# KIRSTEN ROWELL

Research and Innovation Office University of Colorado Boulder kirsten.rowell@colorado.edu

#### **EDUCATION**

PH.D.	2006	UNIVERSITY OF ARIZONA - GEOSCIENCES
M.S.	2001	NORTHERN ARIZONA UNIVERSITY - AQUATIC BIOLOGY
B.A.	1996	PRESCOTT COLLEGE - FIELD ECOLOGY & CONSERVATION

### **APPOINTMENTS**

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2018 –	Associate Faculty, Environmental Studies Program, University of Colorado Boulder
2017 –	Director, Research Leadership in Vice Chancellor's Research and Innovations Office,
	University of Colorado Boulder
2017 –	Director, Global Sustainability Scholars Program, Sustainability and Innovation Lab at
	Colorado
2016 – 2020	Affiliate Curator, Malacology -Burke Museum of Natural History and Culture, University of
	Washington
2014 - 2016	<b>Director,</b> Doris Duke Conservation Scholars Program, University of Washington, College of
	Environment: Duties and responsibilities include:
2011-2016	Acting Assistant Professor, Department of Biology, University of Washington:
2011-2016	Adjunct Curator of Malacology, The Burke Museum of Natural History and Culture,
	University of Washington
2008-2011	Research Scientist University of Washington, Department of Biology
2007-2008	Post-doc Research Associate University of California, Santa Cruz, Ecology and Evolutionary
	Biology
2006-2007	Post-doc Research Associate University of Washington, Department of Biology
2004-2005	Research Associate Intercultural Center for the Study of Deserts and Oceans (CEDO)

## **GRANTS AND SCHOLARSHIPS**

Pending \$499,935 (Co-PI) Navigating Cultural Influences and Boundaries: Identity and Agency among Early Career Sustainability Scholars from Historically Underrepresented Communities - NSF

*Pending* \$1,312,490 (PI) Global Sustainability Scholars for Sustainable Oceans: building a network of transdisciplinary scientists and practitioners that represent humanity's future - NSF

2019 **\$265,500** (Co-PI) Disruptive technologies and US food security: interdisciplinary training of graduate Fellows to be food system leaders – US Department of Agriculture National Institute of Food Agriculture National Needs Graduate and Postgraduate Fellowship Grants Program.

2018 \$60,000 (PI) Global Sustainability Scholars Partnership with George Mason University

2018 \$1,500 (PI) CU Research and Innovation Office Travel Grant - NSF

2017 \$1,314,254 (PI) National Science Foundation – Belmont International Sustainability Scholars

2016 \$170,000 (Co-PI) National Fish and Wildlife Foundation – UW Conservation Scholars Program

2015 **\$120,000** (Co-PI) Wilburforce Foundation: UW Conservation Scholars Program

2015 **\$1,990,150** (Co-PI) Doris Duke Charitable Foundation: *Doris Duke Conservation Scholars Program at University of Washington* 

2015 **\$100,000** (Co-PI) Doris Duke Charitable Foundation: *Transformational Learning and Identity building in underrepresented groups in conservation* 

2015 \$553,406 (Co-PI) Tula Foundation, Clam Garden Research in N. Quadra Island and Bella Bella

2013 \$7,900 (PI) Ecological Society of America, Long-term planning grant for Natural History Section

2010 **\$96,000** (Co-PI) National Science Foundation, Natural History: *Decline to rebirth – workshop proposal* 

- **\$60,000** (Co-PI) University of Washington Environmental Institute, *Natural History: from decline to rebirth workshop proposal.*
- **\$21,000** (Co-PI) National Geographic Society, *Documenting Ancient Management of Marine Resources Among the Tla'Amin of SW BC: Integrating Archaeological, Ecological, and Traditional Knowledge*
- **\$157,500** (PI) David and Lucile Packard Foundation Research, *Geochemical Logs of the Sea of Cortez:*Establishing ecological and life history baselines for fisheries management.
- **\$500,000** (Co-PI) David and Lucile Packard Foundation, Small--Scale Fisheries in the Upper Gulf of California, Mexico: Linking Human and Biophysical Processes. An Ecosystem Based Management Implementation Proposal
- **\$20,000** (PI) Marshall Foundation Dissertation Fellowship
- **\$500** (PI) Estuarine Research Federation Student Travel Grant
- **\$2,000** Johnson Research Scholarship, Shifts in food resources associated with Colorado River flow
- **\$9,155** (PI) National Science Foundation (International/Americas Program), Dissertation Enhancement Grant, *The Importance of Colorado River Flow to Endemic Fish of the Northern Gulf of California: Evidence from Stable Isotopes in Fish Otoliths*
- **\$500** (PI) Society of Conservation Biology, Travel Grant
- **\$1,500** (PI) Southern Arizona Environmental Management Society, Scholarship
- **\$1,325** (PI) Chevron Research Grant, *The importance of the Colorado River to northern Gulf of California fish populations.*
- **\$2,210** (PI) T&E Inc. Conservation Biology Research Grant, *The importance of the Colorado River to northern Gulf of California fish populations*.

