

CURRICULUM VITAE

SUSAN J. MAZER

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BIRTHDATE: November 20, 1958; New York, NY

EDUCATION:

1981; B.S. Biology (with honors); Yale University; New Haven, Connecticut
1983; M.S. Botany; University of California, Davis
1986; Ph.D. Botany; University of California, Davis

FOREIGN LANGUAGE PROFICIENCY: Spanish, French

AWARDS:

2017: Pritzlaff Conservation Award (<https://www.sbbg.org/conservation-research/symposia-awards/pritzlaff-conservation-award>).

EMPLOYMENT & POSITIONS:

2017-present. President, California Botanical Society (<http://www.calbotsoc.org>)

2011 – 2018. Western U.S. Field Coordinator, *Project Baseline: a national seed bank for evolutionary research* (www.baselineseedbank.org/)

2008 – present. Director, *California Phenology Project* (www.usanpn.org/cpp)

January 2004 - December 2005. Program Director, Population and Community Ecology Program, Division of Environmental Biology, National Science Foundation, Arlington, VA.

July 1999 – present. Full Professor of Ecology and Evolution; Department of Ecology, Evolution and Marine Biology, University of California, Santa Barbara.

July 1993 – June 1999. Associate Professor; Department of Ecology, Evolution and Marine Biology, University of California, Santa Barbara.

July 1988 - June 1993. Assistant Professor; Department of Biological Sciences, University of California, Santa Barbara.

February 1991 - May 1993 and July 1988 - September 1989. Research Collaborator; Departments of Botany and Paleobiology, respectively; National Museum of Natural History, Smithsonian Institution, Washington, D. C.

January 1987 - June 1988. Smithsonian Post-Doctoral Fellow; Department of Paleobiology; National Museum of Natural History, Smithsonian Institution, Washington, D. C.

RESEARCH and PUBLIC OUTREACH INTERESTS:

The process and outcome of evolution by natural selection, with a focus on physiological, life history, floral, and mating system traits in wild plant populations. My research on wildflower species in the genera *Clarkia* and *Nemophila* comprises generating and testing both longstanding and novel predictions concerning responses of plants to a suite of environmental challenges.

Recruiting, engaging, and training citizen scientists in tracking the effects of climatic variation and climate change on the seasonal cycles (phenology) of wild plant species. I am currently the Director of the California Phenology Project, a statewide research and education program designed and implemented in seven national parks and 12 regional reserves, botanic gardens, and state parks (www.usanpn.org/cpp).

Causes and consequences of phenological variation in wild plants. By conducting long-term monitoring of the life cycle transitions of individual plants and plant populations across environmental gradients in California, we are examining how wild species respond to climate in ways that may affect their reproductive success and long-term survival. I am also using tens of thousands of electronic herbarium specimen records to examine nationwide responses of flowering date to climatic variation across space and time.

The application of quantitative genetic approaches to the study of genetic vs. environmental variation and covariation in fitness-related traits, including seed mass, gender, floral development, life-history traits, and phenotypic plasticity in plants and animals.

Restoration ecology in the context of local adaptation. How does the process of local adaptation among populations of species occupying heterogeneous environments affect the planning of restoration efforts that rely on wild-collected seeds?

COURSES TAUGHT:

Pollination Ecology in Khao Nan National Park (a graduate course funded by Thailand's Biodiversity Research & Training program)

Rainforest Ecology (visiting instructor for Organization of Tropical Biology graduate course in Costa Rica)

Rainforest Biodiversity (co-instructor for 3-week course at the Tambopata Wildlife Reserve, Peru, sponsored by the Smithsonian Institution)

General Biology (Plant Diversity Section): EEMB 3C
Plant Biology & Biodiversity: EEMB 127
Plant Biology & Biodiversity: field, morphology, and anatomy lab: EEMB 127L
Advanced Plant Evolutionary Ecology: EEMB 112
Plant Evolutionary Ecology Field and Computer Lab: EEMB 112L
Population Genetics: EEMB 130
Evolutionary Ecology: EEMB 135
Conservation and Restoration Ecology: EEMB 133
Plant Reproductive Ecology and Evolution: EEMB 194M
Reproductive Ecology and Evolution Graduate Seminar: EEMB 595M
Plant Ecology Graduate Seminar: EEMB 595A
Evolutionary Ecology Graduate Seminar: EEMB 595EV

Topical Graduate Seminars

Quantitative Evolutionary Genetics
The Evolutionary Theory of Sex Allocation
The Comparative Method in Evolutionary Biology
Speciation: Theoretical and Empirical Approaches
Phenotypic Plasticity

FELLOWSHIPS:

1991. UC Regents Faculty Career Development Award
1990. UC Regents Faculty Career Development Award
1989. UC Regents Junior Faculty Fellowship
1987 - 1988. Smithsonian Post-Doctoral Fellowship; National Museum of Natural History

RESEARCH AWARDS, GRANTS AND CONTRACTS:

2018-2022. National Science Foundation (DEB-1802181) Digitization TCN: Collaborative: Capturing California's Flowers: using digital images to investigate historical and geographic phenological change in a biodiversity hotspot. (PIs: Susan Mazer, EEMB; Katja Seltmann, CCBER, **\$225,844**)

2018. California NanoSystems Institute Challenge Grant. Horticultural lighting using laser-based systems. (PIs: Steven DenBaars, Materials; Susan Mazer EEMB, **\$50,000**)

2017-2021. National Science Foundation (DEB-1655727). Evolutionary adaptation to intensifying drought across a geographic gradient: a comprehensive evaluation of Fisher's Fundamental Theorem (**\$778,809**)

2016-2019. National Science Foundation (DEB-1556768). Phenological sensitivity to climate across space and time: harnessing the diversity of digital herbarium data to generate and to test novel predictions (**\$249,999**).

2015-2019. Multicampus Research Program Initiative: Using UC Reserves to Detect and Forecast Climate Impacts (PIs: Barry Sinervo and Laurel Fox, UCSD: **\$2,000,000** for 9 campuses and 16 Co-PIs, including Susan Mazer and Cherie Briggs, UCSB: **\$104,034** for UCSB)

2015-2018. Collaborative Research: Ecophysiological Instruments for Measuring Biotic Climate Impacts Across Western Field Stations. NSF, Division of Biological Infrastructure. (PIs: Barry Sinervo and Laurel Fox; Co-PI Mazer: **\$99,061**)

2016-2018. UCSB Academic Senate Faculty Research Award. Evolutionary responses to climate change in common and rare native plant species: Generating and testing new predictions based on spatial and temporal variation in adaptive traits (**\$8000**).

2015-2017. UCSB Academic Senate Faculty Research Award. Predicting responses of wild plant populations to climate change: integrating climatic and biological factors influencing the ecology and evolution of floral attractions (**\$6800**).

2015: Research Experiences for Undergraduates: supplement to NSF award DEB-114278: Project Baseline: a genomic resource for the detection of future evolutionary change. REU Project: "The ecological significance of variation in flower size and style length: pollen deposition, pollen tube competition, and pollen tube attrition in natural populations" (**\$7000**)

2012-2016. UCSB Faculty Research Assistant Program. \$300-\$1050 per quarter to support undergraduate students enrolled to conduct supervised research in my lab (Total: **\$3450**).

2011-2017. National Science Foundation, Population and Evolutionary Processes program. Project Baseline: a genomic resource for the detection of future evolutionary change. \$1,313,480 (\$340,000 to UCSB, including 4 Research Experiences for Undergraduates supplements). Co-PIs Julie Etterson (U Minnesota) and Steve Franks (Fordham University).

2011-2015. University of California Office of the President-Research Opportunity Fund. Tracking Spring on a Changing Planet: Phenology and climate change across the University of California Natural Reserve System: *The UCNRS Phenology Network*. **\$40,000** (including \$8K in matching funds from UCSB)

2010-2015. National Park Service, Climate Change Response Program. Assess Climate Change Response and Educate the Public Regarding Climate Change in California's National Parks Through Establishment of the California Phenology Network", **\$430,436** to UCSB.

