Nicholas C. Dove

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EDUCATION

University of California, Merced, CA

Ph.D., Environmental Systems, May 2019

GPA: 4.00

Advisor: Stephen C. Hart

Committee: Asmeret Asefaw Berhe (Chair), J. Michael Beman, Neslihan Taş, Kathleen

Treseder

University of Vermont, Burlington, VT

B.S., Environmental Science - conc. Geospatial Technologies, May 2012 GPA: 3.77 Honors: Cum Laude, Presidential Scholarship, Dean's List

RESEARCH **FUNDING**

Immediate effects of prescribed fire on microbial communities, decomposition, and nitrification: (2017) DOE Joint Genome Institute - Community Science Program - 94 samples for amplicon sequencing and 16 shotgun metagenomes $(\sim $22,000)$ [Lead Author]

PUBLICATIONS Dove, N.C., J.M. Stark, G.S. Newman, S.C. Hart (accepted) Carbon control on terrestrial ecosystem function across contrasting site productivities: the carbon connection revisited. Ecology

> Cheng, H., N.C. Dove, J.M. Mena, T. Perez, S. Ul-Hasan. (2018) The Biota Project: A case study of a multimedia, grassroots approach to scientific communication for engaging diverse audiences. Integrative and Comparative Biology. DOI: 10.1093/icb/icy091

> Aciego, S.M., C.S. Riebe, S.C. Hart, M.A. Blakowski, C.J. Carey, S.M. Aarons, N.C. Dove, K.W.W. Sims, J. Botthoff, E.L. Aronson, (2017) Dust outpaces bedrock in nutrient supply to montane forest ecosystems. Nature Communications DOI: 10.1038/ncomms14800

> Dove, N.C. and S.C Hart (2017) Fire reduces fungal species richness and mycorrhizal colonization: a meta-analysis. Fire Ecology, 13, 3765. DOI: 10.4996/fireecology.130237746

> Krafte, K., N. Dove, M. Duda, E. Nikolaeva, J. Thomsen, C. Zajchowski. (2017) Unbounding parks and protected areas to overcome management challenges for the next 100 years. George Wright Forum, 34, 23-36

> Carey, C., N.C. Dove, J.M. Beman, S.C. Hart, E.L. Aronson, (2016) Meta-analysis reveals ammonia-oxidizing bacteria respond more strongly to nitrogen addition than ammonia-oxidizing archaea. Soil Biology and Biochemistry, 99, 158-166

> Dove, N. C. and W.S. Keeton (2015). Structural Complexity Enhancement increases fungal species richness in northern hardwood forests. Fungal Ecology, 13, 181-192.

AWARDS & **FELLOWSHIPS**

Dept. of Energy Science Graduate Student Research Fellowship (\$27,000)	2017-18
Environmental Systems Professional Development Award (\$2,000 ea.)	2017, 18
Southern CA Edison Graduate Fellowship Award (\$12,000 ea.)	2016, 17
Bobcat Summer Fellowship Award (\$10,600 total)	2015 - 17
University of California, Merced Graduate Fellowship Award (\$63,000 total)	2014-17
University of Vermont Presidential Scholarship (\$8,000 total)	2008-12

RESEARCH **EXPERIENCE**

Graduate Student

2014-present

University of California Merced, CA

Dissertation: Soil microbial ecology of the Sierra Nevada: Predictions for a warm and fiery future

Dept. of Energy Graduate Fellow Lawrence Berkeley National Laboratory 2017-2018 Berkeley, CA

Project: Soil microbial ecology of the critical zone: interactions among community structure, carbon use efficiency, and nutrient availability in a warmer world

PROFESSIONAL Intern **EXPERIENCE**

Bureau of Land Management

May 2013 - March 2014

Buffalo, WY

Assessed the efficacy of wildfire restoration treatments using standard vegetation surveys. Also, designed and planned a native seed propagation facility, which is now in operation, to use for restoration practices.

