



PROFILE

Dr. Koontz leads the development of plant ecology and climate change science at Vibrant Planet by operationalizing existing research and leading new investigations into the dynamics of disturbance-prone systems. His work informs estimates of natural hazard potential, ecological responses to disturbance, departure from target conditions, and opportunities for ecosystem restoration. He combines a firm grounding in ecological theory, cutting edge geospatial data analytics, and a collaborative, open science ethos to understand how disturbance and demography operate across scales to shape ecosystem resilience in a changing climate.

CONTACT

WEBSITE:

www.vibrantplanet.net

EMAIL:

mikoontz@vibrantplanet.net

SELECT PUBLICATIONS

"Cross-scale interaction of host tree size and climatic water deficit governs bark beetle-induced tree mortality." 2021. *Nature Communications*. 12:129. 1-13.

"Local forest structure variability increases resilience to wildfire in dry western U.S. coniferous forests." 2020. *Ecology Letters*. 23:3. 483-494.

"Warming weakens the nighttime barrier to global fire." 2022. *Nature*. 602. 442-448.

"Democratizing macroecology: integrating unoccupied aerial systems with the National Ecological Observatory Network." 2022. *Ecosphere*. 13:8. e4206.

MIKE KOONTZ

EXPERIENCE

Lead Scientist: Ecological Modeling & Climate Change – Vibrant Planet
2023 – present
Incline Village, NV

Lead Scientist: Monitoring & Forecasting – Vibrant Planet
2022 – present
Incline Village, NV

Research Scientist – Earth Lab/CIRES, University of Colorado Boulder
2021 – 2023
Boulder, CO

Data Manager; Secretary; Leadership Team – GLORIA Great Basin
2017 – present
Great Basin, USA

Postdoctoral Scholar – Earth Lab/CIRES, University of Colorado Boulder
2019 – 2021
Boulder, CO

NSF Graduate Research Fellow – University of California, Davis
2014 – 2018
Davis, CA

NSF Graduate Research Fellow – Colorado State University
2013 – 2014
Fort Collins, CO

Field Technician – University of California, Merced
2012
Mountain Research Station, CO

Field Technician – Research Cooperative of the University of Hawai'i
2009 – 2010
Hilo, HI

Field Leader – Hawai'i Volcanoes National Park
2007
Volcano, HI

Field Technician – AmeriCorps/Hawai'i Dept of Forestry and Wildlife
2006
Kahului, HI

EDUCATION

University of California Davis
2014 – 2019
Ecology (Doctor of Philosophy)

Colorado State University
2012 – 2014
Ecology (Master of Science)

University of Hawaii at Hilo
2007 – 2009
Biology (Bachelor of Science)