2010-2013. National Science Foundation. Renovation of Research greenhouses at UC Santa Barbara for ecological, evolutionary and developmental studies. **\$1,725,740**. Co-PIs Scott Hodges, Susan Mazer, and Ruth Finkelstein (UCSB).

2007-2013. National Science Foundation, Integrative Organismal Systems (IOS-0718227). The joint evolution of mating system, life history, and drought-tolerance in *Clarkia*: do genetic correlations constrain adaptive evolution? **\$596,389** including supplemental Research Experience for Undergraduate awards) + \$253,000 to Collaborators Simon Emms and Amy Verhoeven at St. Thomas University.

2012. National Park Service, *Parks as Classrooms* program. Funding to design and to lead two 3-day professional development workshops for secondary school, high school, and adult education teachers to train them in the protocols and educational opportunities offered by the USA National Phenology Network. **\$23,000**. <http://www.usanpn.org>

2011-2012. National Science Foundation, Structural Systems program. Research Opportunity Award supplement to ongoing NSF award: The evolution of life history, physiological, and

floral traits in *Clarkia*: do genetic correlations affect mating system? **\$27,790** (Co-PI, Chris Ivey, Chico State University).

2010-2011. USGS and California Cooperative Ecosystem Studies Unit. Phenology Literacy: Understanding through Science and Stewardship (PLUSS). **\$49,999**.

2007-2012. National Science Foundation, Research Coordination Grant. USA-National Phenology Network. **\$499,000** to design and to implement the first effort to provide nationwide recording and monitoring of seasonal and annual biological events. Co-PIs: Dr. Jake Weltzin, USGS and Dr. Mark Schwartz, University of Wisconsin – Milwaukee.

2009. Conservation Research Foundation. Sustainable agriculture along a protected forest edge in Thailand: promoting ecosystem services to motivate forest conservation in rural communities. (**\$5000**: Co-PIs Susan Mazer & David Greenberg)

2008-2009. U.S. Fish & Wildlife Service. Connecting People with Nature Through Integration of Climate Change Research and Education: the link between phenology and climate change. (**\$40,000**)

2006- 2007. University of California Pacific Rim Research Grant. Planning grant to initiate studies of ecosystem services provided by protected rainforest habitats in Thailand. (Co-investigators: Dr. David Woodruff [UCSD] & Dr. David Greenberg: \$15,000).

2006. University of California Pacific Rim Research Grant. Mini-grant to co-teach rainforest Biodiversity & Research Training course to graduate students at Walailak University, Nakkom Sri Thammarat, Thailand, May 2006 (\$3000).

2002 - 2004. National Parks Foundation Postdoctoral Fellowship Sponsor (postdoctoral fellow: Dr. Kristina Hufford): Molecular genetic and ecological differentiation among Channel Island and mainland wild populations of California native perennial grasses: implications for restoration (\$150,000).

2003 - 2004. National Center for Ecological Analysis and Synthesis. "Beyond hand-pollinations — Linking pollen limitation to plant population biology" Working Group (Co-PI's Drs. Tia-Lynn Ashman, Tiffany Knight, and Martin Morgan: \$64,720).

2001 - 2003. National Center for Ecological Analysis and Synthesis. "Comparative ecology of functional and life history traits among neotropical rainforest species" Working Group (Co-PI's Drs. David Ackerly, Horacio Paz and Miguel Martinez-Ramos: \$53,000).

2002. Vandenberg Air Force Base: Factors influencing the successful restoration of Native Grasslands at Vandenberg Air Force Base, Santa Barbara County, California (\$22,500)

2001. UCSB Committee on Research (intramural grant: \$19,000), Molecular genetic evidence for gene flow and hybridization between resident and alien populations of California native perennial grasses at the UC Sedgwick Ranch Reserve.

2001. Pearl Chase Conservation Fund (intramural grant awarded by UCSB; \$17, 634), Local Adaptation, Conservation, and Restoration of California Grasslands.

2000-2001. National Science Foundation Population Biology Panel, Small Grant for Exploratory Research. Gene Flow and Hybridization Between Introduced and Endemic Populations of Three Native Perennial Grass Species. Co-PI, O. James Reichman. (\$22,464).

2001. Research Experiences for Undergraduates Award. National Science Foundation, Program in Population Biology and Physiological Ecology (\$10,000).

1999 – 2001. Vandenberg Air Force Base Conservation Fund. Restoration of Native Grasslands at Vandenberg Air Force Base, Santa Barbara County, California. (\$90,000).

2000 – 2001. California State Department of Fish and Game. Molecular genetic variation within and among populations of two federally endangered species: *Arenaria paludicola* (Caryophyllaceae) and *Rorippa gambelii* (Brassicaceae) (\$36,000).

1999 – 2000. UC Agriculture and Natural Resources. Seed Preparation, Cultivation and Preservation of Two Endangered Species, *Rorippa gambelii* and *Arenaria paludicola* (\$1800).

1998 – 1999. Vandenberg Air Force Base Conservation Fund. Restoration of Native Grasslands at Vandenberg Air Force Base, Santa Barbara County, California. (\$20,000).

1999 – 2003. National Science Foundation Population Biology Panel. The evolution of sex ratio and gender in selfing vs. outcrossing *Clarkia* spp. (Onagraceae): testing components of sex allocation theory. Collaborative grant with Dr. Veronique Delesalle (Gettysburg College). (Total award: \$308,000; award to Susan Mazer/UCSB: \$223,000).

1999 – 2000. California State Department of Fish and Game. Restoration and recovery of *Arenaria paludicola* (Caryophyllaceae) and *Rorippa gambelii* (Brassicaceae): two endangered species. (\$24,000).

1998 - 1999. California State Department of Fish and Game. Restoration and recovery of *Arenaria paludicola* (Caryophyllaceae) and *Rorippa gambelii* (Brassicaceae): two endangered species. (\$11,200).

1999 - 2000. Vandenberg Air Force Base. Effects of grazing on the diversity and relative abundances of California native perennial grass species in a serpentine grassland (\$24,000).

1998 - 1999. Vandenberg Air Force Base. Restoration of native grasslands at Vandenberg Air Force Base, Record Number 08981080 (\$30,000).

1997 – 1998. University of California, Santa Barbara, Committee on Research Grant. Gender allocation in wild plant species: testing assumptions and predictions. (\$5,000)

1998 - 1999. University of California, Santa Barbara, Committee on Research Grant. Sex allocation and gender expression in *Clarkia unguiculata* vs. *C. exilis*: testing assumptions of sex allocation theory (\$4,000).

1999 – 2000. University of California, Santa Barbara, Committee on Research Grant. Testing the assumptions of sex allocation theory in *Clarkia* species (\$5,000)

1991 - 1997. National Science Foundation Presidential Young Investigator Award in recognition of research and teaching accomplishments. \$25,000/year + \$37,500/year available in matching funds from the National Science Foundation (a total of \$291,251 was awarded from NSF, in addition to matching funds from several sources [below]).

1995 - 1996. Variation in Siring Success in *Clarkia unguiculata*. NSF Dissertation Improvement Award (with Steve Travers). (\$1827)

1995. Centre National de Recherche Scientifique (France). One-year Poste-Rouge sabbatical fellowship as an Associate Research Director in the Laboratoire d'Evolution et Systematique des Végétaux, Université de Paris-Sud XI, Orsay, France.

1995. Research Experiences for Undergraduates Award. National Science Foundation, Program in Population Biology and Physiological Ecology (\$4,000). To provide undergraduate research assistantships for the project, "Sex Allocation and Gender in Wild Populations of *Spergularia marina* (the sand-spurrey: Caryophyllaceae): An examination of the assumptions of theoretical models."

