

CO Dept of Natural Resources DNR, Launch study on Native Pollinating Insects

Will be conducted by Colorado State University Extension, Xerces Society for Invertebrate Conservation, and University of Colorado Museum of Natural History

Changes in climate, land-use, disease, and other stressors are causing insects, including native pollinators, to decline globally and in many areas of Colorado and the American West. In response, the Colorado Department of Natural Resources has announced it has commissioned a study on Native Pollinating Insects to 1) understand the role that native insect pollinators serve in natural resource management, 2) have a better understanding of how native insect populations/communities are changing across the state, and 3) recommend management practices and policies to address the health of native pollinators through statewide and cooperative efforts.

The Colorado legislature passed and Governor Jared Polis signed into law [SB 22-199](#) during the 2022 legislative session directing the Colorado Department of Natural Resources (DNR) to conduct a study of state agency resources and needs related to challenges associated with supporting healthy populations of native pollinating insects.

“Colorado is home to a large and diverse community of native pollinating insects that are essential for pollinating the majority of the state’s flowering plants which are the foundation of our food systems, support overall biodiversity, and are essential for ecosystem services such as climate regulation, erosion control, nutrient cycling, and recreation”, said Dan Gibbs, Executive Director, Colorado Department of Natural Resources. “We are proud to partner with our university and nonprofit partners to gain a fuller understanding of the status of pollinators in Colorado and what policies and measures we can pursue to ensure their long-term health and sustainability.”

The collaborative study will be conducted by Colorado State University Extension, the Xerces Society for Invertebrate Conservation, and the University of Colorado Museum of Natural History, in consultation with state and federal agencies, researchers, scientists, and land managers across the state.

“CSU Extension is thrilled to be partnering with the Xerces Society along with leading pollinator researchers from academic institutions, including the CU Museum of Natural History,” said Deryn Davison, CSU Extension Sustainable Landscape State Specialist. “This team has been conducting research on Colorado pollinators and best management practices for decades, and now we have an opportunity to bring all of that information together. We hope to provide the most comprehensive review of Colorado insect pollinators in state history, identify existing practices and programs, and provide recommendations for new practices, that will benefit pollinator health across the state.”

Pollinators are essential to life on earth and the health and economic stability of Colorado. The ecological service they provide is necessary for the reproduction of over 85% of the world’s

flowering plants, including more than two-thirds of the world's crop species. According to the USDA National Agricultural Statistics Service, Colorado's insect-pollinated crops contribute over \$300 million to the state's economy. Many of these crops depend on native pollinator populations, including squash, pumpkins, and melons, while other crops produce better and higher quality yields when pollinated by native insects.

The critical role of pollinators extends far beyond crop production to the natural habitats within our parks, forests, grasslands, wild lands and greenspaces. A rich diversity of flowering plants depends on diverse species and populations of pollinators. The diversity of wildlife and the quality of natural resources across Colorado hinges on native plant diversity and healthy ecosystems.

Study Leads include, Deryn Davidson (PI), Sustainable Landscape State Specialist Colorado State University Extension, Steve Armstead, Pollinator Conservation & Nature-Based Climate Solutions Specialist, Xerces Society for Invertebrate Conservation, and Adrian Carper, Research Associate University of Colorado Museum of Natural History.

The study must be completed and prepared for presentation to the General Assembly and the Governor on or before January 1, 2024.

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