<u>**26 PUBLICATIONS**</u> (underline = <u>undergraduate students</u>, double underline = <u>graduate student</u>) **In prep.** <u>Guerra, M.</u>, M, Bang, C. Tzou, K. **Rowell,** M. Groom. Expanding Identities in the Field of Conservation.

*In prep.* 2021. <u>Salter, N.</u>, K. **Rowell,** D. Lepofsky, A.K. Salomon. Ancient clam gardens magnify bivalve production by moderating ambient temperature and enhancing sediment carbonate. Salish Sea Conference.

*In review.* Erisman, B.E., E<u>. M. Reed</u>, M. J. Román, I. Mascareñas-Osorio, P. van der Sleen, C. López-Sagástegui, O. Aburto-Oropeza, K. **Rowell**, B. A. Black. Relationships among somatic growth, climate, and fisheries production in an overexploited marine fish from the Gulf of California, Mexico.

**2020**. Maas, B., K.E. Grogan, Y. Chirango, N. Harris, L.F.Liévano-Latorre, K.L. McGuir, A.C. Moore, C. Ocampo, M. Palta, I. Perfecto, R.B. Primack, K. **Rowell**, L. Sales, R. Santos-Silva, R. A. Silva, E. Sterling, R.R.S. Vieira, C. Wyborn, A. Toomey. Academic leaders must support inclusive scientific communities during COVID-19. Nature Ecology & Evolution 4, 997–998. https://doi.org/10.1038/s41559-020-1233-3

**2020.** Lepofsky, D., G. Toniello, J. Earnshaw, C. Roberts, L. Wilson, K. **Rowell,** K. Holmes. Ancient anthropogenic clam gardens of the Northwest Coast expand clam habitat. *Ecosystems*. https://doi.org/10.1007/s10021-020-00515-6

**2019.** Toniello, G., D. Lepofsky, G. Lertzman-Lepofsky, A. K. Salomon, K. **Rowell**. 11,500 Years of Human-Clam Relationships Provide Long-term Context for Intertidal Management in the Salish Sea, British Columbia. *Proceedings of the National Academy of Sciences*. 116 (44) 22106-22114. DOI: 10.1073/pnas.1905921116

**2019.** Flessa, K.W., L.E. Calderon, C.E. Cintra-Buenrostro, D.L. Dettman, G.P. Dietl, D.H.Goodwin, D. K. Jacobs, M. Kowalewski, S.M. Nelson, K. **Rowell**, B.R. Schöne, J.A. Smith, F. Zamora-Arroyo. Comment on Rojas-Bracho et al., 2019: Unsubstantiated claims can lead to tragic conservation outcomes. *Bioscience*, biz021, https://doi.org/10.1093/biosci/biz021

. Flessa, K.W., L.E. Calderon, C.E. Cintra-Buenrostro, D.L. Dettman, G.P. Dietl, D.H. Goodwin, D.K. Jacobs, M. Kowalewski, S.M. Nelson, K. **Rowell,** B.R. Schöne, J.A. Smith, F. Zamora-Arroyo. Comment on Rojas-Bracho et al., 2019: Vaquita face extinction from bycatch. Comment on Manjarrez-Bringas et al.,

