Mare Nazaire

California Botanic Garden, 1500 N. College Avenue, Claremont, CA 91711 909-625-8767 x 268, mnazaire@calbg.org

EDUCATION_

Ph.D., Botany

Washington State University, Pullman, WA

Advisor: Larry Hufford

Dissertation: A phylogenetic analysis of the genus *Mertensia* (Boraginaceae): taxonomy, divergence times, and biogeography

M.S., Plant Biology 2005

University of New Hampshire, Durham, NH

Advisor: Garrett E. Crow

Thesis: A study of the vegetation and floristic diversity of two peatland complexes of post-settlement origin in Lake Umbagog National Wildlife Refuge, Coos County, NH

B.A., Plant Biology, with honors, suma cum laude

2003

University of New Hampshire, Durham, NH

B.F.A. Graphic Design

1990

Maine College of Art, Portland, ME

PROFESSIONAL EXPERIENCE

Research Assistant Professor

2020-present

Claremont Graduate University, Claremont, CA

Administrative Curator

2018-present

RSA Herbarium California Botanic Garden, Claremont, CA

Collections Manager

Botanist/Editor

Research Specialist

2013-2018

RSA Herbarium, California Botanic Garden, Claremont, CA

Curatorial Assistant

2009-2013

Ownbey Herbarium, Washington State University, Pullman, WA

E I ID N. I A . . II . . . EL . CC AZ

Ecological Restoration Institute, Northern Arizona University, Flagstaff, AZ

2007-2008

2008, 2005–2007

Southern Colorado Plateau Network, National Park Service, Flagstaff, AZ

Botanist/Field Ecologist

2005–2006

Pacific Biodiversity Institute, Sonoran Desert, AZ

Herbarium Assistant

2002-2005

2002-2003

Hodgdon Herbarium, University of New Hampshire, Durham, NH

Research Intern

U.S. Fish and Wildlife Service, Lake Umbagog National Wildlife Refuge, Errol, NH

Botanist Intern 2001

U.S. Fish and Wildlife Service, Lake Umbagog National Wildlife Refuge, Errol, NH

GRANTS & FELLOWSHIPS

NSF, ICBR, DBI-2223877, \$95,532 (co-PI)

2022-2026

Collaborative Research: Digitization and enrichment of US herbarium data from tropical Africa to enable urgent quantitative conservation assessments

NSF, ICBR, DBI-2133561, \$482,523 (PI)

2022-2026

Advancing the extended specimen network: Curating and digitizing the Sherwin Carlquist Collection

NSF, ADBC, DBI-2101846, \$258,991 (co-PI)

2021-2025

Digitization TCN: Collaborative Research: Bringing Asia to digital life: Mobilizing underrepresented Asian herbarium collections in the US to propel biodiversity discovery

NSF, ADBC, DBI-2001358, \$149,959 (PI)

2020-2023

Digitization PEN: Augmenting the Endless Forms TCN: Digitization of imperiled plants with unique morphological adaptations

USDA National Institute of Food and Agriculture, Hispanic Serving Institution's Education Grants Program 2015-38422-24058/1007104, \$25,000 (PI)

Building bridges between classrooms and collections at CalBG: A pilot study

NSF, ADBC, DBI-1901889, \$149,828 (PI)

2019-2023

Digitization PEN: Enhancing the SoRo TCN with collections of taxonomic, geographic, and historic significance from the Rancho Santa Ana Botanic Garden

NSF, DBI-1746715, \$99,985 (co-PI)

2017-2023

Engaging underrepresented populations in biodiversity sciences: A series of workshops for undergraduate students

NSF, ADBC, DBI-1802312, \$95,766 (co-PI)

2018-2022

Digitization TCN: Collaborative Research: Capturing California's flowers: Using digital images to investigate historical and geographical phenological change in a biodiversity hotspot

Foundation of the American Institute for Conservation of Historic and Artistic Works, \$7,000 Collections Assessment for Preservation (collections assessment of CalBG's five collections)

NSF, CSBR, DBI-1561648, \$346,030 (PI)

