

Benjamin Theodore Wilder, Ph.D.wilder.benjamin@gmail.com | cell: (520) 971-2486www.benjamintwilder.com**EDUCATION**

Ph.D. 2014. University of California, Riverside, Dept. Botany and Plant Sciences. Advisor: Exequiel Ezcurra, Dissertation: Historical Biogeography of the Midriff Islands, Gulf of California, Mexico.

B.Sc. 2006. University of Arizona, Tucson Arizona, Major in Ecology and Evolutionary Biology Cum Laude and Honors.

APPOINTMENTS

2011-present	co-Founder and Director. Next Generation Sonoran Desert Researchers.
2018–2022	Director. Desert Laboratory on Tumamoc Hill, University of Arizona, Research Innovation and Impact.
2021–2022	Director. University of Arizona, Consortium for Arizona-Mexico Arid Environments (CAZMEX).
2015–2020	Coordinator. University of Arizona, Consortium for Arizona-Mexico Arid Environments (CAZMEX).
2017–2022	Associate Research Scientist. School of Natural Resources and the Environment, University of Arizona.
2016–2018	Interim Director. Desert Laboratory on Tumamoc Hill, University of Arizona, Research Innovation and Impact.
2015	Visiting Scholar. Stanford University, Dirzo Lab, Biology Dept.
2014–2015	Visiting Researcher. UC, Berkeley, Baldwin Lab and UC Herbarium.
2009–2014	Research Assistant. UC, Riverside, Dept. Botany and Plant Sciences.
2005–2013	Independent Researcher. Plant Life of a Desert Archipelago: Flora of the Sonoran Islands in Gulf of California, Mexico. <i>Dr. Richard Felger, Mentor.</i>
2009	Project leader. Matching of Historic Photographs in the Plains of Sonora.
2004–2008	Research Assistant. The Desert Laboratory at Tumamoc Hill, University of Arizona Buffelgrass Control Project. <i>Dr. Julio Betancourt, Mentor.</i>
2005–2006	Assistant Curator. University of Arizona Herbarium.

AWARDS & FELLOWSHIPS

2024	Explorers Club, FN'24
2017, 2018	Agnese Nelms Haury Faculty Fellow (\$76,000)
2014	Finalist, David H. Smith Conservation Research Fellowship
2013–2014	Dissertation Year Program Fellowship, UC Riverside (\$14,400)
2013	Graduate Student Achievement Award, UC Riverside (\$900)
2010, 2011, 2013	National Science Foundation Graduate Research Fellowship (\$90,000)
2012, 2014	Chancellor's Distinguished Fellowship Award, UC Riverside (\$57,600)
2006–2007	Leslie N. Goodding Memorial Scholarship (\$2,600)
2006	Outstanding Senior Award, EEB, University of Arizona
2005	University of Arizona/NASA Spacegrant Fellow (\$1,500)

GRANTS

2025	<i>N-Gen Field Grants: Supporting research at UNEC field stations across the Sonoran Desert</i> JiJi Foundation (\$55,000) <i>N-Gen: N-Gen: Capacity Building Across the Sonoran Desert</i> Marisla Foundation (\$20,000) Fundación Innovaciones Alumbra (\$70,000)
2024	<i>2024 Summit, Next Generation Sonoran Desert Researchers</i> JiJi Foundation (\$30,000) Philanthropic gifts (\$25,000) Prescott College Kino Bay Center (\$25,000) Marisla Foundation (\$20,000) Southwestern Foundation (\$10,000) University of Arizona Honors College (\$4,000) CEDO (\$4,000) Desert Botanic Garden (\$1,000) Southwest Center (\$1,000) Arizona-Sonora Desert Museum (\$500) International Community Foundation (\$500) <i>Fire in the Desert, Synthesis Report</i> Southwest Fire Science Consortium (\$7,500) <i>The Gulf of California Health Status Report</i> Prescott College Kino Bay Center (\$20,000)
2023	<i>2020–2021 Drought Map: Guiding Next Steps to Understand Plant Mortality Event</i> Fundación Innovaciones Alumbra (\$18,000) <i>Long-term vegetation monitoring on Isla Tiburón</i> co-PI with Maximiliano Damián López Romero Mexican Commission for Natural Protected Areas (CONANP) (\$23,000) <i>N-Gen: The Next Era</i> JiJi Foundation (\$22,000) Marisla Foundation (\$20,000)
2022	<i>Wilder collaborative research and leadership</i> Southwestern Foundation (\$12,802)
2021	<i>Las Tortugas Archaeological Investigation</i> Agnese Nelms Haury Charitable Trust (\$107,785) <i>Paleontology Collections Manager</i> Bureau of Land Management, Cultural and Paleontological Resources Management (\$43,000)

- Tumamoc Plant Ecology VIP*
Environment and Resilience VIP, Arizona Institutes for Resilience (**\$7,500**)
- Supporting the Next Era of Paleo Research at the Desert Laboratory*
Southwestern Foundation (**\$17,000**)
- 2020 *Desert Laboratory on Tumamoc Hill Improvements*
University of Arizona Water, Environmental, and Energy Solutions (WEES)-TRIF (**\$330,000**)
- The Future of the Saguaro and long-term data in the Sonoran Desert*
U.S. National Park Service, Southwest Border Resource Protection Program (**\$75,000**)
- Special Publications of the Desert Laboratory on Tumamoc Hill: Communicating the stories of the desert*
Southwestern Foundation (**\$10,000**)
- Eliminating Buffelgrass from Tumamoc Hill: Preserve a Community Treasure*
Co-PI with Dr. Kimberly Franklin, Arizona-Sonora Desert Museum
Arizona Department of Forestry and Fire Management (**\$105,000**)
- Next Generation Sonoran Desert Researchers: Sustainability and Targeted Action*
Marisla Foundation (**\$20,000**)
JiJi Foundation (**\$30,000**)
- 2019 *Collaborative Research: Testing evolutionary pseudocongruence along the Baja California peninsula through integration of geologic and genomic data*
PIs: Wilder (UA), Dorsey (U. Oregon), Dolby (ASU), Hausback (Cal State Sacramento)
NSF EAR Frontier Research in Earth Sciences (**\$2,600,000; \$694,000 UA**)
- 2018 *Tumamoc Hill Meteorological Network and Paleo Research Infrastructure*
University of Arizona Water, Environmental, and Energy Solutions (WEES)-TRIF Equipment Grant (**\$121,505**)
- Making a stand against buffelgrass in the heart of Tucson*
Arizona Department of Forestry and Fire Management (**\$20,000**)
- A Living Laboratory: Forging Connection Between UA Students and Tumamoc Hill to Monitor the Pulse of the Desert*
Co-PI with Dr. Aaron Flesch
University of Arizona Green Fund (**\$23,625**)
- Botanical Diversity and Change of Volcán Tres Vírgenes*
Annetta Carter Memorial Fund of the California Botanical Society (**\$1,000**)
- Cuentame Más: Understanding the Tucson Community Through Tumamoc Hill*
Centre National de la Recherche Scientifique (CNRS) (**€ 5,000**)
- Next Generation Sonoran Desert Researchers: Research Grants Program*
JiJi Foundation (**\$25,000**)