- Lessons for sustainable development: Marine mammal conservation policies and its social and economic effects. *Sustainability* 11, no. 7: 2161 <a href="https://doi.org/10.3390/su11072161">https://doi.org/10.3390/su11072161</a>.
- **2015.** Lepofsky, D., N.F. Smith, N. Cardinal, J. Harper, E. White, A.K. Salomon, M. Morris, M.Puckett, **K. Rowell**. Ancient Mariculture on the Northwest Coast of North America. *American Antiquity 80 (2), pp.236-259, https://doi.org/10.7183/0002-7316.80.2.236*
- **2015**. Munguia-Vega, A., J. Torre, P. Turk-Boyer, S.G. Marinone, M.F. Lavin, T. Pfister, W. Shaw, G. Danemann, P. Raimondi, A. Castillo-Lopez, A. Cinti, J. Duberstein, M. Moreno-Baez, G. Soria, L. Sanchez-Velasco, H. Morzaria-Luna, L. Bourillon, K. **Rowell**, Cudney-Bueno R. PANGAS: an interdisciplinary ecosystem-based research framework for small-scale fisheries in the Northern Gulf of California. *Journal of the Southwest* 57, no. 2/3 (2015): 337-90. <a href="http://www.jstor.org/stable/26310171">http://www.jstor.org/stable/26310171</a>.
- **2015.** <u>Groesbeck, A.</u>, K. **Rowell**, D. Lepofsky, and A. K. Salomon "Ancient Clam Gardens "*in the book* The Archaeology of Food: An Encyclopedia. Rowman & Littlefield Publishers, Inc.
- **2015.** Mitchell, D.R., G. Huckleberry, K. **Rowell,** D.L. Dettman. Coastal Adaptations during the Archaic Period in the northern Sea of Cortez, Mexico. *Journal of Island & Coastal Archaeology* 9(3).
- **2014.** <u>Groesbeck, A. S.,</u> K. **Rowell,** D.S. Lepofsky, and A.K. Salomon, Ancient clam gardens increased shellfish production: Adaptive strategies from the past can inform food security today. *PLoS ONE 9*(3): e91235. doi:10.1371/journal.pone.0091235
- **2014.** Tewksbury, J. J., J. J. Anderson, D. Bakker, T. J. Billo, P. Dunwiddie, M. J. Groom, S. E. Hampton, J. Herman, D. J. Levey, N. J. Machnicki, M. E. Power, C. Martinez Del Rio, **K. Rowell**, A. M. Solomon, <u>L. Stacey</u>, S. C. Trombulak, and T. A. Wheeler. Natural History's Place in Science and Society. *BioScience*, Vol. 64 (4) 300-310.
- **2013.** <u>Gherard, K.E.,</u> B E. Erisman, O. Aburto-Oropeza, K. **Rowell**, and L.G. Allen. Growth, Development, and Reproduction of Gulf Corvina, *Cynoscion othonopterus*. *Southern California Academy of Sciences*. *112(1)*.
- **2012**. Ruesink, J. L. and K. **Rowell**, Seasonal effects of clams (*Panopea generosa*) on eelgrass (*Zostera marina*) density but not recovery dynamics at an intertidal site. *Aquatic Conservation: Marine and Freshwater Ecosystems*. DOI: 10.1002/agc.22692012.
- **2012**. **Rowell**, K. Sharing Wonder in Nature. *Science*. 336 (6085), p. 1109.
- **2012.** Salomon, A.K. and K. **Rowell**. The Art of Ecology; How Field Sketches and Notes Offer Insights into Nature *in* Sagarin, R. and Pauchard A. *Observation and Ecology: Broadening the Scope of Science to Understand a Complex World*, eds. Island Press.
- **2012**. **Rowell**, K. Natural History, Conservation and Management in the Gulf of California, *an invited book review of*, "The Gulf of California, biodiversity and Conservation" *The Quarterly Review of Biology*.
- **2010**. **Rowell**, K., D. L. Dettman, R. Dietz. Nitrogen isotopes in otoliths reconstruct ancient trophic position. *Environmental Biology of Fishes*. 89: 415-425.
- **2010.** Rowell, K., D. L. Dettman. How has over-allocating the Colorado River affected species of the Gulf of California? *In* Melis, T.S., Hamill, J.F., Coggins, L.G., Jr., Grams, P.E., Kennedy, T.A., Kubly, D.M., and Ralston, B.E., eds., 2010, *Proceedings of the Colorado River Basin Science and Resource Management Symposium*, November 18–20, 2008, Scottsdale, Arizona: U.S. Geological Survey Scientific Investigations Report 2010–5135, 372 p. 195-200.
- **2009**. Stevens, L. E., Brown, B. T., K. **Rowell.** Foraging ecology of peregrine falcons (*Falco peregrinus*) along the Colorado River, Grand Canyon, Arizona. *The Southwestern Naturalist*. 54(3): 284-299.
- **2008. Rowell**, K., K. W. Flessa, D. L. Dettman, M. Román, L. R. Gerber, L. T. Findley. Diverting the Colorado River leads to a dramatic life history shift in an Endangered Marine Fish. *Biological Conservation*, 114 (4): 1140-1150.
- **2008**. **Rowell**, K., C. True, K.W. Flessa, L.D Dettman. Fish Without Water: validation and application of the  $\delta$ 180 in *Totoaba macdonaldi* otoliths. *Ciencias Marina's* Volume 34(1): 55-68.
- **2008**. <u>Cudney-Bueno, R.</u>, and K. **Rowell**. Establishing a baseline for management of the Rock Scallop, *Spondylus calcifer* (Carpenter, 1857): Growth and Reproduction in the upper Gulf of California, Mexico. *Journal of Shellfish Research*. 27(4): 625-632.

**2008.** <u>Cudney-Bueno, R.</u>, and K. **Rowell.** The Black Murex Snail, *Hexaplex nigritus* (Mullusca Muricidea), In the Gulf of California, Mexico: Growth, longevity, and morphological variations implications for management of a rapidly declining fishery. *Bulletin of Marine Sciences*. 83(2):299-313.

**2007.** Glenn, P.E., K.W. Flessa, M. J. Cohen, P.L. Nagler, **K. Rowell**, F. Zamora-Arroyo. Just add water and the Colorado River Still Reaches the Sea. *Environmental Management*. 40: 1-6.

**2005**. **Rowell, K.**, K.W. Flessa, D.L. Dettman, and M. Román. The importance of Colorado River flow to nursery habitats of the Gulf corvina (*Cynoscion othonopterus*). *Can. J. Fish. Aguat. Sci.*62: 2874-2885.

**2003**. **Rowell, K.**, D.W. Blinn. Herbivory on a chemically defended plant as a predation deterrent in *Hyalella azteca*. *Freshwater Biology*. 48: 247-254.