2016-2019

Natural History: Engaging our future to preserve our past: curation and preservation of historically significant collections through student participation at the Rancho Santa Ana Botanic Garden

NSF, CSBR, DBI-0956417, \$707,683 (Co-PI, added on to grant mid-project)

2013-2016

Collaborative Project: Harnessing the power of herbaria to understand the changing flora of California: A biodiversity hotspot in peril

Betty W. Higinbotham Award, \$1000

2013

School of Biological Sciences, Washington State University, Pullman, WA

Betty W. Higinbotham Award, \$1322

2012

School of Biological Sciences, Washington State University, Pullman, WA

Betty W. Higinbotham Award, \$2200

2011

School of Biological Sciences, Washington State University, Pullman, WA

Myrna P. Steinkamp Fund, Colorado Native Plant Society, \$1000	2011
Research Award, Washington Native Plant Society, \$600	2011
Margaret Williams Research Award, Nevada Native Plant Society, \$500	2011
Jack & Martha Carter Conservation Award, Native Plant Society of New Mexico, \$1000	2011
NSF, Doctoral Dissertation Improvement Grant, DEB1110484, \$14,730	2011
NSF, East Asia and Pacific Summer Institute Fellowship Biogeography and evolution of <i>Mertensia</i> in Asia and North America	2010
Betty W. Higinbotham Award, \$3766.50 School of Biological Sciences, Washington State University, Pullman, WA	2010
Noe Higinbotham Award, \$500 School of Biological Sciences, Washington State University, Pullman, WA	2010
Hardman Native Plant Award, \$887.60 School of Biological Sciences, Washington State University, Pullman, WA	2009
Betty W. Higinbotham Award, \$4545.79 School of Biological Sciences, Washington State University, Pullman, WA	2009
Conrad Research Award, \$500 University of New Hampshire, Durham, NH	2002

PUBLICATIONS

- Nazaire, M. Mertensia. In press. In Heil, K., and S. O'Kane [eds.], Flora of New Mexico. Missouri Botanic Garden Press, St. Louis.
- Briscoe, L., **M. Nazaire**, Allen, J.R., J. Baker, A.D. Davenport, J. Mansaray, C.A. McCormick, M. Santiago Coyle, and M. Schmull. 2022. Shining light on labels in the dark: guidelines for offensive collections materials. *Collections: A Journal for Museum and Archive Professionals* 18: 506–523.
- Sullivan, J.R. and **M. Nazaire**. 2021. Specimen collection and preparation for a changing flora. *Rhodora* 993: 50–66.
- Nazaire, M. 2020. *Mertensia*. In Flora of Oregon. Volume 2: Dicots A F. S.C. Meyers, T. Jaster, K.E. Mitchell, T. Harvey, and L.K. Hardison [eds]. Botanical Research Institute of Texas Press.
- Yost, J. M., K.D. Pearson, J. Alexander, E. Gilbert, L. Aerne Hains, T. Barry, R. Bencie, P. Bowler, B. Carter, R.E. Crowe, E. Dean, J. Der, A. Fisher, K. Fisher, L. Flores-Renteria, C.M. Guilliams, C. Hatfield, L. Hendrickson, T. Huggins, L. Janeway, C. Lay, A. Litt, S. Markos, S.J. Mazer, D. McCamish, L. McDade, M. Mesler, B. Mishler, M. Nazaire, J. Rebman, L. Rosengren, P.W. Rundell, D. Potter, A. Sanders, K.C. Seltmann, M.J. Simpson, G.A. Wahlert, K. Waselkov, K. Williams, and P.S. Wilson. 2019. The California phenology collections network: using digital images to investigate phenological change in a biodiversity hotspot. *Madroño* 66: 130–141.
- Carlquist, S., and **M. Nazaire**. 2016. SEM studies of two riparian New-Caledonian conifers reveal air channels in stem wood; field observations. *Aliso* 34: 1–7
- Leubert, F., L. Cecchi, M.W. Frohlich, M. Gottschling, C.M. Guilliams, K.E. Hastenstab-Lehman, H.H. Hilger, J.S. Miller, M. Mittlebach, M. Nazaire, M. Nepi, D. Nocentini, D. Ober, R.G. Olmstead, F. Selvi,

