives_Fulbright_to_do_research_in_Siberia.aspx> <http://ww2.fredonia.edu/news/ArchivesSearch/tabid/1101/ctl/ArticleView/mid/1878/articleId/4370/Russian_scholars_here_to_explore_possible_exchange_program.aspx>  |
| Jason Dilworth | Visual Arts and New Media | Alabamboo is a project promoting sustainable economic growth with creative ingenuity. Summer 2011. (<http://RideAlabamboo.com>)Designers and Forests are conducting an interdisciplinary project linking foresters, citizens, artists, storytellers, and designers to explore places in depth and then respond in positive ways to create healthier forests and healthier commentates. (<http://DesignersAndForests.us>) |
| Lei Huang | Marketing | The goal of our research project is to help local governments around the world more effectively implement Local Agenda 21s (LA21s ) — or other collaborative community sustainability plans — and transition toward a local green economy. There are three related topics within this research project:1. Implementation of collaborative regional (or community) sustainability plans / Local Agenda 21s2. Engagement of stakeholders / partners in local sustainable development3. Definition, promotion and quantification of the local green economy<https://uwaterloo.ca/school-environment-enterprise-development/research-at-seed/sustainable-communities/local-agenda-21s-sustainable-community-plans-and-local-green> |
| Michael Jabot | Curriculum and Instruction | Doing work with the preservice teachers around ways that we can incorporate sustainability into classrooms through Education for Sustainability (EfS).  Most recently the Observer had an article about the "solar cooker" project.  <https://www.observertoday.com/page/content.detail/id/593313/SUNY-students-build-solar-cookits.html?nav=5060>Trip to Costa Rica, May 2014, around Appropriate Technologies - focusing on issues around water purification. <http://www.fredonia.edu/internationaleducation/studyabroad/programs/CostaRicaApprTech.asp> Working with Chautauqua County around public education pieces around the Greenway Plan. <http://www.planningchautauqua.com/?q=content/greenways-plan>The Great Lakes Experience, June 2014. <http://www.observertoday.com/page/content.detail/id/593917/Dunkirk-to-host-second-annual-Great-Lakes-Experience-Festival.html?nav=5007> |
| Christina Jarvis | English; American Studies | “Where Engagement Skills Meet Job Skills: Writing, Sustainability and Social Change.” American Democracy and The Democracy Commitment National Meeting, June 6-8, 2013.“Putting Down Roots: Building Strong Community Connections through Tree-Planting Projects.” Twelth Annual American Democracy Project National Meeting, June 7-10, 2012.“Stewardship of Public Lands Case Study: Unexpected Common Ground in the Controversy Over Coal Ash” American Democracy Project Blog (3000+ readers), 22 March 2011. <http://adpaascu.wordpress.com/2011/03/>Professional Development Award for Teaching and Learning, SUNY Fredonia, April 2011. Partial support for course development “Stewardship of Public Lands: Politics and the Yellowstone Ecosystem” (with Dr. William Brown). <http://ww2.fredonia.edu/news/ArchivesSearch/tabid/1101/ctl/ArticleView/mid/1878/articleId/3613/Yellowstone_is_the_site_for_a_summer_course_in_stewardship_of_public_lands.aspx> Individual Development Award, UUP/SUNY Fredonia, March 2011. Partial support for course development “Stewardship of Public Lands: Politics and the Yellowstone Ecosystem” (with Dr. William Brown).Eco-NRG Sustainability Grant (with Dr. Sherri Mason), January 2011, $15,300 grant to fund three major community sustainability projects through the FACE Center. |
| David Kinkela | History | David Kinkela, associate professor of History, served as co-editor of, “Water: History, Power, Crisis,” a special issue of Radical History Review. Dr. Kinkela has also published DDT & The American Century, which examines the interconnections between U.S. environmentalism and U.S. foreign policy. ISBN  978-1-4696-0977-5 Published: August 2013. <http://uncpress.unc.edu/browse/book_detail?title_id=2227>  |
|  |  | Notable Achievements: * served as co-editor of, “Water: History, Power, Crisis,” a special issue of Radical History Review, which was recently named the co-winner of the Council of Editors Learned Journal’s Best Special Issue Award for 2013. <http://ww2.fredonia.edu/news/ArchivesSearch/tabid/1101/ctl/ArticleView/mid/1878/articleId/4663/David_Kinkela_co-edits_CELJ_award-winning_issue.aspx>
* received the Forum for the History of Science in America Book Prize 2012 for his book [DDT and the American Century](http://uncpress.unc.edu/browse/book_detail?title_id=2227), which examines the interconnections between U.S. environmentalism and U.S. foreign policy. <http://ww2.fredonia.edu/news/ArchivesSearch/tabid/1101/ctl/ArticleView/mid/1878/articleId/4136/David_Kinkela_wins_book_prize_at_History_of_Science_Society_meeting.aspx> <http://americanscience.blogspot.com/2013/01/david-kinkela-on-ddt-american-politics.html>