Intern

Bureau of Land Management

June-Nov. 2012

Cederville, CA

Monitored grazing parcels for overuse and measured change in botanical composition. Navigated to sites using GPS and compass.

TEACHING EXPERIENCE Contemporary Biology (3 discussions \times 20 students) Various guest lectures (Intro. to Ecology, Ecosystem Ecology) Fall 2018

2016 - 18

INVITED PRE-**SENTATIONS**

Dove, N.C., N. Taş, S.C. Hart. Soil microbial ecology of the Western US: Predictions for a warm and fiery future. Yosemite Forum Yosemite National Park. April 10, 2018

Dove, N.C. Geospatial techniques for field-based research: case studies in NW Baja California and Yosemite NP. Merced County Geosummit - Merced, CA. April 8, 2016

Dove, N.C., W.S. Keeton, S.C. Hart. Understanding fungal response to disturbance. Society for the Advancement of Chicanos/Hispanics and Native Americans in Science Seminar Series - Merced, CA. May 4, 2015

CONTRIBUTED PRESENTA-**TIONS**

Dove, N.C., S.T. Overby, G.S. Newman, S.C. Hart. (Oral) Ecologically novel wildfires impact carbon and nitrogen cycling processes over a decade after disturbance: a tale of two ecosystems. North American Forest Soils Conference - International Symposium on Forest Soils. June 8, 2018

Dove, N.C., M.S. Torn, S.C. Hart, N. Taş. (Poster) Soil microbial ecology of the Sierra Nevada: Predictions for a warm and fiery future. Dept. of Energy Joint Genome Institute User Meeting. March 21, 2018

Dove, N.C., K. Arogyaswamy, C.J. Carey, A. Packman, S.C Hart, E.L. Aronson. (Oral) Over half of potential soil extracellular enzyme activity occurs below 20 cm. Ecological Society of America Annual Meeting. August 10, 2017

Dove, N.C., K. Arogyaswamy, C.J. Carey, A. Packman, S.C Hart, E.L. Aronson. (Poster) Over half of potential soil extracellular enzyme activity occurs below 20 cm. Critical Zone Observatory All-hands Meeting. June 10, 2017

Dove, N.C. and S.C. Hart. (Poster) Novel, high-severity fire influences microbial communities and biogeochemical processes: opening the charcoal box. Dept. of Energy Joint Genome Institute User Meeting. March 21, 2017

Dove, N.C. and S.C Hart. (Poster) Fire reduces fungal species richness and mycorrhizal colonization: a meta-analysis. Ecological Society of America Annual Meeting. August 11, 2016

COMMITTEES & SERVICE

Environmental Systems Graduate Group Student Repres	entative 2018 - Present
NEON Microbial Ecology Technical Working Group	2017 - Present
UC Merced Graduate Peer Mentor	2017 - Present
UC Merced Environmental Systems Seminar Committee	2017-2018
UC Merced Graduate Student Association (Treasurer)	2016-2018
UC Merced Student Fee Advisory Committee	2014-2018 (Chair 2015-2016)
UC Merced Graduate Council	Spring 2017

OUTREACH

Board of Directors (Treasurer) Community Initiatives for Collective Impacts 2017 - Present Merced, CA

Community Initiatives for Collective Impact (CI4CI) is a non-profit started by myself and two others to fiscally sponsor non-profit activities in California's Central Valley. While most major cities have resources for non-profit startups, rural, economically-depressed areas (where the need is greatest) are often overlooked. We currently sponsor three projects addressing health disparities and food security. <ci4ci.org>

Science Lead & Principal Writer

2015 - Present

The Biota Project Merced, CA

The Biota Project is a mixed-media science communication and outreach organization taking a grass roots approach for connecting underrepresented communities to symbiotic relationships in nature and society since 2013. As Science Lead and Principal Writer, I am in charge of designing stories to document and managing a team of undergraduate students who identify and interview scientists for our stories. <thebiotaproject.org>

Various K-12 Outreach: Science Fair Consultant, 'Ask a Scientist' visit, Soil nutrient testing lesson development and implementation