- M.G. Simpson, K. Sutory, M. Valdes, G.K. Walden, and M. Weigend. 2016. Familial classification of the Boraginales. *Taxon* 65. 502–522.
- Nelson, G., P. Sweeney, L. E. Wallace, R. K. Rabeler, D. Allard, H. Brown, J. R. Carter; M. W. Denslow, E. R. Ellwood, C. C. Germain-Aubrey, E. Gilbert, E. Gillespie, L. R. Goertzen, B. Legler, D. B. Marchant, T. D. Marsico, A. B. Morris, Z. Murrell, M. Nazaire, C. Neefus, S. Oberreiter, D. Paul, B. R. Ruhfel, T. Sasek, J. Shaw, P. Soltis, K. Watson, A. Weeks, and A. R. Mast. 2015. Digitization workflows for flat sheets and packets of plants, algae, and fungi. Applications in Plant Sciences 3: 1500065.
- Hao, Z-Z., Y-Y. Liu, M. Nazaire, X-X. Wei, X-Q. Wang. 2015. Molecular phylogenetics and evolutionary history of sect. *Quinquefoliae (Pinus)*: implications for Northern Hemisphere biogeography. *Molecular Phylogenetics and Evolution* 87: 65–79.
- Nazaire, M., X-Q. Wang, and L. Hufford. 2014. Geographic origins and patterns of radiation in *Mertensia* (Boraginaceae). *American Journal of Botany* 101: 104–118
- **Nazaire, M.** and L. Hufford. 2014. Phylogenetic systematics of the genus of *Mertensia* (Boraginaceae). *Systematic Botany* 39: 268–303.
- **Nazaire, M.** and L. Hufford. 2012. A broad phylogenetic analysis of Boraginaceae: implications for the relationships of *Mertensia*. *Systematic Botany* 37: 758–783.
- Dugan, F.M. and **M. Nazaire**. 2011. First report of rust of *Sidalcea malviflora* (dwarf checkerbloom) caused by *Puccinia sherardiana* in Washington State. *North American Fungi* 6: 1–5.
- Springer, J.D., M.L. Daniels, and **M. Nazaire**. 2009. Field Guide to Forest and Mountain Plants of Northern Arizona: From the Mogollon Rim and White Mountains North. Ecological Restoration Institute, Northern Arizona University, Flagstaff, AZ.
- **Nazaire, M.** and G.E. Crow. 2008. A study of the vegetation and floristic diversity of two peatland complexes of post-settlement origin in Lake Umbagog National Wildlife Refuge, Coos County, New Hampshire. *Rhodora* 110: 296–344.

MANUSCRIPTS IN REVIEW

- Nazaire, M. Mertensia. Flora of North America north of Mexico. Vol. 15: Magnoliophyta: Fouqueriaceae to Boraginaceae. New York and Oxford.
- **Nazaire, M.** *Tiquilia*. Flora of North America north of Mexico. Vol. 15: Magnoliophyta: Fouqueriaceae to Boraginaceae. New York and Oxford.
- **Nazaire, M.** *Lappula.* Flora of North America north of Mexico. Vol. 15: Magnoliophyta: Fouqueriaceae to Boraginaceae. New York and Oxford.

MANUSCRIPTS IN PREP

Nazaire, M., and E. Wiley. Vascular flora of the Rademacher Hills, Kern County, California. – to be submitted in spring 2024 to Crossosoma.

INVITED SPEAKER

Harvey Mudd College, Claremont, CA

2022

California Native Plant Society, Orange County Chapter

2021

Southern California Botanists Symposium, Virtual Symposium	2020
iDigBio Miniseries: Climate of natural history collections during COVID-19, Virtual Symposium	2020
Nevada Native Plant Society, Reno, NV	2016
Regional Natural History Collection and Data Network for South Central California UC Santa Barbara, Santa Barbara, CA	2016
Botany Washington, Washington Native Plant Society, Sun Lakes State Park	2013
Idaho Native Plant Society, White Pine Chapter, Moscow, ID	2012
Washington Native Plant Society, Northeast Chapter, Spokane, WA	2011
Arizona Native Plant Society, Flagstaff Chapter, Flagstaff, AZ	2008