- 2017 *The Desert Laboratory Library and Map Room*
Southwestern Foundation for Education and Historical Preservation
(\$16,000)
- The Desert Laboratory Greenhouse Rehabilitation Project*
U.S. National Park Service, Heritage Partnerships Program **(\$10,000)**
- Tumamoc Transdisciplinary Arts Program*
University of Arizona Confluentcenter **(\$15,000)**
- Next Generation Sonoran Desert Researchers 6&6 Art-Science Collaboration*
University of Arizona Confluentcenter **(\$5,000)**
- Next Generation Sonoran Desert Researchers: Research Grants Program*
Marisla Foundation **(\$30,000)**
JiJi Foundation **(\$25,000)**
- 2016 *Baselines for the wetlands of the Gran Desierto*
U.S. National Park Service, Southwest Border Resource Protection Program
(\$50,000)
- Workshop, Communicating Science Up and Down in the Gulf of California*
Agnes Nelms Haury Program **(\$20,000)**
- 2015 *Knowledge Transfer in Northwestern Mexico: Conservation Ecology Courses to Create Local Leaders Among the Comcaac*
The Christensen Fund **(\$40,000)**
U.S. Fish and Wildlife Service, Wildlife Without Borders – Mexico
(\$45,000)
- Biodiversity of Los Cardones, Sierra de la Laguna, Baja California Sur, Mexico.*
Co-PI with Dr. Sula Vanderplank and Dr. Exequiel Ezcurra.
International Community Foundation and partner foundations **(\$55,000)**
- Land-Sea Interface of Cabo Pulmo.* Co-pi with Dr. Ocatvio Aburto
Angell Family Foundation **(\$25,000)**
- Next Generation Sonoran Desert Researchers 2015 Summit*
The Marisla Foundation **(\$30,000)**
The University of Arizona, CAZMEX **(\$25,000)**
JiJi Foundation **(\$12,000)**
- 2013–2014 *Uncovering the Dryland Biodiversity of the Cabo Pulmo Region*
Co-PI with Dr. Sula Vanderplank and Dr. Exequiel Ezcurra
The David and Lucile Packard Foundation and Ocean Foundation **(\$20,000)**
- 2012–2013 *Scientific Capacity Building in the Comcaac Community*
The Christensen Fund **(\$15,000)**
- Historical Plant Biogeography of the Midriff Islands of the Gulf of California*
UC MEXUS Dissertation Research Grant **(\$12,000)**

- 2012 *Next Generation Sonoran Desert Researchers Summit*
 UC MEXUS (\$20,000)
 The Marisla Foundation (\$20,000)
 The David and Lucile Packard Foundation (\$10,000)
 The University of Arizona College of Science (\$5,000)
 The JiJi Foundation (\$3,000)
 Center for Conservation Biology, UC, Riverside (\$1,200)
 The Sonoran Institute (\$1,000)
- 2011 *Historical Plant Biogeography of the Midriff Islands of the Gulf of California: 2011 Field Season*
 UC MEXUS Small Grants (\$3,000)
- 2009 *Support of the Publication of Plant Life of a Desert Archipelago*
 CONABIO (\$5,000)
- 2008–2009 *Islands of Opportunity: Botanical Diversity of the Sonoran Islands, Gulf of California, Mexico.*
 Co-PI with Dr. Richard Felger
 The David and Lucile Packard Foundation (\$115,000)
- 2008 *Assessment and Control of Non-native Invasive Plant Species, Sonoran Islands, Gulf of California*
 Global Green Grants (\$3,500)
- Exploration of Higher Elevations of Isla Tiburón*
 T&E Inc. of New Mexico (\$1,750)
- 2007–2008 *Reassessment of the vegetation and flora of Islas San Pedro Martir and San Pedro Nolasco, Gulf of California.*
 Co-PI with Dr. Richard Felger
 WWF México Programa Golfo de California (\$15,440)
- 2006–2007 *Vascular flora of Isla Tiburón and satellite islands, Gulf of California, Mexico*
 Cactus and Succulent Society of America, Research Grants Program (\$1,400)
- 2005 *Flora of Isla Tiburón, Gulf of California, Mexico*
 University of Arizona Honors College, Alumni Legacy Grants (\$400)
 Arizona-Nevada Academy of Science (\$200)

PUBLICATIONS

Book

Felger, R.S., **B.T. Wilder** in collaboration with H. Romero-Morales. 2012. *Plant Life of a Desert Archipelago: Flora of the Sonoran Islands in the Gulf of California*. University of Arizona Press, Tucson. 624 pages.

Peer-reviewed papers and book chapters

37. Ezcurra, E., **B.T. Wilder**, S. Vanderplank. *In Press*. Island biogeographic patterns in the southern Gulf of California, a tale from the flora. *Proceedings of the San Diego Society of Natural History*.
36. **Wilder, B.T.**, K.R. Hultine, W.B. Dorshow, S.E. Vanderplank, B.R. López, A. Medel-Narváez, M. Marvan, K. Kindl, A. Musgrave, S. Macfarlan, E. Ezcurra. 2025. Plant responses to anomalous heat and drought events in the Sonoran Desert. *Global Change Biology*, e70217. <https://doi.org/10.1111/gcb.70217>
35. Le Tourneau, F.-M., L.A. Fisher, A.A. Zuniga-Teran, **B.T. Wilder**, A.-L. Boyer, D. Blanchon F. Dubertret. 2024. The socio-ecological complexity of facing climate change: a case study from Pima County (Arizona, USA). *Comptes Rendus. Géoscience*. <https://doi.org/10.5802/crgeos.267>
34. **Wilder, B.T.**, J. Shelly, K.S. Gibson, J. Malusa. 2024. Fire in the Sonoran Desert: An overview of a changing landscape. Southwest Fire Science Consortium.
33. Brown, C., S. Rodriguez Buritica, D.E. Goldberg, F. Reichenbacher, D.L. Venable, R.H. Webb, **B.T. Wilder**. 2023. 106 years of change in a Sonoran Desert plant community: impact of climate anomalies and trends in species sensitivities. *Ecology*, e4914. <https://doi.org/10.1002/ecy.4194>
32. **Wilder, B.T.**, A.T. Becker, D.L. Dettman. 2022. Marine subsidies produce cactus forests on desert islands. *Scientific Reports* 12:17110. <https://doi.org/10.1038/s41598-022-21133-3>
Media coverage: BBC Green Planet, [Desert Worlds](#) episode
31. Araya-Donoso, R. S.M. Baty, P. Alonso-Alonso, M.J. Sanín, **B.T. Wilder**, A. Munguia-Vega, G.A. Dolby, 2022. Implications of barrier ephemerality in geogenomic research. *Journal of Biogeography* 49:2050–2063. <https://doi.org/10.1111/jbi.14487>
30. Dolby, G.A. S.E.K Bennett, R.J. Dorsey, M. Stokes, B.R. Riddle, A. Lira-Noriega, A. Munguia-Vega, **B.T. Wilder**. 2022. Integrating Earth-life systems: A geogenomics approach. *Trends in Ecology and Evolution* 37:371–384. <https://doi.org/10.1016/j.tree.2021.12.004>
29. **Wilder, B.T.**, A.T. Becker, A. Munguia-Vega, M. Culver. 2022. Tracking the desert's edge with a Pleistocene relict. *Journal of Arid Environments* 196:104653. <https://doi.org/10.1016/j.jaridenv.2021.104653>
28. **Wilder, B.T.**, C.S. Jarnevich, E. Baldwin, J.S. Black, K.A. Franklin, P. Grissom, K.A. Hovanes, A. Olsson, J. Malusa, A.S.M.G. Kibria, Y.M. Li, A.M. Lien, A. Ponce, J.A. Rowe, J.R. Soto, M.R. Stahl, N.E. Young, J.L. Betancourt. 2021. Grassification and Fast-Evolving Fire Connectivity and Risk in the Sonoran Desert, United States. *Frontiers in Ecology and Evolution* 9:655561. <https://doi.org/10.3389/fevo.2021.655561>
Media coverage: Arizona Daily Star ([June 2021](#) and [October 2021](#))
27. Zamora, H.A., C.J. Eastoe, **B.T. Wilder**, J.C. McIntosh, T. Meixner, K.W. Flessa. 2020. Groundwater Isotopes in the Sonoyta River Watershed, USA-Mexico: Implications for Recharge Sources and Management of the Quitobaquito Springs. *Water* 12(12):3307. <https://doi.org/10.3390/w12123307>
26. **Wilder, B.T.** 2020. At the desert's edge. In Nabhan, G.P., *The Nature of Desert Nature*. University of Arizona Press. Pp. 79–81.