1994. Research Experiences for Undergraduates Award. National Science Foundation, Program in Population Biology and Physiological Ecology (\$5,000). To provide undergraduate research assistantships for the project, "Sex Allocation and Gender in Wild Populations of *Spergularia marina* (the sand-spurrey: Caryophyllaceae)"

1993 - 1994. National Geographic Society, "Ecological Consequences of Forest Fragmentation on an Amazonian Palm Community" (\$37,024, including matching funds from the National Science Foundation [Presidential Young Investigator Award])

1993 - 1994. Grant from Glaxo Pharmaceuticals, Inc. for the "Collection of Vegetative and Reproductive Botanical Specimens from Rainforest Species of Southeastern Peru for Medicinal Testing" and for the publication of a photographic Guide to the Fruits and Seeds of Lowland Tropical Rainforest Species of Madre de Dios. (\$150,000: including matching funds from the NSF PYI Award)

1993 - 1994. The Nature Conservancy, "Distribution, Abundance, and Reproductive Biology of Field and Greenhouse Populations of Gambel's Watercress (*Rorippa gambellii*: Brassicaceae) and Marsh Sandwort (*Arenaria paludicola*: Caryophyllaceae). (\$46,282: including matching funds from the NSF Presidential Young Investigator Award)

1992 - 1994. National Science Foundation. Program in Population Biology and Physiological Ecology (\$85,000. Co-PI Dr. Veronique Delesalle, Emory University). Sex Allocation and Gender in Wild Populations of *Spergularia marina* (the sand-spurrey: Caryophyllaceae): An examination of the assumptions of theoretical models.

1992 - 1993. California State Department of Fish and Game. (\$81,628: including matching funds from the National Science Foundation). Demography and Reproductive Biology of Field and Greenhouse Populations of Kern mallow (*Eremalche kernensis*: Malvaceae), Woolly threads (*Lembertia congdonii*: Asteraceae), and Jewelflower (*Caulanthus californicus*: Brassicaceae), three endangered species of California.

1991 - 1992. Competitive Research Award. Smithsonian Institution National Museum of Natural History BIOLAT Research Program. \$3500 grant to continue the study of seed dispersal, seed accumulation and the seed flora in Manu National Park, Peru .

1992 - 1993. California State Department of Fish and Game. (\$10,000: including matching funds from the National Science Foundation). Reproductive Biology of the Rare *Astragalus lentiginosus* var. *piscinensis* from (Leguminosae) Fish Slough Natural Area, Bishop, California.

1991 - 1993. National Science Foundation Grant for Improving Doctoral Dissertation Research (\$8000, with Charles T. Schick). Program in Population Biology and Physiological Ecology. "Causes of Geographic Variation in Flower Size in *Nemophila menziesii* H. & A. (Hydrophyllaceae).

1992 - 1993. Faculty General Research Grant (\$3000; University of California, Santa Barbara). Support of ongoing research project, "Quantitative genetics and evolutionary implications of gender variation in *Spergularia marina*".

1991 - 1992. Faculty General Research Grant (\$4000; University of California, Santa Barbara). Support of ongoing research project, "Constancy of genetic parameters of life history and reproductive traits in *Raphanus sativus*".

1990 - 1991. Competitive Research Award. Smithsonian Institution National Museum of Natural History BIOLAT Research Program. \$5000 grant to continue the study of seed dispersal, seed accumulation and the seed flora in Manu National Park, Peru.

1990 - 1991. Faculty General Research Grant (\$4000; University of California, Santa Barbara). Support of ongoing research project, "Constancy of genetic parameters of life history and reproductive traits in *Raphanus sativus*".

1990 - 1991. Hoover Trust and Hardman Fund. With Charles T. Schick (\$1000) to conduct dissertation research on geographic variation in flower size in *Nemophila menziesii*.

1990 - 1991. American Philosophical Society. \$4000 to continue study, "Seed dispersal and accumulation within and among habitats of a neotropical rainforest (Manu National Park, Peru)".

1989 and 1990. Competitive Research Awards. Smithsonian Institution National Museum of Natural History BIOLAT Research Program. \$2500 and \$2765 grants to continue the study of the ecology of seed dispersal in Manu National Park, Peru.

1989. Faculty General Research Grant (\$4000; University of California, Santa Barbara). Support of ongoing research project in Manu National Park, “Comparative seed ecology in a neotropical rainforest: seed dispersal and accumulation in four habitats”.

1988. Faculty General Research Grant (\$5000; University of California, Santa Barbara). Support of pilot study, “Genetic and environmental influences on components of reproduction in *Raphanus raphanistrum* (wild radish): effects of population density on estimates of genetic parameters”.

1988. Smithsonian Institution Research Opportunities Fund (\$1500); seed money to initiate a longterm study of seed dispersal in the lowland tropical Amazonian rainforest of Manu National Park, Peru as a participating ecologist and research associate in the collaborative Peruvian/North American Smithsonian BIOLAT program.

1984 - 1985. Co-author and co-investigator of an ecological consulting contract with the Northern California Power Agency (\$50,000): “The reproductive biology, life history and boron-tolerance of *Streptanthus morrisonii* (Brassicaceae)”.

INVITED INTERNATIONAL SYMPOSIA & WORKSHOPS:

May, 2016. 6th International Workshop and Conference in Plant Reproductive Ecology, Shanghai, China (May 6-8).

2010-2011. (Meetings in May 2010 and December 2010). National Center for Ecological Analysis and Synthesis. Workshop: Forecasting Phenology: Integrating ecology, climatology, and phylogeny to understand plant responses to climate change.

2007. Wenner-Gren Foundation (Stockholm, Sweden), symposium on Mating System Evolution, held at the Kristineberg Marine Research Station. January, 2006. Second Field Ecology Symposium in Biodiversity Management, King Mongkut's University of Technology-Thonburi, Bangkok, Thailand. “Pollen-limited seed initiation in *Etilingera littoralis* (Zingiberaceae), in Khao Nan National Park, Nakhon Si Thammarat Province, Thailand”.

2006. Second Field Ecology Symposium in Biodiversity Management, King Mongkut's University of Technology-Thonburi, Bangkok, Thailand. “Pollen-limited seed initiation in *Etilingera littoralis* (Zingiberaceae), in Khao Nan National Park, Nakhon Si Thammarat Province, Thailand”.

2005. NSF-DFG United States – Germany Conference on Biodiversity, American Association for the Advancement of Science. Title: “Seed size, adult abundances and habitat preferences in neotropical rainforests: alternative approaches to the study of morphological diversity”

2005. Abdul Salam Institute of Theoretical Physics, Trieste, Italy, “Interspecific scaling of seed size and adult abundances of neotropical woody species within and across habitats: is size destiny?”

2004. Botanical Congress of Mexico, Oaxaca, Mexico. “Seed size, habitat preference, and adult abundances of neotropical woody species”
2004. University of Lausanne, Switzerland, Pollination Biology Graduate Workshop. “Mating system, pollen competition in selfing vs. outcrossing taxa: novel predictions for the comparative study of pollen tube growth rates”
2004. Association for Tropical Biology Symposium: Morphology and life history of tropical woody species. “Seed size, germination syndrome, segregation among habitats, and adult tree population densities in neotropical communities”
1999. International Botanical Congress, St. Louis, Missouri. “Ecology and evolution of plant reproductive traits” (symposium organizers: Susan J. Mazer and Christophe Thébaud)
1995. Jacques Monod Conference on Genetics and Adaptation, Centre National de Recherche Scientifique, Aussois, France. “Sex allocation, variation, and covariation in floral and gender-related traits: evolutionary predictions and preliminary observations.”

