



Explore 4-H Programs - The Great Microgreen Caper - A STEM Investigation

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and Agriscience Director**



Outline for today

- Introductions
- 4-H Youth Development
- Explore 4-H Programs
- The Great Microgreen Caper
- Hands On Activities
- Questions



Introduction

- **Brian McNeill**
- 4-H STEM & Agriscience Director, for the University of Minnesota Extension & 4-H Youth Development program
- 33 years experience with non formal learning
- Have experience with our 4-H residential camping program, training youth camp counselors - extensive experience in youth leadership currently with 4-H Agriculture Ambassadors

Current Focus

- **STEM PROGRAMMING** - Robotics, Aquatic Robotics, Engineering, Aerospace, Coding (just a bit)
- **AGRISCIENCE PROGRAMMING** - Science Sprouts, Explores in Ag, 4-H & FFA Crop Scouting, 4-H Agriculture Ambassadors, The Great Microgreen Caper

4-H Youth Development

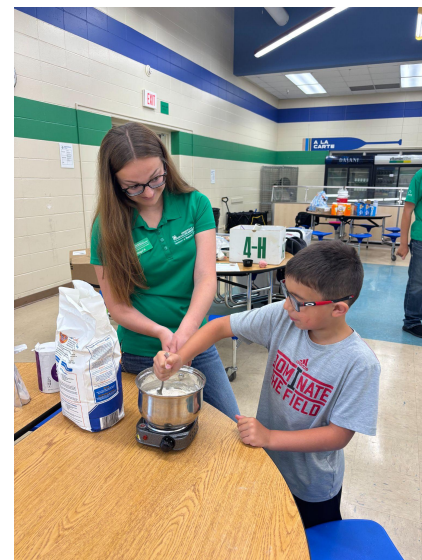
What is 4-H Youth Development?

- Our programs are developed as Hands on Learning in a non formal setting
- Over 55,000 youth enrolled across the state
- 4-H Clubs managed by volunteers in every county in the state
- 4-H members choose areas of interest and dive deep into those
- Research based Curriculum



4-H Youth Development cont.

- Membership is Kindergarten to 1 yr out of high school
- We have both in person and virtual programs
 - Science Sprouts grades 3-5 once a month at 5:30 p.m.
- Offer over 100 project ideas for youth to learn about
- 4-H Year runs Oct 1st - Sept 30th.
- Height of County Fair season working towards the MN State Fair



NEW

Explore 4-H Programs

ATV Safety

BrainWaves Discovery - Grades 6-8

The Great Microgreen Caper -
Grades 3-4 (or 5)



The Great Microgreen Caper



Let's Dive In

- Grow Kit
- 5 Lessons
- Connected to School Standards
- Supplies included
- Lesson Supports



The Great Microgreen Caper Lessons

Intro/Bonus What is 4-H

Lesson 1 - What is a Seed

Lesson 2 - Planting your Microgreens

Lesson 3 - Grow and Identify Microgreens

Lesson 4 - Microgreen Uses and Benefits

Lesson 5 - Microgreen Care and Harvest



Support Materials

- Kit Contents
- Objectives
- Standards
- QR Codes
- Step by step layout
- Full set of lessons and the cards in the box
- Tips and other activities



Lesson #1 - What is a Seed?

1. **Turn and Talk** - talk about seeds, where do you see them, how are they spread, do they all look the same?
2. **Observe and Draw** - Take your mystery seeds, look at the and draw them.
3. **Dichotomous Key** - watch video
4. **Identify and Share** - partner up and use the key to identify your seeds



Reflection

- How do you see this working in your classroom?
- What grade levels do you feel this working well?
- After seeing a little bit do you feel comfortable leading this?



How do you get these kits?

Partner with 4-H:

<https://extension.umn.edu/about-4-h/partner-4-h>

Contact your local 4-H Extension Educator:

<https://extensionstaff.umn.edu/>

Brian McNeill

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Other 4-H Programs to tap into

Tip of the Iceberg

- Virtual Programs
- In person
- We can come to you!



Door Prizes

Door Prize #1

Door Prize #2

Door Prize #3



Contact Information

mcnei006@umn.edu

Youth Development
Curriculum Library:

<https://extension.umn.edu/working-youth/youth-development-curriculum-library>



Thank you for attending this workshop!

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