PRESENTATIONS AT PROFESSIONAL MEETINGS

- Nazaire, M. 2022. Advancing the extended specimen network: curating and digitizing the Sherwin Carlquist Collection. Innovations in Herbaria Session, California Native Plant Society Conference, San Jose, CA.
- Nazaire, M. 2022. Are you prepared? Preparation, response, and recovery in unanticipated disasters. Society for the Preservation of Natural History Collections Conference, Edinburgh, Scotland (virtual).
- Berkowitz, E, M. Nazaire, and D. Woo. 2022. Integrated pest management: holistic approaches to managing pests in herbarium collections. Society for the Preservation of Natural History Collections Conference, Edinburgh, Scotland (virtual poster).
- Nazaire, M. 2022. *Alexgorgea*: Recognizing a botanical legacy through a distinctive genus. Society for the Preservation of Natural History Collections Conference, Edinburgh, Scotland (poster).
- Nazaire, M. 2021. Building bridges between classroom and collections at California Botanic Garden: a pilot study. American Institute of Collections and Society for the Preservation of Natural History Collections Joint Conference (virtual).
- Briscoe, L., and M. Nazaire. 2021. Shining light on labels in the dark: guidelines for offensive collections materials. American Institute of Collections and Society for the Preservation of Natural History Collections Joint Conference (virtual).
- Nazaire, M. 2020. Endless Forms: Herbarium digitization of imperiled plans with extreme morphological adaptations. Southern California Botanists Symposium (virtual).
- Nazaire, M. 2019. Processing historic backlog: lessons learned. Society for the Preservation of Natural History Collections Conference, Chicago, IL.
- Nazaire, M. 2019. *Gymnocactus subterraneus*: a tale of two types. Society for the Preservation of Natural History Collections Conference, Chicago, IL.
- Nazaire, M. 2018. From Thorne to APG IV: reorganization of the digital and physical collections of the Rancho Santa Ana Botanic Garden Herbarium. Society for the Preservation of Natural History Collections Conference, Dunedin, New Zealand.
- Nazaire, M. 2018. From Integrating data quality feedback: a data provider's perspective. Society for the Preservation of Natural History Collections Conference, Dunedin, New Zealand.

- Nazaire, M. 2017. Engaging our future to preserve our past: curation and preservation of historically significant collections through student participation at the Rancho Santa Ana Botanic Garden Herbarium. Society for the Preservation of Natural History Collections Conference, Denver, CO.
- Nazaire, M. 2016. Preservation of natural history collections through student engagement: the internship experience at Rancho Santa Ana Botanic Garden. Society for the Preservation of Natural History Collections Conference, Berlin, Germany.
- Nazaire, M. 2015. Consortium of California Herbaria workflows. iDigBio Herbarium Workflows Workshop, Valdosta, GA.
- Nazaire, M. 2015. To collect or not to collect: the importance of herbarium collections in the context of rarity. Rare Plant Session, California Native Plant Society Conference, San Jose, CA.
- Nazaire, M. 2014. Digitizing the collections and archives of Marcus E. Jones. Global Plants Initiative, Panama City, Panama (poster).
- Nazaire, M., and L. Hufford. 2013. Geographic origins and patterns of radiation in *Mertensia* (bluebells). Symposium on Biogeography, Botany 2013, New Orleans, LA.
- Nazaire, M. 2013. Diversification in *Mertensia* (Boraginaceae): with an emphasis on Pacific Northwest species. Botany Washington 2013, Coulee City, WA.
- Nazaire, M., and L. Hufford. 2012. The phylogenetic relationships of *Mertensia*: implications for taxonomy and inferring cryptic diversity. Symposium on Asteridae, Botany 2012, Columbus, OH.
- Nazaire, M., L. Hufford. 2011. A broad phylogenetic analysis of Boraginaceae: implications for the relationships of *Mertensia*. Symposium on Asteridae, Botany 2011, St. Louis, MO.

