

Elise S. Gornish

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EDUCATION

- Ph.D. (2013) Ecology, Florida State University, Tallahassee, FL
- M.S. (2009) Ecology, Florida State University, Tallahassee, FL
- B.S. (2006) Conservation Biology, Hunter College, New York, NY
- B.S. (2003) Business, State University of New York at Buffalo, Buffalo, NY
- B.A. (2003) English, State University of New York at Buffalo, Buffalo, NY

PROFESSIONAL EXPERIENCE

- 01/2015 – Present Assistant Restoration Ecology Specialist in Cooperative Extension,
University of California, Davis
- 05/2013 – 12/2014 Postdoctoral Scholar, University of California, Davis

PUBLICATIONS

(In review)

- (3) **Gornish ES** and Roche LM. Cooperative Extension holds the key to unlocking public engagement within science. In revision at *Frontiers in Ecology and the Environment*
- (2) Dechen A, Roche LM, and **Gornish ES**. The use of native seeding for management of two late-season invasive plants. In review at *Rangeland Ecology & Management*
- (1) Hulvey KD, Ledger E, Porensky LM, Roche LM, Veblen KE, Fund A, Shaw J, and **Gornish ES**. Restoration islands: A tool for efficiently restoration dryland ecosystems. In review at *Restoration Ecology*

(Published)

- (26) **Gornish ES**, Lennox MR, Lewis D, Tate KW, and Jackson RD. Comparison of herbaceous plant response to active and passive riparian restoration in a Mediterranean climate. In press at *PLoS ONE*
- (25) Davy J, Turri T, Dykier K, and **Gornish ES**. Seeded forages in California annual rangeland. In press at *California Agriculture*
- (24) Ryan WH, **Gornish ES**, Christenson L, Halpren S, Henderson S, LeBuhn G, and Miller TE. (2017) A toolbox for initiating long-term data collections with students and citizen scientists. *American Biology Teacher* 79: 28-34
- (23) **Gornish ES**, Fierer N, and Barberan A (2016) Associations between an invasive plant (*Taeniatherum caput-medusae*, medusahead) and soil microbial communities. *PLoS ONE* 11: e0163930

- (22) **Gornish ES**, James JJ (2016) The effects of habitat and demography on management outcomes for an invasive annual grass. *Plant Ecology* 217: 1247-1258
- (21) Ganjurjav H, Gao Q, **Gornish ES**, Schwartz M, Liand Y, Cao X, Zhang W, Zhang Y, Li W, Wan Y, Li Y, Danjiu L, Guo H, and Lin E (2016) Differential response of alpine steppe and alpine meadow to climate warming in the central Tibetan Plateau. *Agriculture and Forest Meteorology* 23: 233-240
- (20) **Gornish ES**, Brusati E, and Johnson D. (2016) Practitioner perspectives on using non native plants for revegetation in California. *California Agriculture* DOI: 10.3733/ca.2016z0013
- (19) **Gornish ES**, and Ambrozio dos Santos P (2016) Invasive species cover, soil type and grazing interact to predict long-term grassland restoration success. *Restoration Ecology* 24: 222-229
- (18) **Gornish ES**, James JJ and Laca EA (2015) The value of oak woodland habitats as control for Medusahead (*Taeniatherum caput-medusae*). In: Proceedings of the 7th Oak Symposium: Managing Oak Woodlands in a Dynamic Work, November 3-6, 2014, Visalia, CA. USDA Forest Service General Technical Report PSW-GTR-251, 579 p.
- (17) **Gornish ES**, and Leuzinger S (2015) Across the horizon: Scale effects in global change research. *AoB PLANTS* 7:plv079
- (16) Harrison S, **Gornish ES**, and Copeland S. (2015) Climate-driven diversity loss in a grassland community. *Proceedings of the National Academy of Sciences, USA* 112:8672-8677
- (15) **Gornish ES**, and Miller TE. (2015) Plant community responses to simultaneous change in temperature, nitrogen availability, and invasion. *PLoS ONE* 10: e0123715
- (14) James JJ, **Gornish ES**, DiTomaso JM, Davy J, Doran M, Becchetti T, Wilson R, Lile D, Laca E. (2015) Managing medusahead (*Taeniatherum caput-medusae*) on rangeland: A meta analysis of control efforts and assessment of stakeholder needs. *Rangeland Ecology & Management* 68: 215-223
- (13) Monge J, and **Gornish ES** (2015) Mechanisms of facilitation on a barrier island. *Journal of Coastal Research* 31: 17-24
- (12) **Gornish ES**, James JJ, Sheley RL, Rinella MJ, Svecar T, Englund SD, and Aanderud ZT (2015) Altered snowfall influences early life stage transitions and recruitment of a native and invasive grass in a cold desert. *Oecologia* 177: 595 – 606
- (11) **Gornish ES**. (2014) Interactive effects of global change and invasion across levels of organization in an old field plant community. *AoB PLANTS* 6: plu061
- (10) **Gornish ES**. (2014) Demographic effects of warming, elevated soil nitrogen, and native community reduction on the colonization of a perennial plant. *Population Ecology* 5: 645 - 656
- (9) Pastore A, Prather C, **Gornish ES**, Ryan C, Ellis R, and Miller TE (2014) Testing mechanisms of the intermediate disturbance hypothesis in saxicolous lichen communities. *Ecology* 95: 306 – 315
- (8) **Gornish ES**, and Prather C (2014) Do foliar traits predict how plants respond to warming? A meta analysis. *Journal of Vegetation Science* 25: 919 – 927
- (7) **Gornish ES** (2013) Effects of density and fire on the vital rates and population growth of a perennial Goldenaster. *AoB PLANTS* 5: PLT041