25. Nabhan, G.P., E.C. Riordan, L. Monti, A.M. Rea, **B.T. Wilder**, E. Ezcurra, J.B. Mabry, J. Aronson, G.A. Barron-Gafford, J.M. García, A. Búrquez, T.E. Crews, P. Mirocha, W.C. Hodgson. 2020. An Aridamerican model for agriculture in a hotter, water scarce world. *Plants People Planet* 2:627–639. <https://doi.org/10.1002/ppp3.10129>
24. Clark, S.E., E. Magrane, T. Baumgartner, S.E.K. Bennett, M. Bogan, T. Edwards, M.A. Dimmitt, H. Green, C. Hedgcock, B.M. Johnson, M.R. Johnson, K. Velo, and **B.T. Wilder**. 2020. 6&6: A Transdisciplinary Approach to Art-Science Collaboration. *BioScience* 70:821–829. <https://doi.org/10.1093/biosci/biaa076>
23. Armenta-Méndez, L., J.P. Gallo-Reynoso, **B.T. Wilder**, A.A. Gardeo, M.M. Ortega-Nieblas, I. Barba-Acuña. 2020. The role of wild canids in the seed dispersal of *Washingtonia robusta* (Arecaceae) in Sonoran Desert oases. *Revista Mexicana de Biodiversidad* 91: e913129. <https://doi.org/10.22201/ib.20078706e.2020.91.3129>
22. Zamora, H.A., **B.T. Wilder**, C.J. Eastoe, J.C. McIntosh, J. Welker, K.W. Flessa. 2019. Evaluation of Groundwater Sources, Flow Paths, and Residence Time of the Gran Desierto Pozos, Sonora, Mexico. *Geosciences* 9: 378. doi:10.3390/geosciences9090378
Media coverage: [Arizona Daily Star](#), [MAHB](#)
21. **Wilder, B.T.**, R.S. Felger, E. Ezcurra. 2019. Controls of plant diversity and composition on a desert archipelago. *PeerJ* 7:e7286. <https://doi.org/10.7717/peerj.7286>
20. Ezcurra, E., **B.T. Wilder**. 2019. Tres siglos de colaboración científica entre México y los Estados Unidos. *Ciencia* 70:8–15.
19. Gil-Loaiza J., Lutz Ley A.N., **Wilder B.T.**, Lever J., Ruiz J., Scott, C.A. 2019. La ciencia cruzando fronteras: Consorcio Arizona-México para Ambientes Áridos. *Ciencia* 70:56–63.
18. Armenta-Méndez, L., M.M. Ortega-Nieblas, J.P. Gallo-Reynoso, A.A. Gardea, **B.T. Wilder**, G. González-Aguilar, & A.M. Preciado-Saldaña. 2019. Proximal chemical analysis and secondary metabolites in *Washingtonia robusta* fruit (Arecaceae): relevance for the feeding of wildlife and humans. *Botanical Sciences* 97:155–166.
<http://dx.doi.org/10.17129/botsci.2057>
17. **Wilder, B.T.**, C. O’Meara, L. Monti, G.P. Nabhan. 2016. The importance of indigenous knowledge in curbing the loss of language and biodiversity. *BioScience* 66:499–509. <https://doi.org/10.1093/biosci/biw026>
16. **Wilder, B.T.**, C. O’Meara, L. Monti, G.P. Nabhan. 2016. Ethnoscience, the “Oldest Science”: A needed complement to academic science and citizen science to stem to the losses of biodiversity, indigenous languages, and livelihoods. In Nabhan, G.P. (ed) *Ethnobiology for the Future*. University of Arizona Press. Pp. 23–35.
15. **Wilder, B.T.**, C. O’Meara. 2015. The Continuum of Desert Research. *Journal of the Southwest* 57:163–186.
14. Dolby, G. Bennett, S.E.K., A. Lira-Noriega, **B.T. Wilder**, A. Munguia-Vega. 2015. The Geologic and Climatic Forcing of Biodiversity Surrounding the Gulf of California. *Journal of the Southwest* 57:391–455.
13. **Wilder, B.T.** 2014. Historical Biogeography of the Midriff Islands in the Gulf of California, Mexico. Dissertation, UC, Riverside, Plant Biology.
12. Ratay, S.E., S. Vanderplank, **B.T. Wilder**. 2014. Island specialists: Shared flora of the Alta and Baja California Pacific islands. *Western North American Naturalist* 7:161–220.

11. **Wilder, B.T.**, J.L. Betancourt, C. Epps, R. Crowhurst, J.I. Mead, E. Ezcurra. 2014. Local extinction and unintentional rewinding of bighorn sheep (*Ovis canadensis*) on a desert island. *PLoS ONE* 9(3):e91358. doi:10.1371/journal.pone.0091358.
Media coverage: 35+ unique articles in Spanish and English including [La Jornada](#), [NSF](#), and [The Last Word on Nothing](#).
10. Velarde, E., **B.T. Wilder**, R.S. Felger, E. Ezcurra. 2014. Floristic diversity and dynamics of Isla Rasa, Gulf of California, Mexico – A globally important seabird site. *Botanical Sciences* 92(1):89–101.
9. **Wilder, B.T.**, C. O’Meara, A. Medel, N. Narchi, O. Aburto-Oropeza. 2013. The need for a next generation of Sonoran Desert researchers. *Conservation Biology* 27:243–244.
8. **Wilder, B.T.**, P.P. Garcillán, B. Marazzi. 2013. Sonoran Desert. In Howarth, R.W. (ed.), *Biomes and Ecosystems: An Encyclopedia*. Salem Press, Ipswich, MA. Pp. 1160–1163.
7. Garcillán, Pedro P., B. Marazzi, **B.T. Wilder**. 2013. Baja California Desert. In Howarth, R.W. (ed.), *Biomes and Ecosystems: An Encyclopedia*. Salem Press, Ipswich, MA. Pp. 346–349.
6. Gallo-Reynoso, J.P., R.S. Felger, **B.T. Wilder**. 2012. Near colonization of a desert island by a tropical bird: Military macaw (*Ara militaris*) at Isla San Pedro Nolasco, Gulf of California. *The Southwestern Naturalist* 57:461–464.
5. Felger, R.S., **B.T. Wilder**, J.P. Gallo-Reynoso. 2011. Floristic diversity and long-term vegetation dynamics of San Pedro Nolasco Island, Gulf of California, Mexico. *Proceedings of the San Diego Society of Natural History* 43:1–42.
4. **Wilder, B.T.** & R.S. Felger. 2010. Cardons, guano, and isolation: The flora and vegetation of San Pedro Mártir Island, Gulf of California, Mexico. *Proceedings of the San Diego Society of Natural History* 42:1–24.
3. **Wilder, B.T.**, R.S. Felger, H. Romero. 2008. Succulent plant diversity of the Sonoran Islands, Gulf of California, Mexico. *Haseltonia* 14:128–161.
2. **Wilder, B.T.**, R.S. Felger, T. R. Van Devender, H. Romero-Morales. 2008. *Canotia holacantha* on Isla Tiburón, Gulf of California, Mexico. *Canotia* 4(1):1–7.
1. **Wilder, B.T.**, R.S. Felger, H. Romero-Morales, A. Quijada-Mascareñas. 2007. New plant discoveries for Sonoran Islands, Gulf of California, Mexico. *Journal of Botanical Research Institute of Texas* 1:1203–1227.

