

SARAH M. EPPLEY

EDUCATION

Doctor of Philosophy in Population Biology 2000

Population Biology Graduate Group, Center for Population Biology, University of California, Davis

Master of Science in Population Biology 1995

Population Biology Graduate Group, Center for Population Biology, University of California, Davis

Bachelor of Arts in Biology, Minor in Politics 1991

University of California, Santa Cruz

EMPLOYMENT

Assistant Professor, Department of Biology, Portland State University (PSU), 2005 – present.

Postdoctoral Fellow, School of Biological Sciences, Victoria University, Wellington, New Zealand, 2004 – 2005.

Postdoctoral Fellow, Department of Plant Sciences, University of Oxford, UK, 2002 – 2004. Analysis of genetic and ecological factors shaping mating system strategies in the plant genus *Mercurialis* in collaboration with Dr. John Pannell.

Research Assistant, University of California, Davis, 1995 – 1996. Stress tolerance in plants: a multi-generational selection experiment using *Sinapis arvensis* with Dr. M. Stanton and Dr. Barbara Roy.

Research Assistant, University of California, Davis, 1992 – 1993. Molecular characterization of ADPase in *Gossypium hirsutum* with Dr. Thea Wilkins.

Laboratory Technician, University of California, Berkeley, 1991 – 1992. Establishment of *Hordeum vulgare* and *Zea mays* tissue culture lines with Dr. Peggy LeMaux.

Research Assistant, University of California, Santa Cruz, 1991. Analysis of wetland communities and revision of wetland delineation guidelines for California, with Dr. Robert Curry.

Smithsonian Research Fellow, Smithsonian Environmental Research Center, 1990. Analysis of the effects of increased CO₂ on salt marsh communities with Dr. Bert Drake and Dr. Felix Dakora.

Student Research Assistant, University of California, Santa Cruz, 1988 – 1989. Development of circadian clock mutants in *Neurospora* with Dr. Jerry Feldman.

Student Research Assistant, School for Field Studies, Costa Rica, 1988. Analysis of genetic color polymorphisms in tropical frog species with Dr. Brian Bock.

GRANTS, AWARDS, AND FELLOWSHIPS

International Postdoctoral Research Fellowship, U.S. National Science Foundation (NSF), 2002 – 2004

Science to Achieve Results (STAR) Fellowship, U.S. Environmental Protection Agency, 1997 – 1999

Dissertation Improvement Grant, NSF, 1996 – 1998

Research Grants, Center for Population Biology, University of California, Davis, 1994, 1995, 1996

Research Grants, University of California Bodega Marine Laboratory, 1994, 1995, 1996

Plant Molecular Biology Graduate Fellowship, NSF (Declined), 1993 – 1996

Biotechnology Fellowship, U.S. Department of Agriculture, 1992 – 1993

Phi Beta Kappa, 1991

Honors in Biology, Honors from Porter College, University of California, Santa Cruz, 1991

Smithsonian Summer Fellowship, Smithsonian Environmental Research Center, 1990

PROFESSIONAL MEMBERSHIP

The Ecological Society of America

American Bryological and Lichenological Society

The American Society of Naturalists

PUBLICATIONS

Taylor, P.J., Eppley, S. M., and L. K. Jesson. 2007. Sporophytic inbreeding depression occurs in a species with separate sexes but not in a species with combined sexes. *American Journal of Botany* *in press*

Eppley, S. M. and J. R. Pannell. 2007. Density-dependent self-fertilization and male versus hermaphrodite siring success in an androdioecious plant. *Evolution* *in press*

Tsyusko, O. V., Peters, M. B., Tuberville, T. D., Hagen, C., Eppley, S. M., and T. C. Glenn. 2007. Microsatellite markers isolated from saltgrass (*Distichlis spicata*). *Molecular Ecology Notes* *in press*

Eppley, S. M. and J. R. Pannell. 2007. Patterns of occupancy and abundance in an annual plant: testing a metapopulation model for the distribution of sexual systems. *American Naturalist* 169: 20-28

Eppley, S. M., Taylor, P. J. and L. K. Jesson 2007. Self-fertilization in mosses: a comparison of heterozygote deficiency between species with combined versus separate sexes. *Heredity* 98: 38-44

Eppley, S. M. 2006. Females make tough neighbors: sex-specific competitive effects in seedlings of a dioecious grass. *Oecologia* 146: 549-554

Eppley, S. M. 2005. Spatial segregation of the sexes and nutrients affect reproductive success in a dioecious, wind-pollinated grass. *Plant Ecology* 181: 179-190

Pannell, J. R., Dorken, M. E. and Eppley, S. M. 2005. Haldane's Sieve in a metapopulation: sifting through plant sexual polymorphisms. *Trends in Ecology and Evolution* 20: 374-379.

Pannell, J. R. and Eppley, S. M. 2004. Intraorganismal genetic diversity: Is it a useful concept? *Journal of Evolutionary Biology* 17: 1180-1181.

Eppley, S. M. 2001. Gender-specific selection during early life-history stages in the dioecious grass *Distichlis spicata*. *Ecology* 82(7): 2022-2031.

Eppley, S. M., and E. H. Wenk. 2001. Reproductive biomass allocation in the dioecious perennial *Acanthosicyos horrida*. *South African Journal of Botany* 67: 10-14.

Roy, B. A., Stanton, M. L., and S. M. Eppley. 1999. Effects of environmental stress on leaf hair density and consequences for selection. *Journal of Evolutionary Biology* 12: 1089-1103.

Eppley, S. M., Stanton, M. L., and R. K. Grosberg. 1998. Intrapopulation sex ratio variation in the salt grass *Distichlis spicata*. *American Naturalist* 152 (5): 659-670.

PUBLICATIONS – IN PREP

- Eppley, S. M. and J. R. Pannell. 2007. Lack of inbreeding depression and the maintenance of dioecy in *Mercurialis annua*. Evolution
- Pannell, J. R., Eppley, S. M., and R. Berjano. 2007. Variation in sex allocation amongst patches, populations and regions of an annual plant: testing the metapopulation model. American Naturalist
- Eppley, S. M. and L. K. Jesson. 2008. Moving to mate: the evolution of separate and combined sexes in multicellular organisms. Journal of Evolutionary Biology
- Eppley, S. M. and L. K. Jesson. 2008. Intraorganismal selection and the evolution of mating systems. Biology Letters
- Eppley, S. M. 2008. A sex-specific mutualistic interaction before sexual maturity in a dioecious grass. Ecology Letters
- Eppley, S. M. 2008. Environmental stress and sex in bryophytes. Oecologia

PEDAGOGICAL PUBLICATIONS

- Mangel, M., Switzer, P. and S. Eppley. 1996. An Ecological Field Project Book. First Edition.
<http://people.ucsc.edu/~msmangel/field.pdf>
- Mangel, M., Switzer, P. and, S. Eppley. 1996. An Ecological Problem Book. Fifth Edition.
<http://people.ucsc.edu/~msmangel/probbook.pdf>