INVITED NATIONAL SYMPOSIA:

2018. July, 2018. Botanical Society of America Symposium (Rochester, MN), *Tools, Standards, Techniques, and Methods for Using Herbarium Specimens in Phenological Research*. Title of presentation: “Climate affects the rate at which species successively flower: using herbarium records to detect an emergent property of regional floras”
2018. May, 2018. Harvard University, Plant Biology Symposium on *Natural History Collections in the Anthropocene*. Title of presentation: “Climate affects the rate at which species successively flower: using herbarium records to detect an emergent property of regional floras”
2017. October, 2017. Pritzlaff Conservation Symposium, Santa Barbara, California. Title of presentation: “S.O.S. – The power of seeds, observations, and specimens to predict ecological and evolutionary responses to climate change”
2014. Botanical Society of America Symposium, “The ecology and evolution of pollen performance”, Boise, Idaho. Title of presentation: “Winning in style: do longer styles intensify selection on male gametophyte performance in outcrossing *Clarkia* species?” **S. J. Mazer** and A. A. Hove.
2014. Botanical Society of America Symposium, “Evolutionary insights from studies of geographic variation: establishing a baseline and looking ahead to future change”, Boise, Idaho. Title of presentation: “Predicting the effects of climate change on life history and floral traits of selfing and outcrossing *Clarkia* taxa.” H. Schneider and **S. J. Mazer**.
2011. Botanical Society of America Symposium, “Plant reproductive strategies under environmental stress”, St. Louis, Missouri. Title of presentation: “Physiological performance in selfing vs. outcrossing *Clarkia*: does phenotypic selection predict species divergence and temporal change in physiological rates?”

2002. Penn State University Plant Physiology Symposium, *Plant Reproduction 2002*. Title of presentation: "Fickle Sex Expression in Selfing and Outcrossing *Clarkia* (Onagraceae): the evolution of interspecific variation in ontogenetic trajectories."
1997. Symposium on Adaptive Genetic Variation in the Wild, Ecological Society of America meetings, Albuquerque, New Mexico. Title of presentation: "Geographic variation in flower size in *Raphanus raphanistrum* (wild radish: Brassicaceae): the potential role of pollinators as selective agents in flower size evolution. "
1991. National Symposium Organized by Dr. Robert Wyatt and sponsored by the Center for Continuing Education at the University of Georgia. Symposium Title: "Ecology and Evolution of Plant Reproduction: New Approaches"; Chapter Title: "Environmental Modification of Gender Allocation in Wild Radish: consequences for natural and sexual selection." Symposium contributions have been published by Chapman & Hall.
1989. National meetings of the Society for the Study of Evolution; Penn State University. Invited Symposium Speaker; symposium title: "Phylogenetic approaches to the study of evolutionary innovation"; presentation title, "Comparative approaches to the study of seed size evolution within and among angiosperm taxa."
1986. Symposium on the Causes and Consequences of Seed Weight; Botanical Society of America; AIBS meetings; Amherst, Massachusetts; "Causes and consequences of seed weight variation in wild radish."

INVITED RESEARCH SEMINARS (2005 – 2018):

- April, 2018. University of California, Davis, Festschrift for Dr. Maureen Stanton. "Divergence in pollen performance between selfing and outcrossing sister species: the ghost of gametophytic competition past"
- April, 2018. University of California, Santa Cruz. "Divergence in pollen performance between selfing and outcrossing sister species: the ghost of gametophytic competition past"
- May, 2017. University of Trondheim, Norway. "Sexual selection and the evolution of pollen performance in selfing vs. outcrossing species: a case study in *Clarkia*"
- February, 2017. California State University, San Luis Obispo. "Sexual selection and the evolution of pollen performance in selfing vs. outcrossing species: a case study in *Clarkia*"
- October, 2016. Southern California Botanists Symposium, Pasadena. "Phenological responses to winter rainfall and temperature among wild oak species: evidence from the California Phenology Project"

April, 2016. University of California, Riverside. Distinguished Lecturer, Conservation Biology, funded by Jane and Richard Block. “*The California Phenology Project: challenges and rewards of a citizen science program*”

February, 2016. Santa Barbara Botanic Garden, Citizen Science night. Introduction to the California Phenology Project.

September, 2015. University of California, Merced. “The evolution of mating system, physiology, and life history within and among *Clarkia* species: will climate change generate risky sexual behavior in annual plants?”

May, 2015. Rancho Santa Ana Botanic Garden (Claremont, CA). “*The California Phenology Project: species-specific phenological responses to winter rainfall and temperature among wild plant species*”

February, 2015. Michigan State University, Department of Plant Biology: “The joint evolution of mating system, physiology, and life history in farewell-to-spring (*Clarkia*: Onagraceae): genetic correlations and the evolution of risky mating behavior in the context of rapid climate change”

December, 2014. Hawkesbury Institute for the Environment, Western Sydney, Australia, “The joint evolution of mating system, physiology, and life history in farewell-to-spring (*Clarkia*: Onagraceae): genetic correlations and the evolution of risky mating behavior in the context of rapid climate change”

October, 2014. Chenshan Shanghai Botanic Garden, “The joint evolution of mating system, physiology, life history, and floral traits in farewell-to-spring (*Clarkia*: Onagraceae): the potential role of genetic correlations”

October, 2014. College of Life Sciences, Nanjing Agricultural University, Jiangsu Province, China, “The joint evolution of mating system, physiology, life history, and floral traits in farewell-to-spring (*Clarkia*: Onagraceae): the potential role of genetic correlations”

September, 2014. College of Natural Resources and Environmental Science, Nanjing Agricultural University, Jiangsu Province, China, “The California Phenology Project: species-specific effects of climatic variation on the phenological schedules of wild woody species”

September, 2014. Department of Biology, Zhejiang University, Hangzhou, China, “The joint evolution of mating system, physiology, life history, and floral traits in farewell-to-spring (*Clarkia*: Onagraceae): the potential role of genetic correlations”

September, 2014. College of Natural Resources and Environmental Science, Nanjing Agricultural University, Jiangsu Province, China, “The joint evolution of mating system, physiology, and life history in farewell-to-spring (*Clarkia*: Onagraceae): the potential role of genetic correlations”

October, 2012. Department of Biology, University of Toronto, “The coevolution of mating system, physiology, and life history in farewell-to-spring (*Clarkia*: Onagraceae): why do selfers fare well?”

August, 2012. Department of Biology, University of Stellenbosch, South Africa.

April, 2012. Department of Biology, University of Massachusetts, “The coevolution of mating system, physiology, and life history in farewell-to-spring (*Clarkia*: Onagraceae): why do selfers fare well?”

March 2012. Redwood National Park, “Climate change and the onset of spring: *The California Phenology Project* in Redwood National Park”

January 2012. The Desert Institute, Joshua Tree National Park, “Climate change and the onset of spring: *The California Phenology Project* in Joshua Tree National Park”.

November, 2011. The joint evolution of mating system, physiology, and life history in farewell-to-spring (*Clarkia*: Onagraceae): does selection on life history drive the evolution of selfing? Research seminar series, Sequoia and Kings Canyon National Parks, Three Rivers Headquarters, CA.

May, 2011. The joint evolution of mating system, physiology, and life history in farewell-to-spring (*Clarkia*: Onagraceae): how do selfers fare well? National Center for Ecological Analysis and Synthesis, Santa Barbara, California

October, 2011. The Desert Institute, Joshua Tree National Park, “*The California Phenology Project*: citizen science and the effects of climate change on native California plants in Joshua Tree National Park”.

September, 2011. University of California Natural Reserve System’s Annual Reserve Directors’ Meeting (at Sedgwick Ranch Reserve), “Implementing *The California Phenology Project* in the UCNRS: how citizen science can help to detect the effects of climate change on native California plants.

February, 2010. School of Biological Sciences, Washington State University, Pullman. “The joint evolution of mating system, physiology, and life history in farewell-to-spring (*Clarkia*: Onagraceae): adaptation in a changing world”

October 2008. Department of Biology, University of Calgary, Annual Departmental Retreat. “The joint evolution of mating system, physiology, and life history in farewell-to-spring (*Clarkia*: Onagraceae): how do selfers fare well?”

April 2008. Santa Barbara Audubon Society, Santa Barbara Museum of Natural History. “Timing is Everything: Developing a national (and local!) phenology network to detect the links between climate change and phenology”

March 2008. Department of Ecology and Evolution, Iowa State University. “Mating system evolution within and between species of *Clarkia*: evidence for contrasting genetic constraints in selfers vs. outcrossers”.

September 2007. Department of Biology, Washington State University. “Mating system evolution within and between species of *Clarkia*: evidence for genetic constraints”.

May 2006. Department of Geography, UCSB. “The relationship between seed size, abundance, and habitat preferences among neotropical rainforest species: ecological and evolutionary approaches”.