- (6) **Gornish ES**, and Tylianakis J (2013) Plant community response to global climate change at different scales: A review. *American Journal of Botany* 100: 1-13
- (5) **Gornish ES**, and Miller TE (2013) Using long-term census data to inform restoration methods of coastal dune vegetation. *Estuaries & Coasts* 36: 1014 - 1023
- (4) **Gornish ES**, Hamilton JA, Barberan A, Benito BM, Binzer A, DeMeester JE, Gruwez R, Moreira B, Taheri S, Tomiolo S, Vinagre C, Vuarin P, and Weaver J (2013) Interdisciplinary climate change collaborations are essential for early-career scientists. *EOS, Transactions American Geophysical Union* 94: 151
- (3) Ibanez I, **Gornish ES**, Buckley L, Debinski D, Hellmann J, Helmuth B, Latimer A, Miller Rushing A, and Uriarte M (2012) Moving forward in global-change ecology: capitalizing on natural variability. *Ecology and Evolution* 3: 170 - 181
- (2) **Gornish ES** and Miller TE (2010) Effects of storm frequency on dune vegetation. *Global Change Biology* 16: 2668 – 2675
- (1) Miller TE, **Gornish ES**, and Buckley H (2010) Climate and coastal dune vegetation: disturbance recovery and succession. *Plant Ecology* 206: 97 - 104

EXTENSION

- Advisory roles as a member of the Jepson Prairie advisory committee, the California Native Grassland board, the UC Davis Specialists Advisory Council, and the UC Davis Graduate Group in Ecology Diversity Committee
- 75 total academic oral and poster presentations. 42 Extension presentations/field days including: Yolo country hedgerow workshop, CNPS Hedgerow Farms field day, Napa county hedgerow workshop, ANR Program team meeting, Society of Range Management field tour, UC Davis Weed meetings, UC ANR Joint Strategic Initiative Conference, UCCE weed workshops and livestock meetings, and the California Invasive Plant Council symposium. Blog (UC Weed Science, Labconscious, Methods in Ecology & Evolution), twitter (@RestoreCAL), and video (Youtube) posts
- Development of a medusahead (*Taeniatherum caput-medusae*) workshop presentation for Cooperative Extension
- Co-Organizer of five Symposia, including four at the Ecological Society of America annual meeting: *Social-ecological systems in restoration and conservation*; *Alternative approaches to the study of global warming effects on natural communities*; *Effect sizes of global change impacts across spatiotemporal scales and organizational levels*; *A toolbox for initiating and managing long-term data collections*, and one at the Society for Range Management annual meeting: *Integrating ecological and socioeconomic factors into restoration decision making and outcomes*

