

# STEPHEN E, FICK

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

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## EDUCATION:

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<b>Ph.D. in Ecology</b> <i>University of California, Davis</i>	2016
<b>B.S. Biology, B.A. Archaeology</b> - <i>Summa cum laude</i> <i>Wheaton College; Wheaton, Illinois</i>	2008

## APPOINTMENTS:

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<b>Postdoctoral Researcher</b> <i>US Geological Survey, Southwest Biological Science Center, Moab UT</i> <i>University of Colorado, Boulder and New Mexico State University</i>	2018 - present
<b>Research Fellow</b> <i>Stockholm Environment Institute, Stockholm, Sweden</i>	2016 – 2018
<b>Subject Matter Expert, Ecology</b> <i>Plant Editors Scientific Editing Service</i>	2017-present

## GRANTS, FELLOWSHIPS AND AWARDS

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<b>USGS Land Change Science Grant</b> (\$25,500) <i>US Geological Survey, Washington DC</i>	2019
<b>NRCS Soil Survey Collaborative Research Grant</b> (\$154,936) <i>National Resource Conservation Service, Ft. Collins, CO</i>	2018
<b>Henry A. Jastro Research Fellowship</b> (\$2,250) <i>Ecology Awards Committee, University of California, Davis</i>	2014
<b>Ben A. Madson Scholarship</b> (\$500) <i>Dept. Plant Sciences, University California, Davis</i>	2013
<b>Ecology Fellowship</b> (\$60,000) <i>University of California, Davis</i>	2011
<b>Plant Sciences Departmental Assistantship Award</b> (\$30,000) <i>University of California, Davis</i>	2012-2013
<b>Scholastic Honor Society</b> <i>Wheaton College; Wheaton, Illinois</i>	2008

## PEER-REVIEWED PUBLICATIONS

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- Fick, S. E., J. Belnap, and M. C. Duniway.** *In Press.* Grazing-Induced Changes to Biological Soil Crust Cover Mediate Hillslope Erosion in a Long-Term Exclosure Experiment. *Rangeland Ecology & Management*.
- Fick, S. E., N. N. Barger, J. Tatarko, and M. C. Duniway.** *In Press.* Induced biological soil crust controls on wind erodibility and dust (PM10) emissions. *Earth Surface Processes and Landforms*.
- Fick, S. E., N. Barger, and M. Duniway.** 2019. Hydrological 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. Pfennigwerth, 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, V. 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.

## TEACHING:

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### **Teaching Assistant**

*University of California, Davis*

**Multivariate Statistics** (*Graduate-level*)

2015

**Quantitative Geography** (*Graduate-level*)

2014, 2015

## SELECTED PRESENTATIONS

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**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

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“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)