

# STEPHEN E, FICK

US Geological Survey, Southwest Biological Science Center, Moab, UT

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## EDUCATION:

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**Ph.D. in Ecology** 2016  
*University of California, Davis*

**B.S. Biology, B.A. Archaeology** - *Summa cum laude* 2008  
*Wheaton College; Wheaton, Illinois*

## APPOINTMENTS:

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**Postdoctoral Researcher** 2018 - present  
*US Geological Survey, Southwest Biological Science Center, Moab UT*  
*University of Colorado, Boulder and New Mexico State University*

**Research Fellow** 2016 – 2018  
*Stockholm Environment Institute, Stockholm, Sweden*

**Subject Matter Expert, Ecology** 2017-present  
*Plant Editors Scientific Editing Service*

## GRANTS, FELLOWSHIPS AND AWARDS

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**USGS Land Change Science Grant** (\$25,500) 2019  
*US Geological Survey, Washington DC*

**NRCS Soil Survey Collaborative Research Grant** (\$154,936) 2018  
*National Resource Conservation Service, Ft. Collins, CO*

**Henry A. Jastro Research Fellowship** (\$2,250) 2014  
*Ecology Awards Committee, University of California, Davis*

**Ben A. Madson Scholarship** (\$500) 2013  
*Dept. Plant Sciences, University California, Davis*

**Ecology Fellowship** (\$60,000) 2011  
*University of California, Davis*

**Plant Sciences Departmental Assistantship Award** (\$30,000) 2012-2013  
*University of California, Davis*

**Scholastic Honor Society** 2008  
*Wheaton College; Wheaton, Illinois*

## PEER-REVIEWED PUBLICATIONS

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**Fick, S. E., N. Barger, and M. Duniway.** 2019. Hydrologic function of rapidly induced biocrusts. *Ecohydrology*: e2089.

Duniway, M. C., A. A. Pfennigwerth, S. E. **Fick**, T. W. Nauman, J. Belnap, and N. N. Barger. 2019. Wind erosion and dust from US drylands: a review of causes, consequences, and solutions in a changing world. *Ecosphere* 10:e02650.

Winkler, D. E., D. M. Backer, J. Belnap, J. B. Bradford, B. J. Butterfield, S. M. Copeland, M. C. Duniway, A. M. Faist, S. E. **Fick**, S. L. Jensen, A. T. Kramer, R. Mann, R. T. Massatti, M. L. McCormick, S. M.

- Munson, P. Olwell, S. D. Parr, A. A. Pfenningwerth, A. M. Pilmanis, B. A. Richardson, E. Samuel, K. See, K. E. Young, and S. C. Reed. 2018. Beyond traditional ecological restoration on the Colorado Plateau. *Restoration ecology* 26:1055–1060.
- Gardner, T., M. Benzie, J. Börner, E. Dawkins, S. **Fick**, R. Garrett, J. Godar, A. Grimard, S. Lake, R. Larsen, N. Mardas, C. McDermott, P. Meyfroidt, M. Osbeck, M. Persson, T. Sembres, C. Suavet, B. Strassburg, A. Trevisan, C. West, and P. Wolvekamp. 2018. Transparency and sustainability in global commodity supply chains. *World Development*.
- Hedlund, J., S. **Fick**, H. Carlsen, and M. Benzie. 2018. Quantifying transnational climate impact exposure: New perspectives on the global distribution of climate risk. *Global Environmental Change* 52:75–85.
- Lusher, L., C. He, and S. **Fick**. 2018. Are professional basketball players reference-dependent? *Applied Economics* 50:3937–3948.
- Morales, L. V., C. S. Sevillano-Rios, S. **Fick**, and T. P. Young. 2018. Differential seedling regeneration patterns across forest–grassland ecotones in two tropical treeline species (*Polylepis* spp.). *Austral Ecology* 43:514–526.
- Fick**, S. E., and R. R. Evett. 2018. Distribution modelling of pre-Columbian California grasslands with soil phytoliths: New insights for prehistoric grassland ecology and restoration. *PloS one* 13:e0194315.
- Hedlund, J., S. **Fick**, H. Carlsen, and M. Benzie. 2018. Quantifying transnational climate impact exposure: New perspectives on the global distribution of climate risk. *Global Environmental Change* 52:75–85.
- Fick**, S. E., and R. J. Hijmans. 2017. WorldClim 2: new 1-km spatial resolution climate surfaces for global land areas. *International Journal of Climatology* 37:4302–4315.
- Persson, L., S. Karlsson-Vinkhuyzen, A. Lai, A. Persson, and S. Fick. 2017. The Globally Harmonized System of Classification and Labelling of Chemicals—Explaining the Legal Implementation Gap. *Sustainability* 9:2176.
- Stuble, K. L., S. E. Fick, and T. P. Young. 2017. Every restoration is unique: testing year effects and site effects as drivers of initial restoration trajectories. *Journal of Applied Ecology* 54:1051–1057.
- Fick**, S. E., C. Decker, M. C. Duniway, and M. E. Miller. 2016. Small-scale barriers mitigate desertification processes and enhance plant recruitment in a degraded semiarid grassland. *Ecosphere* 7:e01354.
- Young, D. J., L. M. Porensky, K. M. Wolf, S. E. Fick, and T. P. Young. 2015. Burning reveals cryptic plant diversity and promotes coexistence in a California prairie restoration experiment. *Ecosphere* 6:1–11.
- Young, T. P., E. P. Zefferman, K. J. Vaughn, and S. Fick. 2015. Initial success of native grasses is contingent on multiple interactions among exotic grass competition, temporal priority, rainfall and site effects. *AoB Plants* 7.
- Zefferman, E., J. T. Stevens, G. K. Charles, M. Dunbar-Irwin, T. Emam, S. Fick, L. V. Morales, K. M. Wolf, D. J. Young, and T. P. Young. 2015. Plant communities in harsh sites are less invaded: a summary of observations and proposed explanations. *AoB Plants* 7.