# **TECHNICAL REPORTS**

*In prep.* 2021. Mitchell, D., K. Rowell, R. Brusca Archaeological Evidence of Marine Resources Used for Subsistence in Coastal Northern Sonora, Mexico; Chapeter 8 *in* "Coastal Foragers of the Gran Desierto: Investigations of Prehistoric Shell Middens along the Northern Sonoran Coast", Proceedings of the Desert Laboratory on Tumamock Hill, NO. 3.

2012. Lepofsky, D., M. Puckett, T. Clark, A. Groesbeck, A. Salomon, **K. Rowell**. Quadra Island 2011 Clam Garden Exploration Archeological and Ecological Technical Report for the Laich-wil-tach Treaty Society. 2011. Caldwell, M., T. Clark, D. Lepofsky, A. Groesbeck, A. Salomon, **K. Rowell**. Quadra Island 2010 Clam Garden Exploration Archeological and Ecological Technical Report for the Laich-wil-tach Treaty Society. 2005. **Rowell**, **K**. Analysis of Growth of the Spiny Oyster *Spondylus calcifer* in the Gulf of California, Mexico. Technical report for Intercultural Center for the Study of Deserts and Oceans, Inc. (CEDO).

2004. Anonymous. Scale-dependent and indirect effects of filter feeders on eelgrass Annual Report for Washington State Department of Natural Resources

2001. **Rowell, K**. Temporal and spatial snapshots of non-native salmonids in the Grand Canyon Corridor of the Colorado River. Technical report for USGS, Grand Canyon Monitoring and Research Center.

1999. Parnell, R.A., A. Springer, L.E. Stevens, J.B. Bennett, T. Hoffnagle, B. Simmons, H.C. Johnstone, **K. Rowell**. Backwater Rejuvenation along the Colorado River, Grand Canyon, Arizona: Final Report to Grand Canyon Monitoring and Research Center, Bureau of Reclamation

1998. Stevens, L.E., **K. Rowell**. 1998. State of Natural and Cultural Resources in the Colorado River Ecosystem Report. Grand Canyon Monitoring and Research Center, BOR: http://www.gcmrc.gov/score/score.htm

## **INVITED PRESENTATIONS**

2019. **Rowell, K.,** Finney, Carolyn, Storytelling a restorative practice and identity building tool for youth, NSF INCLUDES DATA SCIENCE Conference *Bringing Conversations on Diversity and Inclusion in Data Science to the Environmental Sciences*.

2019. **Rowell, K.** From Undergraduate to Senior Researcher - Building a network of diverse scholars in sustainability research initiatives, *National Science Foundation* cross directorates presentation, April 16. 2016. Flessa, K., Dettman, D., Cintra-Buenrostro, C., and **Rowell, K**., Conservation paleobiology in near time: Isotopic estimates for restoration flows to the estuary of the Colorado River, Mexico. European Geosciences Union, General Assembly.

2016. **Rowell, K.,** Kumanyika, Ch. Storytelling as a tool for communicating across difference and building identity within the Conservation movement. North American Congress for Conservation Biology. 2015. Harris, N., **Rowell**, K. Expanding diversity in the next generation of ecology: What works to recruit, retain, and matriculate disadvantaged youth in gaining undergraduate degrees in ecological disciplines? Ecological Society of America. 100th annual Meeting.

2012. **Rowell**, K. Isotopic Logs from the Sea of Cortez: Using skeletal remains to establish ecological baselines. Simon Frasier University.

2012. Tewksbury, J.J., S. Hampton, T. Wheeler, K. Rowell. 21st Century natural history – no longer alone on the Beagle, Ecological Society of America 97<sup>th</sup> annual meeting.

- 2012. Rowell, K. Dams, Clams and Museums. Pacific Northwest Shell Club.
- 2012. Rowell, K. An Open Museum shells as archives. Burke Museum.
- 2011. **Rowell**, K. Turning off the Colorado Tap: Establishing Baselines in Natural History through Geochemical Logs of the Sea of Cortez, Biology Department, University of Washington.
- 2011. **Rowell**, K. Turning off the Colorado Tap: Establishing Baselines in Natural History through Geochemical Logs of the Sea of Cortez, National Center for Ecological Analysis and Synthesis.
- 2009. **Rowell**, K. *Isotopic Logs of the Sea of Cortez* University of Guam.
- 2007. **Rowell**, K., R. Cudney-Bueno. *Geochemical Logs of the Sea of Cortez: Establishing life history and habitat baselines for small-scale fisheries*. Presentation at Annual meeting American Fisheries Society.
- 2005. **Rowell**, K., K.W. Flessa, D. L. Dettman, M. J. Román-Rodríguez, L. T. Findley. *Fish Out of Water: Environmental and life history records from otoliths of the endangered totoaba*. Presentation at the Climate & Fisheries: Impacts, Uncertainties and Responses of Ecosystems and Communities, Victoria, BC, Canada.
- 2004. **Rowell**, K. *Uses of geochemical records in otoliths*. Presentation at Universidad Autónoma de Baja California, Ensenada, Baja California Norte, Mexíco.
- 2003. **Rowell,** K., K. W. Flessa, D. Dettman, M. Roman, and J. Campoy. *Double the trouble: Sustaining marine and riverine processes in the estuarine Reserva de la Biosfera alto Golfo de California y Delta del Río Colorado, Mexíco*. Presentation at 17<sup>th</sup> Annual Meeting of Society of Conservation Biology.
- 2003. **Rowell**, K., M. Roman, J. Campoy, K. Flessa, and D. Dettman. *From the river to the sea: Evaluating the influence of Colorado River flow on the corvina fishery in the northern Gulf of California*. Presentation at Annual Meeting of Western Division of American Fisheries Society.