Reports and popular publications

20. **Wilder, B.T.** 2025. Chasing *Canotia*: A quest for a landscape's past reveals time embedded in a desert shrub. *Exploration Quarterly* 1(3):28–39.
19. **Wilder, B.T.**, L. Meltzer, J. Torre (compilers). 2025. Assessment of the Ecological Health of the Gulf of California. Next Generation Sonoran Desert Researchers. (English and Spanish versions).
18. **Wilder, B.T.** 2024. Richard Felger's Final Masterpieces – Two books that open the southern edge of the Sonoran Desert as never before. *Plant Press* 47(2):27–30.
17. Bonilla, B., S. Vanderplank, M. Delgado Fernández, A. Peralta García, J.H. Valdez Villavicencio, O. Poulos, E. Burns, A. Munguia Vega, D. Zazueta, **B.T. Wilder**. 2024. Border BioBlitz 2024 / BioBlitz de la Frontera. Next Generation Sonoran Desert Researchers.

16. **Wilder, B.T.**, L. Lozano, J. MacKay, C. de la Rosa, E. Bustamante, D. Zazueta (Editors). 2024. N-Gen Summit 2024: Reconnecting the Sonoran Desert. Next Generation Sonoran Desert Researchers. (English and Spanish versions).
15. **Wilder, B.T.** and L. Meltzer. 2024. A Preliminary Assessment of the Ecological Health of the Gulf of California. Next Generation Sonoran Desert Researchers. (English and Spanish versions).
14. **Wilder, B.T.**, W. Dorshow, E. Ezcurra. 2023. Sonoran Desert Drought Map Initial Report.
13. **Wilder, B.T.** 2023. N-Gen: Pushing the Arc of Desert Research Forward. Next Generation Sonoran Desert Researchers. (English and Spanish versions).
12. **Wilder, B.T.**, T. Hanley. 2023. Agave Renaissance Summit 2023, Proceedings. Next Generation Sonoran Desert Researchers and Agave Heritage Festival. (English and Spanish versions).
11. Arnold, A.E, E. Ezcurra, S.E. Vanderplank, **B.T. Wilder**. 2023. Baja California Sur Plant Mortality Event, Preliminary Assessment.
10. Rutman, S., K.A. Dahl, R.E. McManus, G.P. Nabhan, A.T. Smith, M.B. Traphagen, **B.T. Wilder**. 2019. Defend the Biological and Cultural Integrity of the U.S.-Mexico Borderlands. <https://wildlandsnetwork.org/support-gems-of-the-sonoran-desert/>
9. **Wilder, B.T.** 2019. 6&6: Artists | Scientists. Next Generation Sonoran Desert Researchers.
8. **Wilder, B.T.**, M.M. Early Capistrán, S.E. Vanderplank. 2018. 2018 N-Gen Border BioBlitz. Next Generation Sonoran Desert Researchers.
7. Yin, I, C. Jordan, J. Sanderson, E.C. Riordan, **B.T. Wilder**, H. Bannister, M. Pekarek, B. Pekarek, T. Ontiveros. 2017. Condor Valley Ecological Assessment, Explorers Club Flag Report Flag #210. Explorers Club Flag Report.
6. Wilder, B.T., X. Basurto, R. Dirzo. 2016. Final project report, Knowledge Transfer in Northwestern Mexico: Conservation Ecology Courses to Create Local Leaders Among the Comcaac. Final Report to The Christensen Fund.
5. Vanderplank S.E., **B.T. Wilder**, E. Ezcurra. 2016. Arroyo la Junta: Una joya de biodiversidad en la Reserva de la Biosfera Sierra La Laguna / A biodiversity jewel in the Sierra La Laguna Biosphere Reserve. BRIT, N-Gen, and UC MEXUS. 159 pg.
Media coverage: Six unique articles in Spanish and English including [Mongabay](#), [La Jornada](#), and [Latin American Science](#)
4. Vanderplank, S.E., **B.T. Wilder**, E. Ezcurra. 2014. Descubriendo la Biodiversidad Terrestre en la Región de Cabo Pulmo / Uncovering the Dryland Biodiversity of the Cabo Pulmo Region. Botanical Research Institute of Texas, Next Generation Sonoran Desert Researchers, and UC MEXUS, U.S.A. 122 pg.
Media coverage: 15+ unique articles in Spanish and English including [Mongabay](#) and [Huffington Post](#).
3. **Wilder, B.T.**, C. O'Meara, A. Medel, N. Narchi. 2012. Next Generation Sonoran Desert Researchers 2012 Summit: The beginning of a movement. [English](#). [Spanish](#).

2. **Wilder, B.T.**, R.S. Felger, H. Romero-Morales. 2007. Succulents and bighorn of Isla Tiburón. *The Plant Press, Arizona Native Plant Society* 31(2):9–11.
1. **Wilder, B.T.** 2007. Report to Arizona-Nevada Academy of Science on the project: Vascular flora of Isla Tiburón and satellite Islands, Gulf of California Mexico. *Journal of the Arizona-Nevada Academy of Science* 39(1):51–55.

Editor

7. Felger, R.S. & F.S. Molina. 2024. *Plants and Animals in the Yoeme World: Ethnoecology of the Yaquis of Sonora and Arizona*. Desert Institute Press. 428 pages.
6. Felger, R.S., S.D. Carnahan, J.J. Sánchez-Escalante. 2023. *The Desert Edge: Flora of Guaymas-Yaqui Region of Sonora, Mexico*. Botanical Research Institute of Texas. 1,110 pages. <https://shopbritpress.org/products/desert-edge-flora-of-guaymas-yaqui-region-of-sonora-mexico-vol-i>
5. Rorabaugh, J.C., J. Schipper, T. Flood, E. Fernandez, S. Richardson, G. Robles. 2023. *Mammals of Rancho El Aribabi in the Sky Island Region of Northern Sonora, Mexico*. Hirsute Beast Press.
4. Bird, W.L. 2021. In the Arms of Saguaro: Iconography of the giant cactus. *Proceedings of the Desert Laboratory*, 3:1–222.
3. Esquer, G. 2018. Campos de Fuego: A Brief and Fantastic History of an Expedition into the Volcanic Region of the Pinacate. English and Spanish Editions. *Proceedings of the Desert Laboratory*, 2:1–154. <http://tumamoc.arizona.edu/oasis-desert-edge-flora-nacapule-canyon>
2. Felger, R.S., S.D. Carnahan, J.J. Sánchez-Escalante. 2017. Oasis at the Desert Edge: Flora of Cañón del Nacapule, Sonora, Mexico. *Proceedings of the Desert Laboratory*, 1:1–220. <http://tumamoc.arizona.edu/camposdefuego>
1. O'Meara, C., B.T. Wilder (eds). 2015. Seeds in the Sand: The next generation of approaches to understanding the Sonoran Desert and Gulf of California. *Journal of the Southwest* 57, Numbers 2 and 3.

