



2019 Cooperative Summer Field Training Program

● Project Title:	Pollinator Health and Habitat
● Project Scientists:	Clint Otto
● USGS Center:	Northern Prairie Wildlife Research Center, (GGEMNN0000)
● Location:	Jamestown, ND

Project Description:

Background Information:

Concern over declining pollinators has led to multiple conservation initiatives for improving forage for bees in agroecosystems. In 2014, our USGS team partnered with the USDA to conduct research on the foraging ecology of native bees and managed honey bees in the Northern Great Plains. USDA is using USGS science to improve the cost-effectiveness of their conservation programs for pollinators.

Objectives:

Quantify what forbs are used and preferred by native bees and honey bees in the Northern Great Plains.

Intern Tasks:

Conduct floral resource surveys on prairies and pollinator conservation plantings in rural areas.

Sample, pin, and identify native bees.

Enter data in Microsoft Access and Excel.

Make data publicly available on the USGS Pollinator Library Website

Prepare outreach document for USDA partners, summarizing 2019 findings

Expected Outcomes:

In addition to technical training, I believe it is important for students to understand how research is used by policy makers and natural resource managers. To that end, the student under my supervision will gain a detailed understanding of how USGS science is used by our USDA partners to improve conservation delivery for pollinators in the Northern Great Plains. She or he will improve their ability to identify forb and other perennial plants using dichotomous keys. They will also gain experience handling, pinning, and identifying native bees and honey bees. The student will also gain valuable field experience, making them more competitive when applying to graduate school, or future employment. Most of the past technicians and interns on my team have gone on to post-graduate degrees. I would like the selected intern to assist in the preparation of an outreach product that will highlight their key research findings from the 2019 field season. My team has extensive experience publishing outreach material including digital videos and

Details for Matching:

Type of Project: Field Work

Project Discipline: Ecology, Wildlife Biology

Project Start Date: Mon May 27 2019 00:00:00 GMT-0400 (EDT)

Project Duration: May 27 to September 14 but dates are flexible

Level of Physical Demand: Level 8-2: The work requires some physical exertion such as long periods of standing, walking over rough, uneven, or rocky surfaces; recurring bending, crouching, stooping, stretching, reaching, or similar activities; or recurring lifting of moderately heavy items. The work may require specific, but common, physical characteristics and abilities such as above-average agility and dexterity.

GIS Training: ESA

Special Skills and Interests: Working knowledge of how to identify plants.

Experience pinning and identifying insects.

Basic understanding of Microsoft Access and/or Excel.

Ability to work outdoors during summer weather, with biting insects.

Interest in plant-pollinator community ecology is preferred.