Steven A. Conaway

EDUCATION

PhD candidate, Plant Pathology, August 2007 -present

The Pennsylvania State University, University Park, PA

Bachelor of Science, Environmental Horticulture, Summa Cum Laude, May 2006

University of New Hampshire, Durham, NH

RESEARCH EXPERIENCE

Biological control of invasive weeds with host specific fungal pathogens, 2007-present

- Mapped and monitored field sites using GIS techniques.
- Assessed genetic diversity of pathogens and plants with molecular laboratory techniques.
- Propagated greenhouse plants. Implemented integrated pest management strategies.
- Maintained field sites with hand and power tools.
- Recorded many ecological and environmental factors including species richness, soil quality, and weather conditions.
- Analyzed experimental data with a variety of statistical techniques.
- Advised and supervised undergraduate research projects.

COMMUNITY OUTREACH

Centre County Master Gardener, 2010-present

- Developed weekly lessons for second graders on gardening and environmental stewardship.
- Produced educational and promotional materials for demonstration gardens and events.
- Provided diagnostic expertise and informational database for Master Gardener hotline.
- Designed and organized successful outreach events for farmers, gardeners, and families.

Discovery Space, children's science museum, 2011-present

- Organized special program on the biology of fungi.
- Led plans to install demonstration pollinator and vegetable gardens in conjunction with new hands-on children's programming entitled "Ready, Set, Grow!"

Girl Scouts of America "Plant Life" badge program, 2010

 Developed and taught novel programs on integrated pest management and plant science in conjunction with the Penn State chapter of Graduate Women in Science.

President, Plant Pathology Association (graduate student organization), 2009-2010

- Initiated new fundraising programs to assist educational travel opportunities.
- Established student outreach program with local retirement community.

PROFESSIONAL EXPERIENCE

Visiting researcher at USDA Pacific Basin Ag Research Center, Hilo, HI, Aug-Sept 2011

- Collaborated on field study of emergent diseases in tea plantations
- Assisted tropical forestry project assessing Koa tree replanting strategies.
- Researched local case studies of successful biological control programs reliant on educating stakeholders and the public.
- Presented personal research at annual meeting of American Phytopathological Society and International Symposium on the Biological Control of Weeds.

Visiting scholar at USDA Cereal Disease Laboratory, St. Paul, MN, March 2011

- Worked with top rust disease researchers on current research methods and how to adapt them to weed biological control pathogens.
- Presented special research seminar to staff scientists.

TEACHING

Introductory Plant Pathology, Teaching Assistant, 2010

Assisted with curriculum design, administered lab sessions and gave several lectures.

Integrated Pest Management, Teaching Assistant, 2009-2010

- Taught guest lectures on genetic diversity, biological control, and epidemiology.
- Designed tests, facilitated class discussions and advised students on study materials.