TEACHING

2008-present	Instructor. Comcaac plant team. Long-term plant monitoring and control of invasive plant species on the Midriff Islands, Gulf of California.
2021	Instructor. Natural and Human Impacts on Arid Lands. University of Arizona.
2018	Instructor. Conservation Realities in Northern Mexico. University of Arizona Study Abroad Course, summer session.
2015–2016	Instructor. Conservation and Ecology Course for the Comcaac (conducted in Spanish).
2015	Guest Instructor. Duke University, Community-Based Marine Conservation in the Gulf of California; Dr. Xavier Basurto. Guest Instructor. Prescott College, Island Biogeography; Dr. Tom Fleischner, Dr. Lisa Hanna, Dave Hanna.

- 2012 Instructor. Two workshops, “*Plantas de las Grandes Islas*” in the Comcaac community of Punta Chueca, Sonora.
- 2012 Teaching Assistant. UC, Riverside, Biology 5B, Intro to Organismal Biology.

MENTORSHIP

Doctoral Candidates

2019. Lucila Armenta, Centro de Investigación en Alimentación y Desarrollo, A.C., (CIAD) Unidad Guaymas.
2018. Hector Zamora, Geosciences, University of Arizona

Undergraduate Students

2024. Quinn Ingram Agnew. Honors Thesis co-Advisor, Columbia University.
2019. Mandy Becker, Honors Thesis Advisor, Ecology and Evolutionary Biology, University of Arizona
2014. Kimberly Than, Neuroscience, UC, Riverside
2014. Nancy Villapudua, Biological Sciences, UC, Riverside

OUTREACH

Media

TV and Radio

- 2025
- CBS Evening News. Arizona's iconic saguaro cactus was built for desert heat. Rising temperatures are pushing it to the brink.
 - KJZZ. New study finds Sonoran Desert's iconic cactuses suffer from heat waves, drought in U.S. and Mexico.
 - KJZZ. Report on Gulf of California health shows some species decline as others rebound.
 - KJZZ, The Show. Invasive species, drought make the Sonoran Desert 'a fire-prone ecosystem'.
- 2024
- NBC 12 News Phoenix. Fire season continues on Tonto National Forest in anticipation of drier than normal conditions in months ahead.
 - KCRW. Community catalogs wildlife to change borderland reputation.
 - TheWorld. Citizen scientists rush to catalog plant species on US-Mexico border.
 - NBC 12 News Phoenix. 'Making fires hotter, more dangerous, faster moving': Arizona wildfires being fueled by invasive species covering desert, report shows.
 - KJZZ Fronteras Desk. Invasive plants are making Sonoran Desert fires burn more frequently and longer, study says.
 - Fox 10 Phoenix. How invasive plants impact wildfires.
- 2023
- Science Friday. These Conservation Scientists are Keeping the Sonoran Desert Diverse.
 - La Frontera with Pati Jinich. Episode Two: Ancient Seeds & Desert Ghosts

2022

Green Planet. Desert Worlds, on location. BBC Natural History Unit. Aired in the U.S. by PBS.

PBS NewsHour. Climate change threatens the survival of iconic saguaro cactus in the Southwest.

Arizona Illustrated. Stories in the Sand.

KGUN 9. Saguaro's resilience: Local scientists discuss climate change impact.

KJZZ, Phoenix. Saguaro side blooms worried scientists. Here's why they think it happened.

2021

AZPM. Desert Lab on Tumamoc Hill begins new phase of community outreach.

KJZZ, Phoenix. New Desert Agriculture.

ABC 15 Phoenix. Can saguaros survive in the Valley? Increasing temperatures, worsening drought pose threat.

KJZZ, Phoenix. Unprecedented Outbreak of Side Blooms on Saguars in Arizona.

KVOA 4. Where are the wildflowers? Experts say the extreme drought is affecting more than just them.

ABC 15. Phoenix. Will fire change Arizona's desert ecosystem forever? Researcher studies regrowth after Bighorn Fire.

KVOA 4. Invasive grass species increases risk of wildfire spreading.

AZPM. How one grass at Saguaro National Park shows push and pull of climate change.

2020

KOLD News 13. Researchers study impacts of large fire on A Mountain.

2019

KGUN 9. Why do you walk Tumamoc Hill? UA scholars want to hear your story.

Newspapers and Magazines

2025

Hasta los cactus gigantes del desierto de Sonora enfrentan un futuro incierto debido al cambio climático. *WIRED*.

Saguaros, cardones y grandes cactáceas mueren de sed en Desierto de Sonora. *Excelsior*.

Scientists Racing to Address Wildfires in the US Southwest See Some Unexpected Desert Resilience. *Earth Island Journal*.

Heat, drought ravaging saguaros, other cacti. *Arizona Daily Star*. [Front page]

¿Qué se pierde si se pierden los cactus?: pilares del desierto de Sonora. *Noro*.

Scorching saguaros: Climate extremes are killing cactuses. *Axios*.

Forget the beach. The hot new destination is the desert. *Boston Globe*.

Tucson's driest August to March period on record. *Arizona Daily Star*. [Front Page]

Ballenas y delfines en peligro: el Golfo de California sufre disminución alarmante de especies. *Mongabay Latam*.

Cabo Pulmo: el gran parque marino de México está en riesgo por los proyectos turísticos e inmobiliarios. *Mongabay Latam*.

Alerta ecológica en el Golfo de California: más del 60% de las especies en deterioro. *La Crónica de Hoy México*.

Wildfire threat endangers more than saguaros. *Arizona Daily Star*. [Front page]

Trece especies del Golfo de California se encuentran en deterioro: Informe del N-Gen. *Causa Natura*.

Detienen obras de "La Abundancia" y "Baja Bay Club" en Cabo Pulmo. *Journalmex*.

How Phoenix could experience L.A.-like wildfires. *Axios*.

2024

The Secret Strength of Cacti. *National Geographic*.

Whiskey Del Bac: Dram in the Desert.

Fire in the desert. *PNAS*.

Revive Cabo Cortés: Semarnat aprueba megaproyecto “Baja Bay Club”, una nueva amenaza para Cabo Pulmo. *La Jornada*.

Increase in wildfires taking out saguaros is 'really alarming,' report warns. *Arizona Daily Star*. [Front Page]

Wildfires in Arizona are getting worse due to invasive species, new study says. *Arizona Republic*.

What happened to Arizona’s ‘fireproof’ desert—and what can be done. *The NAU Review*.

So much worth saving': Botanists scour US-Mexico border to document forgotten ecosystem. *NBC San Diego*.

Bioblitz Volunteers Documenting Species Along the U.S.-Mexico Border in Jacumé, Mexico. *The Pipa News*.

Botanists are exploring the US-Mexico border to study an overlooked ecosystem disrupted by a massive wall. *New York Post*.

Botánicos de México y EU documentan un ecosistema dividido por el muro fronterizo. *Proceso*.

Registran especies en Monte Ceniza. *El Viga*.