April, 2006. Northern Arizona University. “Seed size, tree abundances, and habitat preferences among neotropical rainforest species: is seed size neutral?”

July, 2005. Smithsonian Institution, National Museum of Natural History: “Seed size, abundances, and habitat preferences in Peruvian and Ecuadorian rainforests: ecological and evolutionary approaches”

May, 2005. University of Hawaii, Manoa. “Seed size, tree abundances, and habitat preferences among neotropical rainforest species: seeing the forest and the trees”

March, 2005. University of Connecticut, Storrs. “Seed size, tree abundances, and habitat preferences among neotropical rainforest species: seeing the forest and the trees”

Recent Public Outreach Presentations, Lectures, and Workshops

Month/Yr	Title	Meeting/Place
June, 2015	Full-day Professional Development Workshop for Educators: <i>Phenological monitoring as an educational tool in the Sierra Foothills</i>	Sequoia and Kings Canyon National Parks, Ash Mountain Visitors Center
May, 2015	Full-day workshop: <i>The California Phenology Project: tracking the effects of climate change on the seasonal cycles of plants in the Santa Monica Mountains</i>	Santa Monica Mountain National Recreation Area, Black Rock Canyon Visitors Center
April, 2015	Full-day workshop: <i>The California Phenology Project: tracking the effects of climate change on the seasonal cycles of plants at Joshua Tree National Park</i>	Joshua Tree National Park, Black Rock Canyon Visitors Center
January, 2015	Half-day workshop: Establishing monitoring for the <i>California Phenology Project</i> at the Santa Barbara Botanic Garden	Santa Barbara Botanic Garden, Santa Barbara, CA
January, 2015	Full-day Workshop, Madroña March Preserve: <i>The California Phenology Project: the fingerprint of climate change and the seasonal cycles of plants and animals</i>	Los Angeles, California
January, 2015	Full-day Workshop, California Native Plant Society: <i>The California Phenology Project: the fingerprint of climate change and the seasonal cycles of plants and animals</i>	San Jose, California
November, 2014	Introduction to the <i>California Phenology Project: tracking the effects of climate</i>	Santa Barbara Botanic Garden, Santa Barbara, CA

	change on native plant phenology at the Santa Barbara Botanic Garden	
October, 2014	Two-hour presentation for MA and PhD students: <i>Steps and guidelines for success in ecological research and publishing</i>	College of Natural Resources and Environmental Sciences, Nanjing Agricultural University
September, 2014	Full-day Workshop Tejon Ranch Conservancy, for California Master Naturalist Program: <i>The California Phenology Project: tracking the effects of climate on native plants at Tejon Ranch</i>	Tejon Ranch, Lebec, CA
April, 2014	Full-day Workshop, Santa Monica Mountains National Recreation Area: <i>The California Phenology Project: the fingerprint of climate change and the seasonal cycles of plants and animals</i>	Santa Monica Mountains National Recreation Area Headquarters
April, 2014	Full-day Workshop, Redwood National and State Parks for National Park rangers, educators, and resource managers : <i>The California Phenology Project: tracking the effects of climate change on the native flora of Redwood National Park</i>	Arcata, California
April, 2014	Full-day Workshop, for California Educators in the Sierra Nevada foothills: <i>The California Phenology Project: the fingerprint of climate change and the seasonal cycles of plants and animals</i>	Sequoia and Kings Canyon National Park
April, 2014	Evening Public Presentation, Visalia Chapter of the National Audubon Society: <i>The California Phenology Project: the fingerprint of climate change and the seasonal cycles of plants and animals</i>	Visalia, California
January, 2014	Full-day Workshop, Joshua Tree National Park rangers, educators, and resource managers : <i>The California Phenology Project: the fingerprint of climate change and the seasonal cycles of plants and animals</i>	Joshua Tree National Park
September, 2013	Full-day Workshop Yosemite National Park rangers, educators, and resource managers : <i>The California Phenology Project: the fingerprint of climate change and the seasonal cycles of plants and animals</i>	Yosemite National Park
August, 2013	Full-day Training workshop for Field Science Educators , NatureBridge Residential Outdoor School: <i>The California Phenology Project: the fingerprint of climate change and the seasonal cycles of plants and animals</i>	Golden Gate National Recreation Area, Marin Headlands, CA

August, 2013	Full-day Professional Development Workshop for High School teachers : <i>Climate change and the seasonal cycles of plants and animals</i>	Adolfo Camarillo High School, Oxnard, CA
July, 2013	Four-hour Workshop for Botanical Professionals : <i>Climate change and the seasonal cycles of plants and animals: an introduction to the California Phenology Project</i>	National meetings of the Botanical Society of America, New Orleans, Louisiana
March, 2013	Five-hour Training Workshop for Master Naturalists : <i>Climate change and the seasonal cycles of plants and animals: an introduction to the California Phenology Project</i>	Santa Barbara Botanic Garden
October, 2012	Full-day Workshop for environmental educators : <i>Climate change and the seasonal cycles of plants and animals: an introduction to the California Phenology Project</i>	North American Association for Environmental Educators, annual meetings, Oakland, CA
October, 2012	Full-day Follow-up Professional Development Workshop for Middle and High School teachers : <i>Climate change and the seasonal cycles of plants and animals</i>	Santa Monica Mountains National Recreation Area, Satwiwa Ranch Reserve.
June, 2012	Professional Development Workshop for High School teachers : <i>Climate change and the seasonal cycles of plants and animals</i>	Instructor, UCSB Extension class, June 29 and June 30.
June, 2012	Professional Development Workshop for Middle School teachers : <i>Climate change and the seasonal cycles of plants and animals</i>	Instructor, UCSB Extension class, June 22 and June 23.
June, 2012	Introduction to the <i>California Phenology Project</i> and the <i>USA-National Phenology Network</i> : monitoring the effects of climate change on the seasonal cycles of wild species	Instructor, 6-hour workshop, Lassen Volcanic National Park
June, 2012	Introduction to the <i>California Phenology Project</i> and the <i>USA-National Phenology Network</i> : monitoring the effects of climate change on the seasonal cycles of wild species	Instructor, 6-hour workshop, Lava Beds National Monument
May, 2012	Introduction to the <i>California Phenology Project</i> and the <i>USA-National Phenology Network</i> : monitoring the effects of climate change on the seasonal cycles of wild species	Instructor, 6-hour workshop, Ken Norris Rancho Marino UC Natural Reserve
April, 2012	The <i>California Phenology Project</i> : monitoring the effects of climate change on the seasonal cycles of California plants – introduction, protocols, and field practice	Instructor, 6-hour workshop, annual meetings of the <i>Association for Environmental and Outdoor Educators</i> , Camp Hess Kramer, Malibu, CA
March, 2012	The <i>California Phenology Project</i> : monitoring the effects of climate change on the seasonal cycles of California plants	Instructor, 2 3-hour workshops, Redwood State and National Parks