# <u>1997-2018 Presentations</u> to professional associations >50, 17 first authored

- (underline = <u>undergraduate students</u>, double underline = <u>graduate student</u>)
- 2020. <u>Salter, N.</u>, **Rowell, K.**, Lepofsky, D., Salomon, A.K.. Ancient clam gardens magnify bivalve production by moderating ambient temperature and enhancing sediment carbonate. Salish Sea Conference.
- 2019. Balch, J.K, **K. Rowell.** What is Big Data For? NSF INCLUDES DATA SCIENCE Conference *Bringing Conversations on Diversity and Inclusion in Data Science to the Environmental Sciences*.
- 2018. <u>Gray.</u> L.; D. Munroe, A. Groesbeck, D. Lepofsky, A. Salomon. K. **Rowell**. Investigating Clam Garden Productivity: Does Addition of Shell Hash Optimize Surface Sediments for Settlement and Early Survival? American Fisheries Society.
- 2017. Salomon, A. K., A. Groesbeck, D. S. Lepofsky, K. **Rowell.** A Story of Discovery: Revealing the Mysteries of Ancient Clam Gardens. The Salish Sea Ecosystem Conference.
- 2017. Cintra-Buenrostro, C. E., K.W. Flessa, D. Dettman, K. **Rowell.** A call from the dead: thirsty clams and thirsty fish need freshwater inflow to the Colorado River Delta. Association for the Sciences of Limnology and Oceanography Meeting.
- 2017 N. Smith, S. Augustine, K. Holmes, D. Lepofsky, C. Neudorf, M. Puckett, C. Roberts, **K. Rowell**, A. Salomon, N. Salter, G. Toniello, L. Wilson. Ancient Mariculture in British Columbia: Documenting the Past for the Future, Part 2. Society of Ethnobiology Conference, Montreal, QC
- 2017. <u>Salter,N.</u>, A. Groesbeck, K. **Rowell**, A.K. Salomon. Ancient Clam Gardens: Exploring Cultural and Ecological Mechanisms that Enhanced Clam Production. The 81st Annual Meeting of the Society for American Archaeology, Vancouver, BC (tDAR id: 431574)
- 2017. Munroe, D., <u>L. Gray</u>, A. Groesbeck, A. K. Solomon, D. Lepofsky, K. **Rowell**. Ancient clam gardens as nursery grounds: How do shell hash additions affect settlement and survival? Oral presentation at National Shellfisheries Association Annual Meeting. Knoxville, TN. March 26-30, 2017.
- 2017. <u>Toniello, G.</u>, D. Lepofsky, **K. Rowell, G.** Lertzman-Lepofsky. 11,000 years of Human-Clam Relationships on Northern Quadra Island, Salish Sea, British Columbia. Presented at the Society of Ethnobiology Conference