2023

Climate Change Wiped Out Thousands of the West’s Most Iconic Cactus. Can Planting More Help a Species that Takes a Century to Mature? *Inside Climate News*.

2022

Wildflower forecasters grow cautiously optimistic after December rains. *Arizona Daily Star*.

Desert Ruins. *Sierra Club*.

Tucson experts helped BBC crew with desert episode of new nature series. *Arizona Daily Star*. [Front Page]

Tumamoc Hill's historic boathouse – yes, boathouse – sees new life. *Arizona Daily Star*. [Front Page]

Arizona's iconic saguaro cactus: How fast they grow, how big they get and can you cut one? *Arizona Republic*.

Saguaro, Free of the Earth. *Emergence Magazine*.

The role of agaves in resilience at the food/water/energy nexus. *Food Tank*.

Art exhibit on Tumamoc Hill invites visitors to wax poetic about climate change. *Arizona Daily Star*.

Mountain Maxims: Tumamoc Hill art instillation asks the community to create new weather proverbs. *Tucson Weekly*.

Student Project Tallies Tumamoc Hill Biodiversity. *UA News*.

Bobcats are busy on Tucson's Tumamoc Hill. *Arizona Daily Star*.

2021

We're parched: 2020 brought Tucson's driest year on record. *Arizona Daily Star*.

Saving the West's most iconic cactus from climate change. *Washington Post*.

Tumamoc Hill is getting a garden kitchen and shade houses for desert plants. *Arizona Daily Star*.

Park land scorched by Bighorn Fire could offer clues to emerging desert threat. *Arizona Daily Star*. [Front Page]

Arizona's iconic saguaro cactus is flowering "wrong" - and no one knows why. *Salon*.

Vaccinated people can hike Tumamoc Hill without mask. *Arizona Daily Star*.

Not even the cacti survive the heat records in Arizona. *Trouw*, Dutch newspaper.

Tucson food icon Janos Wilder showed his son how to work with purpose. Now Ben runs a Tucson icon. *Arizona Daily Star*.

Buffelgrass battle: What's needed to make sure weeds don't win at saguaros' expense. *Arizona Daily Star*. [Front Page]

Columnar Characters: New book celebrates the symbolism of saguaros in Arizona and beyond. *Tucson Weekly*.

Masters of Desert Survival, Can This Iconic Cactus Survive Wildfires? *New York Times*. [Front Page of National Section]

'I almost needed a machete' — burned areas brim with new growth after monsoon. *Arizona Daily Star*. [Front Page]

Here's how Arizona's extreme weather is killing the saguaro. *AZ Big Media*.

Arizona farmers must use less water to survive. Here are 5 things to do differently. *Arizona Republic*.

Surrounded by Desert Beauty, The Trail Leading up Arizona's Tumamoc Hill is a Hiker's Paradise. *Only in Our State*.

Native Americans' farming practices may help feed a warming world. *Washington Post*.

2020

At Tumamoc Hill lab, Tucson native explores past, future of the Sonoran Desert. *Arizona Jewish Post*.

University of Arizona Researchers unveil new model for desert farming in warming world. *Arizona Daily Star*.

Study says wild crops can bolster food access in arid climates. *Food Tank*.

Researchers Seek to Solve Decades-Long Baja California Peninsula Mystery. *UA News*.

Long-time Tucson botanist Richard Felger spent his lifetime exploring Sonoran Desert. *Arizona Daily Star*.

Invasive buffelgrass may have helped Bighorn Fire take out saguaros. *Arizona Daily Star*.

University of Arizona Researchers measure ice age chill to forecast future warming. *Arizona Daily Star*.

What can the wild chile teach us about conserving crop wild relatives? *Sustainable, Secure Food Blog*.

Wildfires dot the Southwest as dry, windy conditions prove disastrous. *Accuweather*.

2019

'Tales from Tumamoc' project recording comments from hill walkers. *Arizona Daily Star*.
 Past Meets Present on Tucson's Tumamoc Hill. *Arizona Highways*.
 Interdisciplinary Oral History Project Seeks "Tales From Tumamoc". *UA News*.
 New Year, new road: The road up Tumamoc Hill is being repaved. *The Daily Wildcat*.
 A lecture series on Tumamoc Hill about an endangered porpoise is not as random as it sounds. *Arizona Daily Star*.
 How Fiery Desert Chilis Can Protect Us from Climate Change. *Food Tank*.
 How desert plants play the odds to survive winter. *Futurity*.
 Despite climate threats, landscape may shelter some saguaros. *Tucson Sentinel*.
 'A treasure for humanity': Binational group looks for inventive ways to protect Sonoran Desert. *Cronkite News*.

2018

New director of Tumamoc Hill lab has big plans for research center, community landmark. *Arizona Daily Star*.
 Tumamoc Hill has plan for balancing use, research. *Arizona Republic*.
 Benjamin Wilder appointed director of Tumamoc Hill. *Inside Tucson Business*.
 Benjamin Wilder named new director at Tumamoc Hill. *Tucson Weekly*.
 Art and Science rendezvous at Tumamoc. *The Daily Wildcat*.
 Hidden Water: Pozos of the Gran Desierto. *Arizona Daily Star*.
 UA Scientist Spearheads Effort to Illuminate Borderlands. *UA News*.
 When Cactus Destruction Is Imminent, These Rescuers Come Running. *Atlas Obscura*.
 In Search of Food for a Hot World. *Eating Well*.
 36 Hours in Tucson. *New York Times*.

2017

Stopping For Pozos: A Collaboration Between Ben Wilder and Ben Johnson. *MAHB, Stanford University*.
 Past, present and future: A new era at Tumamoc Hill. *The Daily Wildcat*.
 Tumamoc Hill changes walking hours to attract visitors. *The Daily Wildcat*.

2016

Benjamin Wilder named Tumamoc Hill's interim director. *The Daily Wildcat*.

2014

Report finds site of mega-development project in Mexico is a biodiversity hotspot. *EurekAlert! | AAAS*
 Survey finds huge biological value in Baja California, stalls resort development. *Mongabay*.
 Joint Chinese/Mexican Mega-Development Threatens UNESCO World Heritage Site: Provoking an International Outcry. *Huffpost*.
 Bighorn sheep went extinct on desert island in Gulf of California, study finds. *NSF News From the Field*.
 The Long Now of the Tiburón Bighorn. *The Last Word on Nothing*.
 Científicos logran recuperación no intencional del borrego cimarrón. *La Jornada*.

Podcasts

2025

In Defense of Plants

Ep. 519 - Sonoran Desert, Past & Future.

<https://www.indefenseofplants.com/podcast/tag/Dr.+Ben+Wilder>

2023

No Hesitations Leadership Podcast.

James Beard Award Winning Chef, Janos Wilder and Desert Ecologist, Ben Wilder talk about career transition and fulfillment.

<https://www.nohesitationspodcast.com/2220802/13878119-007-james-beard-award-winning-chef-janos-wilder-and-desert-ecologist-ben-wilder-talk-about-career-transition-and-fulfillment>

2021

Valley 101 podcast

Why do saguaros only grow in the Sonoran Desert? Arizona Republic.

<https://www.azcentral.com/story/news/local/arizona/2021/11/15/valley-101-podcast-asks-why-saguaros-only-grow-sonoran-desert/8592532002/>

Mrs. Green's World

Tumamoc Hill: An Iconic Sense of Place.

https://www.mrsgreensworld.com/podcast/tumamoc-hill-an-iconic-sense-of-place/?utm_content=buffer91b9d&utm_medium=social&utm_source=linkedin.com&utm_campaign=buffer

2020

Biosphere 2 Podcast.

