

Muscatine County Conservation Board



Eric Yerington

6th Grade general science teacher at
McKinley Elementary

2021 extern at Muscatine County
Conservation Board

Part I: Overview of Workplace

The Muscatine County Conservation Board was approved by the residents of the county in 1964 and began operations January 1, 1965.

MCCB manages 11 areas encompassing 1755 acres

These areas provide opportunities for hunting, fishing, camping, nature trails, conservation education programs, and more in beautiful, natural settings.

Part I: Overview of Workplace

The mission of MCCB is to:

- preserve and enhance natural areas and resources in Muscatine County for the use and benefit of the community
- preserve sufficient natural habitats in Muscatine County
- ensure the survival of native plants and animals
- acquire, develop and manage land for public hunting, fishing, camping and recreation
- promote public appreciation and responsibility for the environment through education

Part II: Workplace Focus

Michelle Berns, naturalist at Discovery Park, has been working with Monarch Butterflies for 18 years. She has planted various flowers and plants that help attract monarchs and she works on educating the public on what they can do as well.

Part III: Introduce the Problem

- Monarch populations have seen a mostly downward trend since 2003
- Monarchs are important pollinators for many crops – including food crops
- Last year experts estimate the monarch population was down **26%** from the previous year
- The area occupied by Monarchs in Mexico is **2.1 hectares**. Experts say the key to keeping the breed from going extinct the magic number is **6 hectares!**
- **What can we do to support and increase the number of Monarchs in our area and regrow the population??**

Part IV: Standards, Driving and Essential Questions

- **MS-LS2-4 Ecosystems: Interactions, Energy, and Dynamics**
- Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.

- **MS-LS2-5 Ecosystems: Interactions, Energy, and Dynamics**
- Evaluate competing design solutions for maintaining biodiversity and ecosystem services

Part V: Extern Host Role

Michelle Berns will come share her expertise on monarchs. Later in the project she will also come help evaluate the student projects.

Part VI: Student Learning

Students will be able to make many choices along the way. They will be able to choose the direction of their research as well as if they want to do an individual project (for example, for use at their own homes) or a community project (such as creating a monarch 'waystation' in a community area)