

**Abstract:** Selecting species and seed from appropriate sources to maximize project success faces many challenges, and this presentation will review plant selection for ecosystem diversity for economically and ecologically practical outcomes. Habitat degradation and loss have accelerated globally, resulting in loss of biological diversity and species endangerment at unprecedented scales. Restoring habitats that provide ecosystem services necessary for all life is crucial. One of the biggest hurdles to habitat restoration is the availability of seeds of native plants to provide a diverse and resilient base of the food chain. Plant diversity is now clearly a fundamental driver of ecosystem services and the diversity of other organisms, and native plant diversity is needed because invasive plants tend to reduce diversity and homogenize vegetation on the landscape. Seeding with native plants is one of the few reliable methods of restoring diversity at all levels, even in the face of climate change and controversial novel ecosystems. Therefore, selecting and sourcing the right plants for restoration sites is vital for the successful establishment of diverse and resilient native ecosystems.



## Tom Kaye

Executive Director Institute for Applied Ecology

**Bio:** Dr. Tom Kaye is founder and Executive Director of the Institute for Applied Ecology (IAE), a nonprofit organization with a mission to conserve native habitats and species through research, restoration, and education. Tom serves on the board of directors of the Society for Ecological Restoration and he is a courtesy Associate Professor in the Department of Botany and Plant Pathology at Oregon State University. Tom conducts research on rare species reintroductions, habitat restoration, plant invasions, and plant population responses to climate change, and engages prison inmates in conservation through the

Sagebrush in Prisons Project. Sourcing native plants for restoration is a key area of interest, research and publication for Dr. Kaye. He serves as a Commission Member on the IUCN SSC Seed Conservation Specialist Group. Tom is a member of the Natural Areas Association and has authored several research articles published in the Natural Areas Journal.

Website: https://appliedeco.org/

**Register Now**