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| Ted Lee | Biology | Pérez-Fuentetaja, A., M. D. Clapsadl, and W. T. Lee. Comparative role of dreissenids and other benthic invertebrates as links for type-E botulism transmission in the Great Lakes. In T. F. Nalepa and D. W. Schloesser [eds] Quagga and Zebra Mussels: Biology, Impacts, and Control. 2nd Edition.  CRC Press: Boca Raton (in press) (2013). <http://www.crcpress.com/product/isbn/9781439854365>  |
| Tracy Marafiote | Communication | Dr. Marafiote is currently seeking grants for work on the cultural and socio-environmental impacts of inland oil spills. Benton, B., & Marafiote, T. (2013).Fatalism, Fear, and Retribution: Japanese Environmentalism in Godzilla vs. Biollante. The Journal of Japanese Science Fiction Fantasy, http://historyvortex.org/ KaijuFan.html, <http://www.historyvortex.org/godzilla_vs_biollante.html> Marafiote, T. (2013). (White, Male) Wilderness and the (Wild) Frontier, on “The more things change, the more things stay the same”: story-telling in the global era. *Panel Session* presented at the Western States Communication Association Annual Conference*.* Reno, NV. |
| Sherri Mason | Chemistry; Environmental Sciences | Research is poised at the forefront of research on plastic pollution within freshwater ecosystems, in general, and the Great Lakes, more specifically. SUNY Fredonia lies 2 miles from the shores of Lake Erie, one of the 5 Great Lakes, which in total comprise the largest freshwater ecosystem in the world. In collaboration with the 5 Gyres Institute, we conducted the first-ever survey for plastic pollution within the open-waters of the Great Lakes. <http://alumni.fredonia.edu/Magazine/SearchArticles/tabid/188/ctl/ArticleView/mid/608/articleId/356/SUNY-Fredonia-leads-the-first-ever-survey-of-Plastic-Pollution-in-the-Great-Lakes.aspx>  |
|  |  | Notable Accomplishments: * Dr. Mason's important work has been featured on NPR as well as numerous news outlets nationwide. <http://www.npr.org/templates/story/story.php?storyId=251664454>

See also, for example, <http://www.wnyc.org/people/sherri-mason/> <http://www.loe.org/> <http://www.mprnews.org/story/npr/251664454> <http://news.wbfo.org/term/sherri-mason> |
| Michael Milligan | Chemistry; Environmental Sciences | (1) Impact of In- and Out-of-State Power Plants on Semivolatile Pollutants in New York State. The objective of this project is to measure the concentrations of airborne particulate matter, including its semivolatile components, such as nitrate, sulfate, polyaromatic hydrocarbons (PAHs), and gas-phase metallic and reactive gaseous mercury. Ultimately, we hope determine the impact of in-state and out-of-state power plants and other sources on the concentrations of these species measured in New York State. (2) Deposition and Ambient Concentrations of Semivolatile Organic Pollutants in the Lake Ontario Region The transport of semivolatile compounds is of international concern and abundant data currently exists to confirm the long distance transport of these contaminants to areas hundreds and thousands of kilometers from the origin. However, the role of volatilization and atmospheric deposition of these compounds for large bodies of water are still not well understood. Our ultimate goal is to try to understand the role that Lake Ontario plays in the cycling of these contaminants in the environment. <http://www.buffalonews.com/city-region/town-of-tonawanda/toxic-chemicals-found-in-soil-of-homes-near-tonawanda-coke-plant-20140303>  |
| Aimee Nezhukumatathil  | English | Research interests include: poetry and creative non-fiction, environmental literature, eco-criticism, mythology, and Asian-American literatures. As a writer and teacher of creative writing, I'm particularly drawn to voices that have an entwined relationship to landscape and supposition.Poetry magazine’s November issue, including Nezhukumatathil’s poem “Two Moths,” <http://www.poetryfoundation.org/poetrymagazine/toc/2424>  |
|  |  | Notable Accomplishments: * Professor Nezhukumatathil is the author of three poetry collections: [LUCKY FISH](http://aimeenez.net/2011/books/lucky-fish/) (2011), winner of the gold medal in Poetry from the Independent Publisher Book Awards and the Eric Hoffer Grand Prize for Independent Books; [AT THE DRIVE-IN VOLCANO](http://aimeenez.net/2007/books/at-the-drive-in-volcano/) (2007), winner of the Balcones Prize; and [MIRACLE FRUIT](http://aimeenez.net/2003/books/miracle-fruit/) (2003), winner of the Tupelo Press Prize, ForeWord Magazine’s Book of the Year Award, the Global Filipino Award and a finalist for The Glasgow Prize and the Asian American Literary Award. Her first chapbook, [FISHBONE](http://aimeenez.net/2000/books/fishbone/) (2000), won the Snail’s Pace Press Prize.