January, 2012	The <i>California Phenology Project</i> : monitoring the effects of climate change on the seasonal cycles of California plants	Presentation at the annual meeting of the California Native Plant Society, San Diego, CA
January, 2012	The <i>California Phenology Project</i> : monitoring the effects of climate change on the seasonal cycles of California plants – introduction, protocols, and field practice	Instructor, 6-hour workshop, Division of Education and Interpretation, Joshua Tree National Park, CA
January, 2012	The <i>California Phenology Project</i> : monitoring the effects of climate change on the seasonal cycles of California plants – introduction, protocols, and field practice	Instructor, 2-hour evening seminar, The Desert Institute, Joshua Tree National Park, CA
November, 2011	The <i>California Phenology Project</i> at John Muir National Monument: monitoring the effects of climate change on the seasonal cycles of California plants	1 full-day training workshop at John Muir National Monument
October, 2011	The <i>California Phenology Project</i> : monitoring the effects of climate change on the seasonal cycles of native plants in the UC Reserves – introduction, protocols, and field practice	Instructor, 3-hour workshop at the annual retreat for the UC Natural Reserve Managers, held at Sedgwick Ranch Reserve, UCSB
October, 2011	The <i>California Phenology Project</i> at Joshua National Park: monitoring the effects of climate change on the seasonal cycles of native desert plant species – introduction, protocols, and field practice	Presentation for The Desert Institute seminar series, Joshua Tree National Park, Twenty-Nine Palms, CA
September, 2011	The <i>California Phenology Project</i> at the Santa Monica Mountains National Recreation Area: monitoring the effects of climate change at Sandstone Peak – establishing long-term phenological monitoring and field practice	1 full-day training workshop at Sandstone Peak, Santa Monica Mountains National Recreation Area
September, 2011	The <i>California Phenology Project</i> : monitoring the effects of climate change on the seasonal cycles of widespread California plant species – introduction, on-line resources, protocols, and field practice	Presentation at the annual meetings of the California Native Plant Society
July, 2011	The <i>California Phenology Project</i> at Joshua National Park: monitoring the effects of climate change on the seasonal cycles of native desert plant species – introduction, on-line tools protocols, and field practice	1 full-day training workshop at Lassen Volcanoes National Park, CA
July, 2011	The <i>California Phenology Project</i> at Sequoia and Kings Canyon National Parks: monitoring the effects of climate change on the seasonal cycles of Sequoia & Kings Canyon native plants – introduction, on-line tools, protocols, and field practice	1 full-day training workshop at Sequoia and Kings Canyon National Park, CA

June, 2011	The <i>California Phenology Project</i> at Golden Gate National Recreation Area: monitoring the effects of climate change on the seasonal cycles of native species in Golden Gate Park – introduction, protocols, and field practice	1 full-day training workshop at Golden Gate National Recreation Area, San Francisco, CA
June, 2011	The <i>California Phenology Project</i> at Redwood State and National Parks: monitoring the effects of climate change on the seasonal cycles of native plants species in Redwood National Park – introduction, on-line tools, protocols, and field practice	1 full-day training workshop at Redwood State and National Parks
May, 2011	The <i>California Phenology Project</i> : monitoring the effects of climate change on the seasonal cycles of native plant species in the Santa Monica Mountains	3 full-day training workshops at Santa Monica Mountains National Recreation Area, Thousand Oaks, CA
April, 2011	The <i>California Phenology Project</i> : monitoring the effects of climate change on the seasonal cycles of native plant species in Joshua Tree National Park	1 full-day training workshop at the Desert Institute at Joshua Tree National Park, 29 Palms, CA
August 14, Sept 10, September 18, and October 1, 2010	Four Workshops: Planting the Seed for Citizen Science: Climate Change and Phenology Workshops for Educators and Scientists in Southern California	Santa Monica Mountains National Recreation Area

RECENT CONTRIBUTED PAPERS:

March, 2015. Species-specific phenological responses to climatic conditions: results from the California Phenology Project. Parks for Science meetings, National Park Service, Oakland, CA

January, 2015. Phenological responses to climatic variation among California native plants: inter-annual and spatial patterns detected by the California Phenology Project. California Native Plant Society annual meetings, Special Session California's Changing Climate: Conservation in the Age of Uncertainty, San Jose, CA

August, 2014. Phenological patterns along biogeographic gradients: a case study from the California Phenology Project. K. Gerst, A. Evenden, and **S. J. Mazer**. Ecological Society of America, Sacramento, CA.

August, 2014. Associations between outcrossing rate and photosynthesis within populations of two mixed-mating *Clarkia* species. C. T. Ivey, L. S. Dudley, A. A. Hove, S. K. Emms, and **S. J. Mazer**. Ecological Society of America, Sacramento, CA.

August, 2014. Evidence for nanoparticle induced phototoxicity in a soil-grown wildflower. J. R. Conway, S. J. Mazer, and A. A. Keller. American Chemical Society, San Francisco, CA.

August, 2013. *Project Baseline*: a living genome bank to capture evolution in action. J. Etterson, S. Franks, **S. J. Mazer**, R. Shaw, A. Weis, M. Jahnke, K. Updegraff, and N. Gordon. Ecological Society of America, Minneapolis, MN.

- July, 2013. Instantaneous and long-term water use efficiencies in two pairs of *Clarkia* taxa with contrasting mating systems. L. A. Dudley, S. K. Emms, A. A. Hove, A. Verhoeven, and **S. J. Mazer**. Botanical Society of America, New Orleans, Louisiana.
- July, 2013. Natural selection on phenological traits across the biogeographic range of a California annual wildflower: independent effects on fitness of first flowering date and flowering synchrony B. P. Haggerty and **S. J. Mazer**. Botanical Society of America, New Orleans, Louisiana.
- June, 2013. Are photosynthetic rates and outcrossing rates associated within populations? A test using two mixed-mating *Clarkia* taxa. C. T. Ivey, L. S. Dudley, A. A. Hove, S. K. Emms, **S. J. Mazer**. Society for the Study of Evolution, Snowbird, Utah.
- January, 2013. The California Phenology Project: a case study of public participation in scientific research. K. Gerst, E. M. Matthews, **S. J. Mazer**, A. Evenden, C. Brigham, A. Forrestel, B. Haggerty, S. Haultain, J. Hoines, S. Samuels, and F. Villalba. George Wright Society Conference, Denver, CO.
- October, 2012. Spectral expressions of phenology: an exploratory data analysis of plant-level observations in a Mediterranean climate ecosystem. K. L. Roth, D. A. Roberts, **S. J. Mazer**, and C. D'Antonio. Phenology 2012, Milwaukee, Wisconsin.
- August, 2012. Building a phenological monitoring network in California as a model for the nation. Matthews, E., **S. Mazer**, A. Evenden, K. Gerst, C. Brigham, J. Coles, S. Fritzke, B. Haggerty, S. Haultain, J. Hoines, S. Samuels, K. Thomas, F. Villalba and J. Weltzin. Ecological Society of America, Portland, OR.
- August, 2012. Implementing a regional phenology network: the California Phenology Project. Gerst, K., E. Matthews, **S. Mazer**, A. Evenden, C. Brigham, J. Coles, S. Fritzke, B. Haggerty, S. Haultain, J. Hoines, S. Samuels, F. Villalba and J. Weltzin. Ecological Society of America, Portland, OR.
- August, 2012. Predicting species presence-absence as a function of edaphic variation: implications for restoration of California native grasslands. K. L. Hufford, J. Schimel and **S. J. Mazer**. Ecosummit meeting, Portland, OR.
2012. The California Phenology Project: Tracking nature's pulse to assess climate change response across California landscapes and national parks. Liz Matthews, **Susan J. Mazer**, Angela Evenden, Christy Brigham, and Sylvia Haultain. California Native Plant Society, San Diego, CA.
2011. Linking species to science in a phenology monitoring project: The California Phenology Project case study. Kathryn Thomas, Jake Weltzin, Angela Evenden, **Susan J. Mazer**, Liz Matthews, Abe-Miller Rushing. Ecological Society of America, Austin, TX.
2011. From elegant to slender, does phenotypic selection on leaf physiological traits predict the divergence between *Clarkia sister species*, *C. unguiculata* and *C. exilis*? Leah S. Dudley, **Susan J. Mazer**, Alisa A. Hove. Society for the Study of Evolution, St. Louis, MO.
2011. Physiological Impact of Metal Oxide Nanoparticles in Soil-Grown *Clarkia* (Onagraceae). Jon R. Conway, Beng Joo Reginald Thio, **Susan J. Mazer**, Arturo A. Keller. 241st National Meeting of the American Chemical Society, Anaheim, CA.