- 2017. <u>Toniello</u>, G., D. Lepofsky, **K. Rowell**, G. Lertzman-Lepofsky. 11,000 years of Human-Clam Relationships on Northern Quadra Island, Salish Sea, British Columbia. Presented at the Society for American Archaeology Conference
- 2017. <u>Toniello,</u> G., D. Lepofsky, **K. Rowell.** Ancient Clam Gardens and Ecological Enhancement on Northern Quadra Island, British Columbia. Poster Presented at the 39thAnnual Society of Ethnobiology Conference March 16-19, Tucson, AZ.
- 2016. <u>Gray, L.</u>, A. Groesbeck, D.M.Munroe, D. Lepofsky, and **K. Rowell**. Are clam gardens ideal nursery grounds? How DO shell hash additions affect settlement and Survival? Poster presentation, Western Society of Naturalists Annual Meeting, Monterey, CA., November 10-13, 2016.
- 2016. <u>G. Toniello</u>, D. Lepofsky, **K. Rowell**. Ancient Clam Gardens and Ecological Enhancement on Northern Quadra Island, British Columbia. Annual meetings, Society of Ethnobiology, Tuscon.\*\*best student paper award.
- 2015. <u>Gray, L.D.</u>, D. M. Munroe, and **K. Rowell**. Sediment characteristics governing biological productivity in ancient clam gardens. Association for the Sciences of Limnology and Oceanography Aquatic Sciences Meeting.
- 2015. <u>Toniello</u>, G., D. Lepofsky, **K. Rowell**. Assessing the Productivity of Ancient Clam Gardens on Northern Quadra Island, British Columbia. Poster Presented at the 2nd International Historical Ecology Meeting November 14, 2015, Simon Fraser University, Burnaby, BC.
- 2015. <u>Toniello, G., D. Lepofsky, **K. Rowell.** Assessing the Productivity of Ancient Clam Gardens on Northern Quadra Island, British Columbia. Poster Presented at British Columbia Archaeology Forum October 17, 2015, Vancouver, BC.</u>
- 2015. <u>Toniello</u>, G.,D. Lepofsky, **K. Rowell.** Clam Garden Productivity on Northern Quadra Island, British Columbia. Presented at Hakai Research Exchange October 15, 2015, Nanaimo, BC.
- 2015. <u>Toniello</u>, G., D. Lepofsky, **K. Rowell**. Assessing the Productivity of Ancient Clam Gardens on Northern Quadra Island, British Columbia. Poster Presented at Hakai Research Exchange October 15, 2015, Nanaimo, BC.
- 2015. <u>Toniello, G.</u>, D. Lepofsky, **K. Rowell**. Assessing the Productivity of Ancient Clam Gardens on Northern Quadra Island, British Columbia. Poster Presented at the 38thAnnual Society of Ethnobiology Conference May7-8, 2015, UCSB, Santa Barbara, CA.
- 2014. Rowell, K. and N. Turley. ESA Natural History Section, Ecological Society of America.
- 2014. Lepofsky, D.S., S. Augustine, N. Cardinal, M. Hatch, <u>J. Jackley</u>, <u>A. Groesbeck</u>, E. Mclay, <u>M. Puckett</u>, K. **Rowell**, A. Salomon, N. Smith, and E. White. *Ancient Mariculture in British Columbia: Documenting the Past for the Future*. Northwest Anthropological Conference
- 2014. <u>Groesbeck, A.S.</u>, K. **Rowell**, M. Puckett, D. S. Lepofsky, A. K. Salomon. *Ancient aquaculture practices in British Columbia: Clam gardens provide insights and baselines for today's management*
- 2014. Lepofsky, D.S., S. Augustine, N. Cardinal, M. Hatch, <u>J. Jackley</u>, <u>A. Groesbeck</u>, E. Mclay, <u>M. Puckett</u>, K. **Rowell**, A. Salomon, N. Smith, and E. White. *Ancient Mariculture in British Columbia: Documenting the Past for the Future*. Salish Sea Ecosystem Conference.
- 2013. Lepofsky, D.S., S.Augustine, N. Cardinal, A. Groesbeck, M. Puckett, K. **Rowell**, A. Salomon, N. Smith, and E. White. *Ancient Mariculture in British Columbia: Documenting the Past for the Future.* Society of Ethnobotany.
- 2013. <u>Groesbeck, A.S</u>., A. K. Salomon, <u>M. Puckett</u>, D. S. Lepofsky, K. **Rowell**. *Ecosystem enhancements? Ancient aquaculture practices in British Columbia provide insights and baselines for today's management.* Ecological Society of America.
- 2012. <u>Groesbeck, A.S.</u>, A. K. Salomon, D. S. Lepofsky, K. **Rowell.** *Ancient shellfish cultivation in British Columbia: An experimental look at First Nations' clam gardens.* Western Society of Naturalists.
- 2012. **Rowell, K.** and D. L. Dettman. *Food chain length nearly half the size it used to be? Prehistoric skeletal remains document ecosystem change in the upper Gulf of California*. Ecological Society of America 97<sup>th</sup>.

- 2011. <u>Groesbeck, A.S.</u>, A. K. Salomon, D. S. Lepofsky, K. **Rowell**, *Ancient clam mariculture on BC's coastline:* an experimental examination. Western Society of Naturalists.
- 2011. <u>Groesbeck, A.S.</u>, A. K. Salomon, D. S. Lepofsky, K. **Rowell**, *Ancient clam mariculture on British Columbia's coastline: an experimental examination*. Salish Sea Science Symposium.
- 2011. <u>Fall\*, L. M.</u>, K. W. Flessa, D. L. Dettman, R. D. Dietz, K. **Rowell**, *Nitrogen isotopes in preservable hardparts indicate trophic level: a case study from the Gulf of California*. Geological Society of America 2011. **Rowell**, K. and D. L. Dettman, *Otolith Diaries: Isotopic Trails Tell Ecological Tales of a River Diversion or Overfishing?* American Fisheries Society.
- 2011. **Rowell**, K. and A. K. Salomon, *Why we are Naturalists Capturing the Passion of Natural History through Conversation*. Ecological Society of America.
- 1997 2010: 21 presentations at professional meetings 13 first authored.

## **Selected Recent Media coverage/outreach**

2019 Daily Camera — Hosted Dr. Carolyn Finney for a public talk at CU Boulder

2018 Daily Camera — Research and Innovation week Faculty Ted Talks

**2017** <u>Science Magazine</u> – Ending poaching may not save the doomed Totoaba.

**2016** Conservation Conversations – The beginning of the conversation; why does human diversity matter to biodiversity?

**2015** <u>Conservation Stories –</u> Unheard narratives from a new generation of conservation scholars. Cocreators include Chenjerai Kumanyika, Carolyn Finney, Benjamin Drummond, and Sara Joy Steele.

