

Stuart Bryan Weiss, Ph.D.

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EDUCATION

Stanford University 1992 - 1996

Ph.D. in Biological Sciences. September 1996

Area of Specialization: Ecology and Conservation Biology

Dissertation: Weather, landscape structure and the population ecology of a threatened butterfly, *Euphydryas editha bayensis*.

Doctoral Committee: Profs. Paul R. Ehrlich, Peter M. Vitousek, Harold A. Mooney

Stanford University 1978 - 1982

B.S. with Honors Biological Sciences 1984

Area of Specialization: Population Biology and Ecology

Current position: Founder and Chief Scientist, Creekside Center for Earth Observation

Expertise: Conservation biology, landscape ecology, microclimatology, restoration ecology, GIS analysis, statistical analysis and experimental design, nitrogen deposition, policy development.

Creekside Center for Earth Observation, selected projects

- Sep 2006 – present: Science advisor to Bay Area Upland Habitat Goals, Bay Area Open Space Council
- Sep 2006 – present; Restoration of *Clarkia franciscana* and other rare plants in the San Francisco Presidio, National Park Service and Presidio Trust
- Sep 2007 – present: San Mateo Thornmint Restoration, USFWS funded
- Aug 2006 – Mar 2008: Stream temperature characterization of San Francisquito Creek, San Francisquito Watershed Council
- Oct 2004-Dec 2007: Adaptive management of serpentine soil species in Santa Clara County, funded by USFWS Central Valley Project Conservation Project.
- July 2004- July 2005: Recovery Plan for Tidal Marsh Species, population analysis of California Clapper Rail, Salt Marsh Harvest Mouse, and development of recovery criteria and strategies.
- 2004-2006: Habitat assessment of microclimate in Monarch Butterfly Biosphere Reserve, Mexico, funded by World Wildlife Fund, Mexico
- 1999-present: Calpine Metcalf Energy Center Project: N-deposition impact assessment, mitigation planning, and long-term monitoring, negotiations with CEC and USFWS.

- 2001-present: Edgewood Preserve Habitat restoration for Bay checkerspot butterfly: assessed N-deposition and habitat impacts from I-280, planned the restoration of habitat and reintroduction of butterfly in 2007
- Continuing studies of Bay checkerspot butterfly ecology and conservation
- Vineyard microclimate studies with Robert Mondavi Winery, Woodbridge Winery, Etude Winery, Gallo of Sonoma, Opus One, J. Lohr, and other wineries
- Habitat assessment of over-wintering monarch butterflies California
- Regional biodiversity assessments in Oaxaca, Mexico and Podocarpus National Park, Ecuador
- Climate change research and mapping in White Mountains, CA

Postdoctoral Fellow, Center for Conservation Biology, Stanford University: 1996- 1999

Staff Biologist, Center for Conservation Biology, Stanford University: 1984-1992

SELECTED PUBLICATIONS (From 29 peer reviewed, full list available on request)

- Fenn, M.E., E.B. Allen, **S.B. Weiss**, S. Jovan , L.H. Geiser , G.S. Tonnesen, R.F. Johnson, L.E. Rao, B.S. Gimeno, F. Yuan, T. Meixner, A. Bytnerowicz. 2010. Nitrogen critical loads and management alternatives for N-impacted ecosystems in California. *Journal of Environmental Management* 91:2402-2423.
- Van de Ven, C., **S.B. Weiss**, and W.G. Ernst. 2007. Plant species distributions under present conditions and forecasted for warmer climates in an arid mountain range. *Earth Interactions* 11:1-33.
- Ackerly, D. D. C.A. Knight, **S.B. Weiss**, K. Barton and K.P. Starmer. 2001. Leaf size, specific leaf area and microhabitat distribution of chaparral woody plants: contrasting patterns in species level and community level analyses. *Oecologia* 130: 449-457.
- Weiss, S.B.** 2000. Vertical and temporal patterns of insolation in an old-growth forest. *Canadian Journal of Forest Research* 30:1953-1964
- Galindo-Leal, C., J.P. Fay, **S.B. Weiss**, and B. Sandler. 2000. Conservation priorities in the greater Calakmul region, Mexico: Correcting the consequences of a congenital illness. *Natural Areas Journal* 20:376-380.
- Weiss, S.B.** 1999. Cars, cows, and checkerspot butterflies: nitrogen deposition and grassland management for a threatened species. *Conservation Biology* 13:1476-1486
- Guisan, A., **S.B. Weiss**, A.D. Weiss. 1999. GLM versus CCA spatial modeling of plant species distribution. *Plant Ecology* 143:107-122.
- Human, K.G., **S.B. Weiss**, A.D. Weiss, B. Sandler, and D.M. Gordon. 1998. Effects of abiotic conditions on the distribution and activity of the invasive Argentine ant *Environmental Entomology* 27:822-833.
- Clark, D.B., D.A. Clark, P.M. Rich, **S.B. Weiss**, and S.F. Oberbauer. 1996. Landscape-scale analyses of forest structure and understory light environments in a neotropical lowland rain forest. *Canadian Journal of Forest Research* 26:747-757.
- Murphy, D.D., and **S.B. Weiss**. 1992. The effects of climate change on biological diversity in western North America: species losses and mechanisms. In: Peters, R.L., and T.J. Lovejoy (eds.) *Global Warming and Biological Diversity*. Yale University Press New Haven, CT.

- Weiss, S.B.**, P.M. Rich, D.D. Murphy, W.H. Calvert, and P.R. Ehrlich. 1991. Forest canopy structure at overwintering monarch butterfly sites: measurements with hemispherical photography. *Conservation Biology* 5:165-175.
- Murphy, D.D., K.E. Freas, and **S.B. Weiss**. 1990. An environment-metapopulation approach to population viability analysis for a threatened invertebrate. *Conservation Biology* 4:41-51.
- Weiss, S.B.**, D.D. Murphy, and R.R. White. 1988. Sun, slope, and butterflies: topographic determinants of habitat quality for *Euphydryas editha bayensis*. *Ecology* 69:1486-1496.
- Murphy, D.D., and **S.B. Weiss**. 1988. Ecological studies and the conservation of the Bay checkerspot butterfly, *Euphydryas editha bayensis*. *Biological Conservation* 46:183-200.
- Murphy, D.D., and **S.B. Weiss**. 1988. A long-term monitoring plan for a threatened butterfly. *Conservation Biology* 2:367-374.
- Weiss, S.B.**, R.R. White, D.D. Murphy, and P.R. Ehrlich. 1987. Growth and dispersal of larvae of the checkerspot butterfly *Euphydryas editha*. *Oikos* 50:161-166.