2009. A phenological assessment of California: Integrating multiple data sources and the implications for statewide analyses. (authors: Keely L. Roth, Brian P. Haggerty, Eliza S. Bradley, Michael Toomey, **Susan J. Mazer**, Dar A. Roberts). American Geophysical Union, San Francisco, CA.
2009. Bats and fruits: ecological association or mutual evolution. Tatyana A. Lobova and **Susan J. Mazer**. North American Society of Bat Research, Portland, OR
2009. Sustainable agriculture along the forest edge: ecosystem services and forest conservation at Kaeng Krachan National Park, Thailand. David Greenberg, **Susan Mazer**, Wallapak Polasub, Adcharaporn Pagdee. Association for Tropical Biology and Conservation, Morelia, Mexico
2007. Association for Tropical Biology and Conservation, Morelia, Mexico: “The relationship between breeding system and seed size in a neotropical flora: testing evolutionary hypotheses.”
2006. Association for Tropical Biology and Conservation, Kunming, China: “The relationship between breeding system and seed size in a neotropical flora: dioecious species have larger seeds than their hermaphroditic counterparts.”
2006. Society for the Study of Evolution, Stony Brook, NY: “Evolutionary trajectories in the gunsite *Clarkia*: independent evolution or genetic constraints?”
2005. Association for Tropical Biology and Conservation, Uberlandia Brazil: “Seed size, abundances, and habitat preferences in Peruvian and Ecuadorian rainforests: explaining the maintenance of seed size variation”
2003. Sex expression in selfing vs. outcrossing *Clarkia* species; developmental variation. International meeting of the Society for the Study of Evolution. Chico State University, California.
2002. Fickle sex expression in selfing vs. outcrossing *Clarkia* species: the evolution of ontogenetic trajectories for floral traits. International meeting of the Society for the Study of Evolution, Champaign-Urbana, Illinois
2001. The evolution of winged seeds in *Spergularia marina* (Caryophyllaceae): to wing or not to wing? International meeting of the Society for the Study of Evolution, Knoxville, Tennessee.
1998. Does the neighborhood matter? The effects of neighbors on gender expression in *Spergularia marina* (Caryophyllaceae). (with Dr. Veronique Delesalle). Ecological Society of America meetings, Baltimore, Maryland.
1998. Size-dependent sex allocation in *Clarkia unguiculata* (Onagraceae): changes within and among genotypes. International meeting of the Society for the Study of Evolution, Vancouver, British Columbia.
1998. Response to selection on primary sexual investment in *Spergularia marina* (Caryophyllaceae): the accessory traits. (with Dr. Veronique Delesalle). Society for the Study of Evolution meetings, Vancouver, British Columbia.

1997. Genetic constraints on the evolution of sex allocation in plants: responses to selection on gamete production in *Spergularia marina* (Caryophyllaceae). Society for the Study of Evolution meetings, Boulder, Colorado.

1996. Nutrient levels and salinity affect gender and floral traits in the autogamous *Spergularia marina*. With Dr. Veronique Delesalle, Ecological Society of America meetings.

1995. Phenotypic and Genetic Variation Within and Among Floral and Gender Traits in *Spergularia marina* (Caryophyllaceae): ontogenetic and population effects. Petit Pois Deridé National Population Biology Meetings, Lyon, France.

1994. Variation and Covariation among Floral and Gender Traits in *Spergularia marina* (Caryophyllaceae): ontogenetic and population effects. Society for the Study of Evolution, Athens, Georgia.

1994. Floristic Composition, Soil Quality and Litter Decomposition within and among Terra Firme and Floodplain Habitats in Manu National Park, Peru. Association for Tropical Biology, Guadalajara, Mexico.

PROFESSIONAL SOCIETY MEMBERSHIPS:

American Association for the Advancement of Science

American Institute of Biological Sciences

American Society of Naturalists

Association for Tropical Biology

Botanical Society of America

Ecological Society of America

Society for the Study of Evolution

European Society of Evolutionary Biology

REVIEWS FOR SCIENTIFIC JOURNALS and FUNDING AGENCIES (last 3 years):

American Journal of Botany, Evolution, Evolutionary Ecology, International Journal of Plant Sciences, Philosophical Transactions of the Royal Society, Proceedings of the Royal Society, B. Also, ~4 reviews per year for the National Science Foundation Population and Ecological Processes Program Panel and Ecology Program Panel.

OTHER RECENT PROFESSIONAL CONTRIBUTIONS & ADMINISTRATIVE DUTIES

International

2014-2015 Special Issue Editor, American Journal of Botany, co-editing (w/Dr. Joseph Williams, University of Tennessee) a special issue on The Ecology and Evolution of Pollen Performance.

2013 - Editor, *International Journal of Plant Sciences*

2003 - 2006 Editorial Board Member, *Madroño*

1999 - 2001 Executive Vice-President and Council Member, Society for the Study of Evolution

- 1997 - 2000 Editorial Board Member, *Journal of Evolutionary Biology*
- 1997 Served on “Habilitation” promotional committee of Dr. Isabelle Dajoz (University of Paris VI, Jussieu, Laboratoire d’Ecologie, Paris, France).
- 1998 Served on Ph.D. Committee of Horacio Paz, a student at the Universidad Nacional Autonoma de Mexico.
- 1997 Served on “Habilitation” promotional committee of Dr. Jacqui Shykoff (University of Paris VI, Jussieu, Laboratoire d’Ecologie, Paris, France).
- 2000 Served on “Habilitation” promotional committee of Dr. John D. Thompson (Centre d’Ecologie Fonctionnelle et Evolutive, Centre National de Recherche Scientifique, Montpellier, France)
- 1995 – 1998 Served on Ph.D. Committees of five students at the Université de Paris XI, the Université of Montpellier, and the Université Joseph Fourier, Grenoble: Luc Gigord, Laurence Affre, Nathalie Escaravage, Agnes Mignot, and Claudie Doums

National Committees and Advisory Boards

- 2005–present Scientific Advisory Board, Ecological Flora of California.
<http://ucjeps.berkeley.edu/efc/efc-board.html>
- 2012 Chair, National Science Foundation, Division of Environmental Biology (DEB), Committee of Visitors, charged with evaluating and reporting on the last three years of programming, review practices, management and funding of the DEB.
- 2012 National Science Foundation, Division of Environmental Biology, Community Ecology Program; served on pre-proposal review panel.
- 2012-present National Ecological Observation Network. Plant Phenology Working Group: technical working group with diverse experience in plant phenological measurements, analysis, process-based modeling and scaling is necessary to inform the development of science design, protocols, workflows, quality assurance and quality control procedures, and data products resulting from NEON measurements. The PPWG provides a bridge to and a conduit for input from the broader scientific and technical community in ecological research and specifically related to plant phenology research. The overarching objective is to ensure that the design of plant phenology component of the observatory is based upon a sound scientific rationale.
- 2010-present Member, Advisory Committee of the National Phenological Network, organizing a nationwide effort to monitor seasonal changes in the flowering times of widespread and local plant species, and their responses to climate change.

- 2007-2009 Vice Chair, Executive Committee of the National Phenological Network, designing and organizing a nationwide effort to monitor seasonal changes in flowering time of widespread and local plant species, particularly in response to climate change.
- 2007-2009 Co-Director, Education, Citizen Science, and Outreach Committee of the National Phenology Network, designing and supervising a national effort to integrate phenological studies into curricula from K-12 through the university level.
- Mar 2007. Search committee member for the nationwide search for the Executive Director of the U.S. National Phenology Network.
- Feb 2007. Workshop co-organizer (NSF funded): *Project Baseline*: a plan for the collection and preservation of seeds for future evolutionary studies to monitor evolutionary change.
- Nov 2006. Workshop participant: Data Center Planning & Development for the archiving of ecological data and metadata. National Center for Ecological Analysis and Synthesis.
- Oct 2006. Workshop participant: U.S. National Phenology Network to design and plan a coast-to-coast network for the monitoring of phenological progression.
- Apr 2006. Served on Advisory Panel to evaluate the Science Plan of the National Science Foundation's proposed National Ecological Observatory Network (NEON).
- March 2006. Workshop participant: U.S. National Phenology Network to design and plan a coast-to-coast network for the monitoring of phenological progression.
- Aug 2005. Workshop observer for the National Science Foundation: U.S. National Phenology Network to design and plan a coast-to-coast network for the monitoring of phenological progression.
- Nov 2003. Served on Advisory Panel for Evolutionary and Population Ecology competition of the National Science Foundation.
- June 2002 Participated in a 4-day writing conference for "Teaching about the Nature of Science and Biological Evolution" at the Biological Sciences Curriculum Study in Colorado Springs, Colorado. This conference developed text for three teaching modules for the high school and freshman college levels, illustrating the concepts and process of evolution by natural selection.
- 2000 - 2002 Serving on NSF-supported workshop to evaluate desirability and appropriateness of funding an Evolutionary Synthesis Center
- 2000 - Advisory Board for the American Institute of Biological Sciences' BioOne initiative to provide electronic access to journals of societies that are members of the BioOne Consortium