TEACHING EXPERIENCE	
Research Assistant Professor, Claremont Graduate University BOT420 Floristic Methods	2023
Instructor, California Botanic Garden The Pressed Plant (workshop)	2014, 2020, 2022
Instructor, California Botanic Garden Aquatic Plants of Southern California (workshop)	2015, 2019
Instructor, California Native Plant Society Conference The Pressed Plant (workshop)	2018
Teaching Assistant, School of Biological Sciences, Washington State University General Biology (undergraduate lab)	2008, 2009
Instructor, Arizona Native Plant Society Plant Identification and Writing Botanical Keys (workshop)	2008
Teaching Assistant, Department of Plant Biology, University of New Hampshire Systematic Botany (undergraduate lab)	2004, 2005
Teaching Assistant, Department of Plant Biology, University of New Hampshire Biodiversity: A Phytogeographical Perspective (graduate lecture and lab)	2004
Teaching Assistant, Department of Plant Biology, University of New Hampshire	2002, 2003

Systematic Botany (undergraduate lab)

TRAINING, MENTORING, AND ADVISING_____

Manage a department of 11 curatorial staff, interns, graduate research assistants, and ~20 volunteers as the Administrative Curator of the RSA Herbarium. I directly supervise the following staff:

LeRoy Gross (Curatorial Assistant III), Rhay Flores (Workroom Manager), Carrie Baldwin (Digitization Technician), Sydney Kaye (Curatorial Assistant I), Sara Dave (Project Manager), Ray Vilchis, Ixchel Maston, Ivy Jordan, Maheen Khan, Stephanie Quintanilla, Karrie Chung (Interns)

Graduate students: *in progress* - Kim Schaefer (MS, 2021–present); Rachel Tageant (MS, 2022–present); Garrett Goodrich (MS, 2023–present)

Graduate student committees: completed - Maria Jesus (MS, 2018–2021); Christina Varnava (MS, 2018–2021); Nina House (MS, 2019–2022)

EDUCATION & COMMUNITY OUTREACH

Herbarium Specimen Preparation Workshop, Ridgecrest, CA

December 2022

Led workshop on techniques in mounting and specimen preparation to 17 participants at the Maturango Museum.

Maturango Museum Annual Wildflower Show, Ridgecrest, CA

April 2019, 2022

Plant identification for the wildflower show.

Broadening Participation in the Biodiversity Sciences, Albuquerque, NM

November 2019

Organized and co-lead workshops and career shadowing event for undergraduate students at the New Mexico Museum of Natural History and Science.

Broadening Participation in the Biodiversity Sciences, Flagstaff, AZ

October 2018

Organized and co-lead workshops and career shadowing event for undergraduate students at the Museum of Natural History.

Broadening Participation in the Biodiversity Sciences, Los Angeles, CA

April 2017

Organized and co-lead workshops and career shadowing event for undergraduate students at the Natural History Museum of Los Angeles.

STEAM Night, Washington Magnet Academy, Pasadena, CA

April 2015

Career night for elementary students.

Science and Career Day, Pasadena Community College, Pasadena, CA

April 2015

Led botany workshop and roundtable discussion for middle school girls.

SERVICE

Member-at-Large

2020-present

American Society of Plant Taxonomists

Liaison for Society for the Preservation of Natural History Collections

2020-present

American Society of Plant Taxonomists

Systematic Collections Committee

2020-present

American Society of Plant Taxonomists

Admin Committee

2019-present

2016-2020

Consortium of California

Treasurer

7

Society of Herbarium Curators

Board of Directors and Taxon Editor (Hydrophyllaceae, Lamiaceae) Flora of North America	2015-present
Georeferencing Working Group iDigBio	2014–2019
Data Management Interest Group iDigBio	2014–2019
Board of Directors	2013–2017

Southern California Botanists

MANUSCRIPT REVIEWS_____

Aliso, American Journal of Botany, Annales Botanici Fennici, Botanical Journal of the Linnaean Society, Madroño

PROFESSIONAL AFFILIATIONS

American Society of Plant Taxonomists California Native Plant Society Society for the Preservation of Natural History Collections Society of Herbarium Curators Southern California Botanists