

Michael Reagon
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EDUCATION

- Ph.D. Department of Evolution, Ecology and Organismal Biology
The Ohio State University, December 2006
Advisor: Dr. Allison Snow
Dissertation: “Mechanisms facilitating and evolutionary consequences of gene flow in two crop-wild hybrid complexes: sunflower and rice”
- B.S. Biological Sciences, 1995
Antioch College, Yellow Springs, Ohio
Undergraduate thesis: “Plant breeding systems as determinants of population genetic structure”

FELLOWSHIPS AND GRANTS

- The Ohio State University Presidential Fellowship, 2005-2006
- Janice Beatley Herbarium Travel Grant, 2000, 2003
- The Ohio State University Graduate Fellowship, 1999-2000
- Howard Hughes Undergraduate Research Grant, 1993

RESEARCH EXPERIENCE

Graduate Research Assistant 2001 to present

Department of Evolution, Ecology and Organismal Biology,

- Field– set up and supervised experimental plots of sunflower in Colorado and Ohio. Designed survey methods for determining frequency of crop-wild hybrids in wild sunflower populations. Collected wild rice samples in Vietnam for genetic diversity survey.
- Laboratory – used various molecular markers including SSR, ISSR, and RAPDS, and familiar with sequencer (ABI 3100) and gel electrophoresis.
- Data analysis – used SAS, Minitab, EXCEL, and R/S for analysis of field experiments and genetic diversity data. Wrote R code for demographic model in sunflowers and coalescent simulations. I have also used many programs for analysis of genetic data, including: Arlequin, FSTAT, Bayesass, BAPS, structure and PAUP.

TEACHING EXPERIENCE

Teaching Assistant

The Ohio State University (2001-present)

- Instructor of record: Biology 101 Ohio State extension campus at Newark, OH – Autumn 2006.
- Supervised undergraduate independent research project titled “Can invasive plant species facilitate pollination and increase fecundity of native Jewel weed (*Impatiens capensis*)?” – Summer 2005
- Head Teaching assistant, Ecology Lab (EEOB 413) – Summer, Autumn 2004
- Evolution (EEOB 410) – taught four quarters
- Ecology (EEOB 413) - Winter 2002
- Introduction to Plant Biology (PB101) – Spring 2001, Summer 2002

RELATED WORK EXPERIENCE

INTERNSHIPS

FALL 1994

U.S. Forest Service Intern, Denver CO and Corvallis OR

Worked on air-quality control project using lichens as biomonitors

Assembled field notes, created digital maps, and prepared lichen specimens

SPRING 1993

Student Researcher, Reserva Volta Velha, Santa Catarina, Brazil

Wrote management plan for a 500 HA private nature preserve, to sustainably harvest an agronomically important palm (*Euterpe edulis*) and taught English

OTHER WORK EXPERIENCE

1997-1999

American Environmental, Inc.; Wright Patterson Air force Base, Dayton, OH

OSHA 40 certified hazardous waste handler for environmental consulting company

Responsible for the removal of hazardous and laboratory waste from Wight Patterson AFB.

PUBLICATIONS

PEER REVIEWED ARTICLES

Reagon, M. and A. A. Snow. 2006. Cultivated *Helianthus annuus* (Asteraceae) as a genetic “bridge” to weedy sunflower populations in North America. *American Journal of Botany* 93: 127-133.

Snow, A. A., D. P. Pilson, L. Rieseberg, M. Paulsen, N. Pleskac, M. Reagon, D. Wolf, and S. Selbo. 2003. A Bt transgene reduces herbivory and enhances fecundity in wild sunflowers. *Ecological Applications* 13: 279-286.

CONTRIBUTED PRESENTATIONS

Snow, A. N. T. Lang, B. C. Buu, M. B. Cohen, M. R. Reagon, S. M. Quilloy, L. P. Lan, and L. M. Chau. Crop-weed and crop-wild hybridization in rice in Vietnam: a

progress report. Proceedings of the 8th International Biosafety Symposium, Montpellier, France, September 27, 2004.

Reagon, M., S. M. Quilloy, A. A. Snow, and M. Cohen. Estimating the genetic diversity of perennial wild rice *Oryza rufipogon* in the Mekong Delta of Vietnam. Annual meeting of the Botanical Society of America, Snow Bird, Utah, USA, August 2, 2004.

Johnston, J., M. Reagon, and A. A. Snow. Potential for gene flow from cultivated sorghum to shattercane (both *Sorghum bicolor* ssp. *bicolor*) in the Midwestern US. 88th annual meeting of the Ecological Society of America, Savannah, Georgia, USA, August 3, 2003.

Snow, A. A., D. P. Pilson, L. Rieseberg, M. Paulsen, N. Pleskac, M. Reagon*, D. Wolf, and S. Selbo. A Bt transgene reduces herbivory and enhances fecundity in wild sunflowers. Annual meeting of the Ecological Society of America, Tuscon, AZ, USA, August 4, 2002. (*presented by M. Reagon)

Reagon, M., A. A. Snow, and L. S. Spencer, The potential for volunteer sunflowers to start populations and exchange genes with weedy *Helianthus annuus*. 42nd annual meeting of the Weed Science Society of America, Reno, NV, USA February 11, 2002.

INVITED/COMMUNITY PRESENTATIONS

Reagon, M. 2003. "Ecological risks of transgenic crop species." Guest speaker at meeting of a group of Ohio State emeriti faculty interested in scientific and social issues, Columbus, OH.

Reagon, M. 2002. "Transgene escape and the organic farmer" Guest speaker at meeting of the Family Farm Alliance of Ohio, Columbus OH.

Reagon, M. 2001. "Consequences of gene flow between crops and their wild relatives." Invited lecture, Fudan University Shanghai China.

MANUSCRIPTS IN PREPARATION

Reagon, M., S. M. Quilloy, A. A. Snow, and M. Cohen. Using coalescence and tests of exchangeability to develop an *in situ* conservation program for *Oryza rufipogon* in the Mekong Delta of Vietnam.

Reagon, M., A. A. Snow, and D. Pilson. Regulatory effects of seed bank and recipient population size on crop allele introgression in wild sunflower (*Helianthus annuus*): can dilution be a solution to transgene confinement?

Reagon, M., S. Su, A. A. Snow. Population genetic structure of shattercane (*Sorghum bicolor*) in Nebraska: implications for crop gene introgression.