Hidden Water - Ben Johnson & Dr. Ben Wilder.

<https://open.spotify.com/episode/4fuRrcvatdadyrSPg3gd1i>

The Agave Sessions

Dr. Benjamin Wilder.

<https://www.youtube.com/watch?v=FyOvz8TDPDo>

2019

Mrs. Green's World.

Tumamoc Hill: The Living Laboratory.

<https://www.mrsgreensworld.com/podcast/tumamoc-hill-the-living-laboratory/>**Meetings organized**

2025, Agave Heritage Festival and Agave Renaissance Summit. Tucson, Arizona. 115 participants.

2024, Next Generation Sonoran Desert Researchers Summit. Álamos, Sonora. 275+ participants.

2023, Seri Voices workshop (with Dr. Carolyn O'Meara). Punta Chueca, Sonora. 30 participants.

2023, Agave Renaissance Summit, part of Agave Heritage Festival. Tucson, Arizona. 75 participants.

- 2016. Communicating Science Up and Down in the Gulf of California (with Dr. Michelle Early Capistrán and Dr. Adrian Munguia Vega). Ensenada, Baja California. 30 participants.
- 2015, Next Generation Sonoran Desert Researchers Summit. Guaymas, Sonora. 150 participants.
- 2012, Next Generation Sonoran Desert Researchers Summit. Tucson, Arizona. 90 participants.

Lecture series organized

- 2022, spring. Planting the Seeds for Tomorrow: The Tumamoc Resilience Garden.
- 2021, fall. Tumamoc Hill: Health, Community, and Nature in a New Era.
- 2021, fall. Future Climate Proverbs, with Jonathon Keats.
- 2021, summer. Desert Senses Awake, with Roseann Hanson.
- 2021, spring. Agave Renaissance: A Resilient Future Embedded in the Heart of a Plant, with Doug Smith (Exo) and Todd Hanley (Hotel Congress).
- 2021, spring. Seeing Math in Nature with Roseann Hanson.
- 2020, fall. Past, Present, and Future of the Santa Cruz River Heritage Reach.
- 2020, spring. The Cultural Landscape of Cemamgi Du'ag.
- 2019, fall. New Explorations on the Río Mayo, with Jeff Bannister (University of Arizona Southwest Center).
- 2019, spring. La Vaquita Marina, the World's Most Endangered Marine Mammal: Where do we go from here? with CEDO.
- 2018, fall. Campos de Fuego: Explorations of the Pinacate Volcanic Range.

Presentations, invited

- 2025. Fire in the Sonoran Desert: An overview of a changing landscape. Western National Parks, Tucson, AZ.
- 2025. Smith Fellows Panel, Conservation in the Borderlands. Nogales, AZ.
- 2024. Fire in the Sonoran Desert: An overview of a changing landscape. Southwest Vegetation Management Association Annual Meeting, Camp Verde, AZ.
- 2024. Fire in the Sonoran Desert: An overview of recent advances and ongoing research. CNRS OHMI Annual Seminar, Tucson, AZ.
- 2024. Las Tortugas: A Clovis Site in the Gran Desierto. International Sonoran Desert Alliance Tri-National Symposium, Ajo, AZ
- 2024. Grassification and the Expansion of Fire in the Desert. International Sonoran Desert Alliance Tri-National Symposium, Ajo, AZ
- 2023. The Desert's Changing Edge: Grassification and the expansion of fire in the desert. Association for Fire Ecology, 10th International Fire Ecology Congress. Monterrey, CA.
- 2023. La expansión del estrés vegetal en el desierto: ¿Consecuencia de la sequía? CONANP. Virtual.
- 2023. Grassification and Fast-Evolving Fire Connectivity and Risk in the Sonoran Desert, United States. Southwest Fire Science Consortium. Virtual.
- 2023. Lecciones Aprendidas: Control de Especies Invasoras en la RB Isla San Pedro Mártir. CONANP. Virtual.

2023. The Science and Culture of Saguaros. Panel discussion. University of Arizona James E. Rogers College of Law, Tucson, AZ.
2023. Conservation in the Gulf of California: The World's Aquarium? Conservation Biology course, University of Arizona, Tucson, AZ.
2022. Screening and presentation of Green Planet, Desert Worlds. Prescott College Kino Bay Field Station.
2022. Screening and presentation of Green Planet, Desert Worlds. EcoAlianza, Loreto, BCS.
2022. Native Plant Protection Ordinance review. Tucson City Council.
2022. Richard Felger, the Man Who Cuts the Heads Off Plants. International Sonoran Desert Alliance Tri-National Symposium, Ajo, AZ
2021. Island Biogeography of the Gulf of California. Prescott College Kino Bay Field Station.
2020. Baja GeoGenomics: Understanding Earth-life evolution of the Baja California peninsula. San Diego Natural History Museum Binational Advisory Council, virtual.
2020. Hope in the Borderlands. Keynote address, International Sonoran Desert Alliance Tri-National Symposium, Ajo, AZ.
2020. Hidden Water: Pozos of the Gran Desierto. Tohono O'odham Legislative Council, Sells, AZ.
2020. The Boojum and Its Home. Arizona-Sonora Desert Museum, Tucson, AZ.
2020. Madagascar 90 | 90. University of Arizona Herbarium, Tucson, AZ.
2020. Establishing Ecological Baselines in the Sonoran Desert. School of Natural Resources and the Environment, Tucson, AZ.
2019. Biodiversity Baselines and Conservation Opportunities in the Gulf of California. Conservation Biology course, University of Arizona, Tucson, AZ.
2018. The History and Future of Tumamoc Hill. The Four Southern Arizona Tribes Cultural Council, Sells, AZ.
2018. Collaboration Across Borders. 1^{er} Encuentro de Becarios CONACYT en Norte América, Washington D.C.
2018. Hidden Water: Pozos of the Gran Desierto. Water Resources Research Center, Tucson, AZ.
2017. A New Era of Science Communication. Natural History Institute, Prescott, AZ.
2017. Opening Address. 8th Biennial Conference of the International Biogeography Society, Tucson, AZ.
2016. CAZMEX and N-Gen, catalyzing collaboration across the U.S.-MX Border. Agnese Nelms Haury Program Fall Reception, Tucson, AZ.
2016. Un Modelo para Bio-Expediciones: Arroyo La Junta, Una Joya de Biodiversidad en la Reserva de la Biosfera Sierra La Laguna. CONABIO, Mexico City.
2016. Next Generation Sonoran Desert Researchers. Gulf of California Funders Meeting, Ensenada, Baja California.
2016. The Continuum of Desert Research. Tumamoc Hill, Tucson, AZ.
2016. Tracking the Desert's Edge with a Pleistocene Relict. University of Arizona Herbarium, Tucson, AZ.