GRANTS

- **Gornish ES**, Groscholz T, and Darin G. Investigations of restoration techniques that limit invasion of tidal wetlands. Delta Conservancy, 07/2017 – 06/2020. \$107,650.
- Coopmann Rivers C, Roche LM, Orloff S, DiTomaso J, **Gornish ES**, Davy J. Prescribed grazing strategies management to enhance agricultural production and meet riparian habitat

conservation objectives. Russell L Rustici Rangeland and Cattle Research Endowment, 01/2017 – 12/2018. \$33,100.

- **Gornish ES.** Using restoration to manage invasive plants on annual grasslands. East Contra County Habitat Conservancy, 01/2017 – 06/2018. \$9,998.
- Roche LM, Jin Y, Lile D, Snell L, Hogan S, and **Gornish ES.** Remote data collection for adaptive rangeland management on public lands. Russell L Rustici Rangeland and Cattle Research Endowment, 01/2017 – 12/2018. \$100,808
- **Gornish ES.** Native species range seeding for multiple management goals. University of California, Davis, 11/2016 – 06/2017. \$10,000
- **Gornish ES** and Harrison SP. Using trait based approaches to confer drought resilience to California grassland restoration. University of California, Davis, 07/2016 – 09/2017. \$14,555
- Snell L, Lile D, Roche L, Oneto S, **Gornish ES,** Mashiri F, Tate K. Post-wildfire livestock grazing management on public rangelands. University of California, Davis, 05/2016 – 05/2017. \$110,000
- **Gornish ES,** Eviner V, Young T, Laca E. Ecological restoration on natural and working landscapes in California: Restoration research and information center (RIC). University of California, Division of Agriculture and Natural Resources, 04/2016 – 11/2018. \$79,000
- **Gornish ES,** Bean TM, Davy J, and Kyser G. Integrated pest management of barb goatgrass and medusahead in annual grasslands. Western IPM, 09/2015 – 05/2017. \$30,000
- **Gornish ES,** Roche LM, Tate KW. Completing the knowledge cycle: Deriving IPM knowledge directly from practitioners on working landscapes. Department of Pesticide Regulation, 09/2015 – 03/2018. \$199,414
- **Gornish ES,** Miller TE. Use of long-term vegetation census data to inform restoration methods and processes of community ecology on a barrier island. National Oceanic and Atmospheric Administration, 09/2008 – 05/2010. \$57,648

ADVISEES

PhD: Julea Shaw, University of California (2015-), Davis; Noah Teller, University of California, Riverside (2016-); Breauna Gillespie, San Diego State University (2016-2017)
Qualifying exam committee member: Evan Wolf, University of California, Davis; Julia Michaels, University of California, Davis; Chhaya Werner, University of California, Davis; Aurbianne Zamora, University of California, Davis

PROFESSIONAL AFFILIATIONS

Society for Ecological Restoration
California Invasive Plant Council
California Native Plant Society
California Native Grasslands Association
Ecological Society of America
Association of Natural Resource Extension Professionals

SERVICE

- Co-chair, Ecological Restoration Section of the Ecological Society of America
- Natural Resources Editor, *California Agriculture*
- Editor for two special issues. *Restoration Ecology* special issue: *Beyond conceptual frameworks: Emerging approaches to successful restoration* and *AoB PLANTS* special issue: *Scaling effects regulating plant response to global change*
- Reviewer for Graduate Women in Science National Fellowship Program
- High School Botany Mentor, PlantingScience.org
- Partner, Letters to a Pre-Scientist
- Peer reviewer for *American Journal of Botany*; *Annals of Botany*; *AoB PLANTS*; *Biological Invasions*; *Ecology*; *Ecosphere*; *Environmental Management*; *Journal of Applied Ecology*; *Journal of Coastal Research*; *Journal of Ecology*; *Journal of Ecosystem & Ecography*; *Journal of Vegetation Science*; *Land Degradation and Development*; *New Phytologist*; *Oecologia*, *Plant Ecology*; *PLoS ONE*; and *Restoration Ecology*