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## TEACHING:

### **Teaching Assistant**

*University of California, Davis*

**Multivariate Statistics (Graduate-level)**

2015

**Quantitative Geography (Graduate-level)**

2014, 2015

**Principles of Ecology and Evolution**

2013, 2014

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## SELECTED PRESENTATIONS

- Fick, Stephen E.** 2018. Assessing the development and function of rapidly-restored biological soil crusts. Annual Conference of the Society for Ecological Restoration – Southwest Chapter. Flagstaff, AZ
- Fick, Stephen E.** 2018. Rangeland Restoration and Dust Mitigation on the Colorado Plateau. Soil and Water Conservation Society Annual Conference. Albuquerque, NM
- Fick, Stephen E.** 2017. Distribution Modeling of Pre-Columbian California Grasslands with Soil Phytoliths: New Insights for Restoration and Prehistoric Grassland Ecology. Natural Areas Conference, Ft Collins, CO.
- Fick, Stephen E.** 2012. Grazing Legacies and Grassland Restoration in Canyonlands National Park. Oral Presentation. Four Corners School field day. July 20, 2012.
- Fick, Stephen E.** 2008. “Subsistence Strategies for Marginalized Farmers in Northern Thailand”. Wheaton College Human Needs Global Resources Symposium.

## OUTREACH/ SERVICE

- Co- Organizer, Canyon Country Restoration Working Group** 2019  
*Society for Ecological Restoration SW chapter*
- Treasury Advisory Committee, UC Davis Graduate Student Association** 2015
- Assistant teacher, The Biology Undergraduate Scholars Program (BUSP)** 2015  
*University of California, Davis (<http://www.busp.ucdavis.edu/>)*
- Helped teach a two-week intensive course preparing at-risk students interested in biology for their sophomore-year biology classes.
- Mentor, Student and Landowner Education and Watershed Stewardship Program** 2011-2016  
*Center for Land Based Learning, Winters, CA*
- Supervise and mentor high-school students in an ongoing local restoration projects
  - Facilitate interpretive activities to make connections between day-to-day activities and ecosystem health
- Certificate, UC Davis Graduate Teaching Association, “Diversity in the Classroom”** 2012  
*University of California, Davis*
- Lab Safety Manager** 2011-2016  
*Young Lab, UC Davis*
- Representative, Graduate Student Association** 2011-2012  
*University of California, Davis*
- Intern, Human Needs Global Resources (HNGR)** 2008  
*Upland Holistic Development project; Fang, Thailand / Wheaton College; Wheaton, Illinois*
- Six-month immersive service-learning internship and research project studying poverty and community development in the Global South.

## MEDIA

- “Climbers Relationship with Place” Interviewed by Kristina Young on KZMU’s Science Moab. May 19, 2019. URL: <https://www.kzmu.org/the-science-of-climbing/>

## LANGUAGES

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**Thai**, Level: intermediate

**R** (advanced), **Python** (intermediate), **Javascript** (intermediate), **SQL** (intermediate), **Cypher** (intermediate)