- 2015. Historical Biogeography of the Midriff Islands, Gulf of California. Department of Ecology and Evolutionary Biology, UCLA.
- 2015. Biodiversity Baselines and Conservation Opportunities in the Gulf of California, Stanford University Center for Latin American Studies.
- 2015. Historical Biogeography of the Midriff Islands, Gulf of California. Tilden Botanic Garden, Berkeley, CA.
- 2014. Historical Biogeography of the Midriff Islands, Gulf of California. UC Herbarium, UC Berkeley.
- 2014. Closing plenary: Panel on working together across agencies and borders. International Sonoran Desert Alliance Tri-National Symposium, Ajo, AZ.
- 2014. Establishing Conservation Baselines in the Gulf of California. Conservation Biology class, University of Arizona, Tucson, AZ.
- 2013. Cabo Pulmo and Cabo Cortés: The conservation frontier in Baja California. University of Arizona Herbarium, Tucson, AZ.
- 2013. Historical Biogeography of the Midriff Islands, Gulf of California. Arizona Native Plant Society, Tucson, AZ.
- 2013. Establecimiento de linea de base biológica en las Grandes Islas. Simposio de CONANP, Bahía de los Ángeles, Baja California.
- 2012. Highway 16 Revisited: A transect of the Sierra Madre Occidental. University of Arizona Herbarium, Tucson, AZ.
- 2012. From Coastal Scrub to Desert Islands: A botanical tour of Baja California. California Native Plant Society Riverside-San Bernardino Chapter, Riverside, CA. Co-presenter: Sula Vanderplank.
- 2012. Plant Life of a Desert Archipelago. California Native Plant Society, Conservation Conference, San Diego, CA.
- 2011. La Flora de las Grandes Islas y su Importancia para la Conservación. XV Anniversary of CIAD, Guaymas, Sonora. Presented in Spanish.
- 2007. Flora de la Isla Tiburón e islotes adyacentes, en el Golfo de California. Sonoran Native Plants Society, Hermosillo, Sonora. Presented in Spanish.
- 2007. Floristic Diversity of Isla Tiburón and Satellite Islands, Gulf of California, Mexico. Arizona Native Plants Society, Tucson, Arizona.
- 2006. Different Place, Same Problem: Buffel in the Australian Outback. Desert Laboratory on Tumamoc Hill, Tucson, Arizona.
- 2006. Different Place, Same Problem: Buffel in the Sonoran Desert, USA. CSIRO, Alice Springs, Northern Territory, Australia.

Presentations, contributed

- 2018. Border BioBlitz: Bridging the wall with data. 4th Biodiversity and Management of the Madrean Archipelago Conference. Tucson, AZ.
- 2018. Hidden Water: Pozos of the Gran Desierto. International Sonoran Desert Alliance Tri-National Symposium, Ajo, AZ.
- 2014. Historical Biogeography of the Midriff Islands, Gulf of California, Mexico. [Dissertation Defense]. UC, Riverside.

2014. Local Extinction, Unintentional Rewilding, and the Historical Biogeography of Islands in the Gulf of California. 99th Annual Meeting of the Ecological Society of America, Sacramento, CA.
2014. Panel: Re-imagining a Resilient Border. [Moderator]. Celebrating the Sonoran Desert, A Tri-National Symposium. Ajo, AZ.
2014. Historical Biogeography and Unintentional Rewilding of the Midriff Islands, Gulf of California. Lab of Dr. Rodolfo Dirzo, Stanford CA.
2013. Panel: Plant Life of a Desert Archipelago. [Participant with Richard Felger and Exequiel Ezcurra, moderated by Joseph Wilder]. Tucson Festival of Books.
2011. Island Biogeography, Plant Distribution, and Origin of Island Floras. 96th Annual Meeting of the Ecological Society of America, Austin, TX.
2011. A Century of Vegetation Change on the Midriff Islands, What Can We Expect in the Coming Decades? Conservation and Science Symposium, Loreto, Baja California Sur.
2011. Islands of Opportunity: Controlling Invasive Plant Species on the Midriff Islands, Gulf of California. Conservation and Science Symposium, Loreto, Baja California Sur.
2010. Dwarf Giants, Guano, and Isolation: Vegetation and Floristic Diversity of Isla San Pedro Mártir, Gulf of California, Mexico. 53rd Annual Symposium of the International Association for Vegetation Science (IAVS), Ensenada, Baja California, Mexico.
2010. Floristic Diversity and Historic Vegetation Reconstruction of the Midriff Islands, Gulf of California, Mexico. California Botanical Society 22nd Annual Graduate Student Symposium, San Jose, CA.
2009. Plants of the Sonoran islands, Gulf of California: Overview and conservation priorities. Encuentro Nacional para la Conservación y el Desarrollo Sustentable de las Islas de México, Ensenada, Baja California, Mexico.
2009. Dwarf Cardons and Ice Age Relicts; Some Biogeographical Plant Stories from Islands in the Gulf of California, Mexico [Poster]. 4th Biennial Conference of the International Biogeography Society, Merida, Yucatan, Mexico.
2009. A Phylogenetic Analysis of Three Tropical Forests [Poster]. 4th Biennial Conference of the International Biogeography Society, Merida, Yucatan, Mexico.
2007. Succulents and Bighorn of Isla Tiburón, Gulf of California. IV Arizona Botanists Conference, Phoenix, Arizona.
2006. Buffelgrass: A New World Order in the Sonoran Desert. Arizona Space Grant Symposium, Tucson, Arizona.
2006. Vascular flora of Isla Tiburón and satellite islands, Gulf of California, Mexico. V International Symposium Flora of Arid Lands, Hermosillo, Sonora, Mexico.

PROFESSIONAL SERVICE & SKILLS

Board Member

Current:

Northern Jaguar Project, co-president 2025 (joined 2023)
 Sub consejo Científico de la Reserva de la Biosfera, Isla San Pedro Mártir (joined 2023)
 Tucson Mountain Association (joined 2022).

Previous:

Arizona-Sonora Desert Museum Science and Conservation Council (2018–2022)
 CEDO (2020–2022)
 Prescott College Kino Bay Center for Cultural and Ecological Studies (2011–2019)
 Parque Nacional Cabo Pulmo (2015–2019)
 8th Biennial Conference of the International Biogeography Society (2017)
 CONANP Elaboración de un Programa de Adaptación al Cambio Climático en la Región de Grandes Islas (2013–2017)
 Biosphere 2 Desert Sea (2013–2015)
 Southern California Botanists (2009–2013).

Art/Science Practitioner

Leader, co-founder, and participant, 6&6 art-science collaboration, <https://ngen6and6.com/> (2015–2019)
 Tumamoc Art & Science Course: Observational Drawing Skills for Field Notebooks (2018–2022)
 Tumamoc Transdisciplinary Arts Working Group (2019–2022).

Botanical Collector

Over 3,500 herbarium collections made primarily from the Sonoran Desert, distributed to herbaria across the U.S. and Mexico (2005–present).

IUCN

Sonoran Desert Plant Specialist Group (2021–2025).

Reviewer

University of Arizona Press; *PLOS ONE*; *Botanical Diversity*; *Haseltonia*; *Perspectives in Plant Ecology, Evolution, and Systematics*; *The Southwestern Naturalist*.

Academic Consultant and Contributor

Green Planet, Desert Worlds, BBC Natural History Unity. 2022.
 La Frontera with Pati Jinich, Season two. 2022.

Executive Producer

Next Generation Sonoran Desert Researchers website www.nextgensd.com (2012–present).
 Fire and the Future: Tucson's Bighorn Fire One Year Later, June 2021, <https://air.arizona.edu/fire-on-the-mountain>
 Fire on the Mountain: Understanding Tucson's Bighorn Fire, August 2020, <https://air.arizona.edu/fire-on-the-mountain/archive>
 Tumamoc Tour mobile phone app, <https://desertlaboratory.arizona.edu/tour> (2016–2017)