- July 2000. Served on NSF's Committee of Visitors Panel to evaluate activities and fairness of the Systematics and Population Biology Programs from 1996 -1999.
- May 1999. Served on Advisory Panel for the Integrated Research Challenge grant competition of the National Science Foundation.
- October 1997. Served on the Population Biology Advisory Panel of the National Science Foundation.
- June 1996. Participated in a Site Visit with the Research Training Grant Advisory Panel for the Program in Population Biology of the National Science Foundation
- October 1994. Served on the Population Biology Advisory Panel of the National Science Foundation.
- 1992 Served on U. S. national subcommittee of the “Steering Committee for the Systematics Agenda 2000”, investigating research trends and priorities within systematic biology.

University Committees

- 2017-present Member, Undergraduate Council
- 2017-present Member, UCSB Campus-wide Sustainability Committee
- 2012-2013 Vice Chair, UCSB Committee on Diversity and Equity
- 2015-present Member, Executive Board, Institute for the Study of Ecological and Evolutionary Climate Impacts, Multicampus Research Program Initiative (University of California Office of the President)
- 2007-2009 Chair, Committee on Committees (charged with populating all UCSB Academic Senate Committees)
- 2008-2009 Chair, EEMB Undergraduate Curriculum Committee
- 2008-2009 Chair, EEMB Undergraduate Curriculum Reform & Restructuring Committee
- 2008-2009 Member, Advisory Board, Network for Experimental Research on Evolution (NERE), a University of California Multicampus Research Program
- 2007 Fall quarter, Member, Faculty Legislature of UCSB’s Academic Senate
- 2002 Advisory Committee on Pay Equity at UCSB
- 2001 Chair, Committee to Evaluate the Risk of Exotic Species at UCSB Natural Reserves.
- 2000 -2002 Chancellor's Advisory Committee on the Status of Women
- 1996 Member, Committee on Organizational Structure (to find ways to reduce campus-wide expenses while increasing efficiency in the following activities: Computing, Shops, Publication, Library)
- 1991 - 1994 Chair, Advisory Committee for the Coal Oil Point Natural Reserve
- 1992 - 1994 Member, Faculty Legislature - Area V
- 1993 - 1994 Member, UCSB Student Affairs Council
- 1990 - 1994 Member, UCSB Campus Wetlands Committee
- 1989 - 1994 Member, UCSB Natural Reserve System Advisory Committee

1992 Participant in UC-wide Conference on the Report of the University Task Force on Faculty Rewards (Pister Report)

Departmental (Ecology, Evolution & Marine Biology)

2016-present Member, Graduate Affairs Committee
 2014-2017 Member, EEMB Resources Committee
 2013-present Chair, EEMB/MCDB Greenhouse Committee
 2006-present Curator of Botany, Cheadle Center for Biodiversity & Ecological Restoration
 2013-2015 Diversity/Equal Opportunity Committee
 2013-2015 Storeroom Oversight Committee
 2007-2010 Vice Chair, Department of Ecology, Evolution & Marine Biology
 2008-2009 Chair, EEMB Undergraduate Curriculum Committee
 2008-2009 Chair, EEMB Undergraduate Curriculum Reform & Restructuring Committee
 2008-2012 Member, EEMB Greenhouse Development Committee
 2005-2012 Member, EEMB Greenhouse Oversight Committee
 2007-2009 EEMB Chair's Advisory Committee
 2007-2012 Member, Cheadle Center for Biodiversity & Ecological Restoration; Oversight Committee member
 1997 - 1999 Chair and Organizer of Weekly Research Seminar Series
 1997 - 1999 Life Sciences Computer Facility Committee
 1996 - 1999 Committee for the Evaluation and Appointment of Adjunct Faculty
 1993 - 1995 Department of Biological Sciences Resources (Budget and Space) Committee
 1993 - 1994 Departmental Introductory Course Committee
 1993 - 1995 Departmental Advisor and Liaison for Forestry/Agriculture
 1993 Departmental Reorganization Committee (Administering the Split between Ecology, Evolution & Marine Biology and Cell, Developmental & Molecular Biology)
 1992 - 1997 Greenhouse Oversight Committee
 1993 New Department of Ecology, Evolution and Marine Biology Instructional Planning Committee
 1992-1993 Organization and Steering Committee of the Life Sciences Computing Facility
 1991-1992 Departmental Operations and Services Planning Committee

CURRENT Graduate Degree Committees

PhD Committees

Student	Yr Deg. Compl.	Chair/Member	Optional Info (e.g., Current Employment)
Natalie Rossington	Expected 2020	Chair	EEMB PhD student
Kristen Peach	Expected 2018	Chair	EEMB PhD student
José Waterton	Exp. 2019	Member	UCSD PhD student (Elsa Cleland, Chair of Committee)
Brian Haggerty	Exp. 2017	Member	EEMB M.S. student
Nathan Derieg	Exp. 2017	Member	EEMB PhD student

PEER-REVIEWED PUBLICATIONS:

1. **Mazer, S. J.** and B. H. Tiffney. 1982. Fruits of *Wetherellia* and *Palaeowetherellia* (?Euphorbiaceae) from Eocene sediments in Virginia and Maryland. *Brittonia* 34: 300-333.
2. **Mazer, S. J.**, A. A. Snow and M. L. Stanton. 1986. Fertilization dynamics and parental effects upon fruit development in *Raphanus raphanistrum*: consequences for seed size variation. *American Journal of Botany* 73: 500-511.
3. **Mazer, S. J.** 1987. Parental effects on components of seed development and seed yield in *Raphanus raphanistrum*: implications for natural and sexual selection. *Evolution* 41: 355-371.
4. **Mazer, S. J.** 1987. The quantitative genetics of life-history characters in *Raphanus raphanistrum*: ecological and evolutionary consequences of seed weight variation. *American Naturalist* 130: 891-914.
5. **Mazer, S. J.** 1987. Maternal investment and male reproductive success in angiosperms: parent-offspring conflict or sexual selection? *Biological Journal of the Linnean Society* 30: 115-133.
6. Snow, A. A. and **S. J. Mazer**. 1988. Gametophyte selection in *Raphanus raphanistrum*: a test for heritable variation in pollen competitive ability. *Evolution* 42: 1065-1075.
7. Nakamura, R. R., M. L. Stanton and **S. J. Mazer**. 1989. Effects of mate size and mate number on male reproductive success in plants. *Ecology* 70: 71-76.
8. **Mazer, S. J.** 1989. Ecological, taxonomic, and life history correlates of seed mass among Indiana Dune angiosperms. *Ecological Monographs* 59: 153-175.
9. **Mazer, S. J.** 1989. Genetic associations among life history and fitness components in wild radish: controlling for maternal effects on seed weight. *Canadian Journal of Botany* 67: 1890-1897.
10. **Mazer, S. J.**, R. R. Nakamura and M. L. Stanton. 1989. Seasonal changes in components of male and female reproductive success in *Raphanus sativus* L. (Brassicaceae). *Oecologia* 81: 345-353.
11. **Mazer, S. J.** 1990. Seed mass variation of Indiana Dune genera and families: taxonomic and ecological correlates. *Evolutionary Ecology* 4: 326-358.
12. Byrne, M. and **S. J. Mazer**. 1990. The effect of position on fruit characteristics, and relationships among components of yield in *Phytolacca rivinoides* (Phytolaccaceae). *Biotropica* 22: 353-365.
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