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| Peter Reinelt | Economics | Reinelt, Peter: “Proposal to Abolish or Limit Water Data Confidentiality to 1-5 Years: Improving Water Resource Management and Increasing Net Water Benefits in the State of California”, Submitted to State Water Resource Control Board for Public Workshop Regarding Immediate Drought Response Options., February 26, 2014.Guest Editor for “Economics of Groundwater Management” special issue of *Hydrogeology Journal* *20*(5), the official journal of the International Association of Hydrogeologists, August 2012.<http://link.springer.com/journal/10040/20/5/page/1>Reinelt, Peter, Nicholas Brozović, M. Ejaz Qureshi, and Petra Hellegers, “Preface: Economics of groundwater management,” in *Hydrogeology Journal, 20*(5), August 2012. [http://link.springer.com/article/10.1007%2Fs10040-012-0878-7#page-1](http://link.springer.com/article/10.1007/s10040-012-0878-7#page-1)Qureshi, M. Ejaz, Andrew Reeson, Peter Reinelt, Nicholas Brozović, and Stuart Whitten, “Factors determining the economic value of groundwater,” *Hydrogeology Journal, 20*(5), August 2012.[http://link.springer.com/article/10.1007%2Fs10040-012-0867-x#page-1](http://link.springer.com/article/10.1007/s10040-012-0867-x#page-1)Reinelt, Peter, James Markham, Michael Lesinski, “Economic Impact Analysis of Lake Erie Steelhead Fishery in New York State,” May 2013.  Submitted to both Chautauqua County Industrial Development Agency and Lake Erie Fisheries Unit, NY State Dept of Environmental Conservation |
|  |  | Notable Accomplishment:[Economics’ Reinelt studies impact of region’s sport fishing](http://alumni.fredonia.edu/Magazine/SearchArticles/tabid/188/ID/391/Economics-Reinelt-studies-impact-of-regions-sport-fishing.aspx) <http://alumni.fredonia.edu/Magazine/SearchArticles/tabid/188/ID/391/Economics-Reinelt-studies-impact-of-regions-sport-fishing.aspx>  |
| Alberto Rey | Visual Arts and New Media | Here are a couple museum projects that I have been working on for the past two years that were presented this year:1. Masur Museum <http://www.masurmuseum.org/current.php> 2. Burchfield Penney Art Center [http://www.burchfieldpenney.org/exhibitions/exhibition:02-14-2014-05-18-2014-biological-regionalism-alberto-rey/](http://www.burchfieldpenney.org/exhibitions/exhibition%3A02-14-2014-05-18-2014-biological-regionalism-alberto-rey/) more images and info can be found at: <http://www.albertorey.com/site-specific-projects/> Working with Janeil Rey and Dr. Mike Jabot - intensive four day conference on providing skills and study plans for teaching place-based education, sustainability and conservation: <http://www.childreninthestream.com/>Another program that I have been directing for 15 years teaching - it teaches place-based education, sustainability and conservation:<http://www.albertorey.com/s-a-r-e-p-youth-fly-fishing-program/> |
| Jonathan Titus | Biology; Environmental Sciences | Titus, J.H. and J.G. Bishop. 2014. Competition with N-fixing colonists decreases survival of Douglas-fir seedlings on primary successional sites at Mount St. Helens, Washington. Journal of Vegetation Science. Accepted.del Moral, R. and J.H. Titus. 2014. Primary Succession on Mount St. Helens: Rates, Determinism and Alternative States. In: V.H. Dale & C. H. Crisafulli (eds.), Ecological Responses Revisited 35 years after the 1980 Eruptions of Mount St. Helens. Springer-Verlag, New York. Accepted.Titus, J.H, P.J. Titus, M. Laituri and B. Sethebe. 2012. Population Structure of an Arborescent Aloe (Aloe marlothii) in Botswana. African Journal of Plant Science 6:328-336. http://www.academicjournals.org/AJPS/PDF/Pdf2012/Oct/Titus%20et%20al.pdfStaunch, A., M. Redlecki, J. Sleeper, J. Wooten and J.H. Titus. 2012. Moss and Soil Substrates Interact with Moisture Level to Influence Germination by three Wetland Tree Species. ISRN Botany 2012. http://www.isrn.com/journals/botany/aip/456051/Titus, J.H. and P.J. Titus. 2011. Recovery Plan for the Huachuca water umbel (Lilaeopsis schaffneriana ssp. recurva). Agency Review Draft. U.S. Fish and Wildlife Service. Tucson AZ. 74 pp. |
| Meagan Urban | Visual Arts and New Media | Designers and Forests a interdisciplinary project linking foresters, citizens, artists, storytellers, and designers to explore places in depth and then respond in positive ways to create healthier forests and healthier commentates. (<http://DesignersAndForests.us>) |