**2014** Editorial in <u>Nature</u> on our article on the importance of natural history, there were several other online media that also ran editorials like <u>Scientific America</u>.

**2014** Online, in print, and radio coverage on our PlosOne clam garden research (at least 15 different sources): e.g. The <u>Canadian Daily</u> and <u>Harper's Magazine</u> "Findings"

**2014** Scientific America, Earthtouch News, ESA, covered #IAMANATURALIST Campaign.

2013 + ESA Natural History Section webpage, blog and twitter @esanathist - built and maintain

2012 Burke Blog: http://burkemuseum.blogspot.com/2012/02/malacology-at-burke.html

**2012** Work summarized by Gary Nabhan "My First (and Last) Rodeo: <u>Catching Corvina in the Sea of Cortez</u>" in his book Desert Terror, Chapter 97.

**2011** Coverage on the Natural History Initiative: <u>Biology Letters</u> Meeting Report on Natural History Initiative: by Hampton S. E. and Wheeler, T. A; <u>Conservation Magazine</u> by Richard Conniff

**2011** Natural History Initiative – <u>Natural Histories Project</u> – a conversation and celebration of the practice of Natural History, part of NSF funded Natural History Initiative workshops.

http://naturalhistoriesproject.org/

**2009** work summarized *in* text book chapter: Calderon-Aguilera, L. E. and K. Flessa. Just add water? Transboundary Colorado River flow and ecosystem services in the upper Gulf of California. In a Conservation of Shared Environments: Learning from the United States and Mexico. Eds. L. Lopez-Hoffman, E.D. Mc Govern, R.G. Varady and K. W. Flessa, pp. 154-169. University of Arizona Press. **2008** Down to earth: Science and Environment online:

http://www.downtoearth.org.in/news/river-diversion-affects-fish-growth-4633

**2008** Mongbay.com: <a href="https://news.mongabay.com/2008/06/dried-up-colorado-takes-toll-on-giant-mexican-fish/">https://news.mongabay.com/2008/06/dried-up-colorado-takes-toll-on-giant-mexican-fish/</a>

## **TEACHING**

- 2020 Facilitator/ Co-Instructor Research and Innovation Faculty Fellows Research Leadership multi-day retreat on faculty research leadership skills; Instructor— Global Sustainability Scholars Program 2020.
- 2019 Facilitator/ Co-Instructor Research and Innovation Faculty Fellows Research Leadership multi-day retreat on faculty research leadership skills; Instructor— Global Sustainability Scholars Program 2019, Guest lecturer Two-day curriculum on inclusive practices in

	conservation. Professional Masters in Environmental Studies, University of Colorado Boulder;
	Guest lecturer for Environmental Studies (ENVS 1000), CU Boulder
2018	<b>Facilitator/ Co-Instructor</b> Research and Innovation Faculty Fellows Research Leadership - multi-day retreat on faculty research leadership skills.
2017	<b>Guest lecturer</b> Two-day curriculum on inclusive practices in conservation. Professional Masters in Environmental Studies, University of Colorado Boulder
2016	<i>Instructor</i> Doris Duke Conservation Scholars Program Summer Intensive, University of Washington
	Guest lecturer Two-day curriculum on inclusive practices in conservation Professional Masters
	in Environmental Studies, University of Colorado Boulder
2015	<i>Instructor</i> Doris Duke Conservation Scholars Program Summer Intensive, University of
	Washington
2012	<i>Instructor</i> International training on Methods of Otolith preparation and sampling for isotopes
	University of Arizona
2011	<i>Instructor</i> International Workshop on Methods for Isotope Sampling in Otolith and Mollusk
	University of Arizona
2001-2003	Teaching and Laboratory Assistant: Paleontology lab, University of Arizona
1999-2001	Teaching Assistant: Bio 180 &182 labs. Northern Arizona University
1997	Co-Instructor for Invert. Zoology and Intertidal Ecology, Bahía de Kino, Mexíco, Prescott
	College
1996	Teaching Assistant: Natural History & Cultural Ecology, Bahía de Kino, Mexíco, Prescott
	College

## **STUDENT MENTORSHIP and ADVISING**

M.S. students 2018 Natacha Salter – M.S. Student at Simon Frasier University; 2017 Ginevra Toniello; MS. Simon Frasier University; 2013 Amy Groesbeck – M.S. Simon Frasier University; 2012 Ana K. Celis – M.S. University of Baja California; 2011 Katie Gherrard – M.S. California State University Northridge; 2004 Ta-Shana Taylor – M.S. University of Arizona

**Undergraduates:** 2014 *Laura Gray* - B.S. Oberlin; 2006 *Melisa Reeder* – B. S. University of Washington; 2005 Jackie White – B.S. University of Washington; 2005 *Lindsay Starret* – B.S. University of California Santa Cruz; 2004 Sherry-Ann Todd-Pearson – B.S. University of Arizona

## **PROFESSIONAL SERVICE**

**2020.** Beyond the Academy (National Academies Keck Futures Initiative) Steering committee; Diversity committee member of North American Association of Conservation Biology meeting 202: ANGLES Network for Graduate Student Leadership Network for Sustainability; Reviewer For American Geophysical Union, Earths Future journal; Reviewer for Anschutz and Boulder Nexus proposals.

**2019.** Invited member of the Institutionalizing Interdisciplinarity Network, funded by the National Academies Keck Futures Initiative;

2019. Reviewer for George Mason University Transdisciplinary Centers for Advance Study

**2018.** Reviewer for Inter-American Institute for Global Change Research Reviewer for Co-Funded Small Grants Program; The role of ecosystem services in adaptation to global Change for human wellbeing

**2018 - 2019** Planning committee, NSF INCLUDES DATA SCIENCE Conference *Bringing Conversations on Diversity and Inclusion in Data Science to the Environmental Sciences* 

**2016 - 2019** Steering committee for Doris Duke Conservation Scholars Program UW.

2015 - 2016 Diversity Committee for the Department of Biology (UW); University of Washington Departmental Chair Diversity Committee; College of the Environment, (UW) Diversity Committee. Seminar Committee for Department of Biology (UW), Diversity Committee for College of the Environment (UW)
2015 - Post-Chair for Natural History Section at Ecological Society of America (responsible for securing Centennial Plenary Meeting Speaker and helping organize meeting activities)

2014 – Guest Editor for Northwest Science open access journal.

**2014 – 2012 Inaugural Chair** for Natural History Section at Ecological Society of America (responsible for public outreach, priority setting, financial management, & development) <a href="http://esanaturalhistory.wordpress.com/">http://esanaturalhistory.wordpress.com/</a>

**2013 Co-session Leader** of "Transforming Natural History Museums through Collaborative and Innovative Learning Research" workshop at ATCS conference

2012 Co-organizer of Curator's dinner, an annual fundraiser event, with guided tours through collections 2011 Co-organizer and Co-PI of the Natural History Initiative, four week long workshops held in January, March and June of 2011, focused on the future of Natural History in Society, Education, and Research and Environmental Management. <a href="http://naturalhistorynetwork.org/the-natural-history-initiative/">http://naturalhistory-initiative/</a>
For more information on the conversations at these meetings: <a href="http://naturalhistoriesproject.org/">http://naturalhistoriesproject.org/</a>
2011 Co-organizer of Ecological Society of America Symposium: A Natural History Initiative for Ecology.

**2011 Co-organizer of Ecological Society of America Symposium:** A Natural History Initiative for Ecology, Stewardship, and Sustainability

**Member of the following professional societies**: American Fisheries Society, Desert Fishes Council, Ecological Society of America, and Society for Conservation Biology. Expert for Sciaenidae Red List of the International Union Conservation of Nature (IUCN) – Species Survival Commission.

**Reviewer for George Mason University** – Interdisciplinary Research Center.

Reviewer for the following professional journals: Conservation Letters, Continental Shelf Research, Scientific Reports (Nature), Conservation Biology, Biological Conservation, Canadian Journal of Fisheries and Aquatic Sciences, Earth's Future (AGU), Ecological Engineering, Environmental Biology of Fishes, Fish Biology, Journal of Archaeological Method and Theory, Rapid Communications in Mass Spectrometry, Hydrobiologia, Isotopes in Environmental and Health Studies, The Quarterly Review Biology. In addition, I've reviewed books for University of Arizona Press and MIT Press

## PROFESSIONAL DEVELOPMENT

**2019** - *Invited Participant,* "Metrics that Matter" workshop for National Academy Keck Foundation Initiative; Inclusive Field course training (NSF WEBINAR); Inclusive Pedagogy training (CU)

2018 -Invited Participant, Leopold Leadership Program Teach-in, research and academic leadership skills

2018 - One- Day workshop Franklin Covey - Speed of Trust & Leadership Development

One – day Inclusive Excellent Diversity Summit workshops – Inclusive pedagogy

**2017** - Accepted Participant Three-day workshop on <u>Transdisciplinary Research</u> methods; NSF Broadening Participation at CU seminar, Franklin Covey Leadership workshop.

2016 - First Aid/CPR training, Red Cross, Seattle.

Leading with a Racial Equity Lens training, Seattle Parks and Recreation, Seattle.

**2015 -** Two-day workshop - Peoples Institute, Undoing Racism, Seattle

One-day workshop - Sexual Harassment prevention training, UW, Seattle

One-day workshop - Undocumented Student Allies Workshop, UW, Seattle

Two-day workshop - Multicultural Environmental Learning Workshop - Antioch College, Seattle Two-day Inclusion and Excellence training - CU, Boulder

**2013** *Accepted Participant* of NSF funded week-long workshop for Women Evolving Biological Science Symposium.

**2012** *Invited Participant* of NSF funded and Smithsonian Sponsored Conference 21st Century Learning in Natural History Setting.

**2012** Accepted Participant of NSF funded Oregon State University Sponsored workshop, Advancing Toward Professorship in Biology, Ecology, and Earth Systems Sciences (ATPinBEESS) workshop.