

How does plant diversity compare between the school prairie and the grassy part of the school playground?

Team Member Names:

Emma Strunk, Jade Saxton, and Kenzie Frye

Teacher's Name: Mrs. Amy Boros

Advisor's Name: Dr. Jodi Haney



Our Team

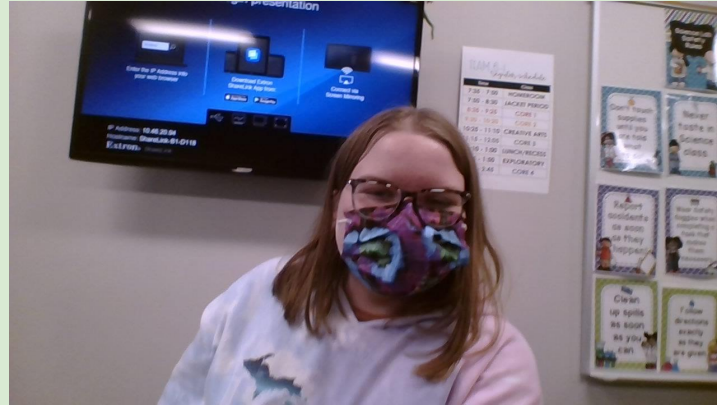
Photographer

Emma Strunk



Experimenter

Kenzie Frye



Data Recorder

Jade Saxton



Why are Native Prairies Important?

- Species of plants and animals to live and grow
- Giving certain animals or insects habitats to live in
- Gives students a hands on experience with nature



Research Question & Hypothesis

RQ: How does plant diversity compare between the school prairie and the grassy part of the school playground?

Hypothesis: If we test the plant diversity between the prairie and the grassy part of the playground, then, the prairie will have more plant diversity because most of the grassy area is shaded.

Variables

- Dependent Variable Goldenrod
place in prairie

Plant Diversity



Near the obstacle part of
the playground



Tall boneset place in
prair

- Independent Variable

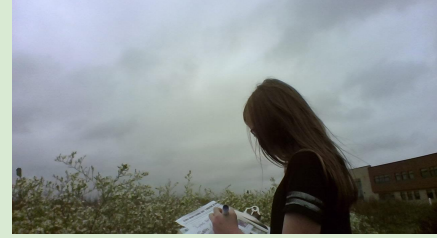
Location: School prairie and grassy
part of the school playground



Near fire hydrant



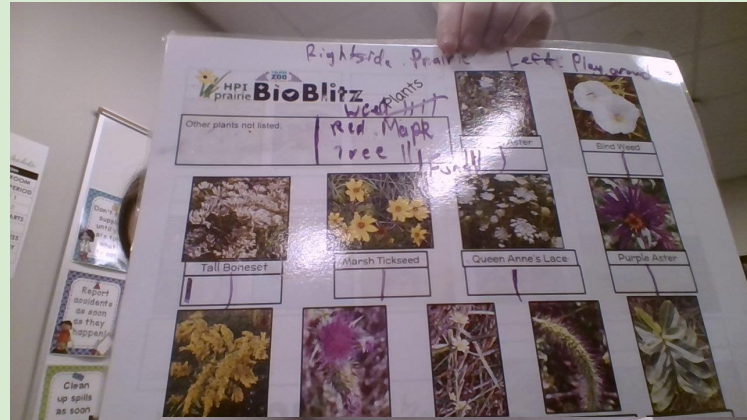
Near swings on
playground



Place
of Shining
Aster in
prairie

Materials

- Pencil
- Dry Erase Marker
- Plant Check Sheet



Step by Step Procedures:

1. Locate a spot in the playground grass area.
2. Grab the weather data sheet and mark the weather.
3. Walk around the grassy area
4. Identify the plants using the Bio Blitz plant checksheet
5. Locate a spot or area in the prairie
6. Walk around in the area you chose
7. Identify any of the plants you see in the area
8. Count the plants you found for each area
9. Average the plant count

Weather Conditions on the Day of Data Collection

It was cloudy, windy, and cold.

Cloud Type: Altostratus

Sky Color: Milky

Sky Visibility: Very Hazy

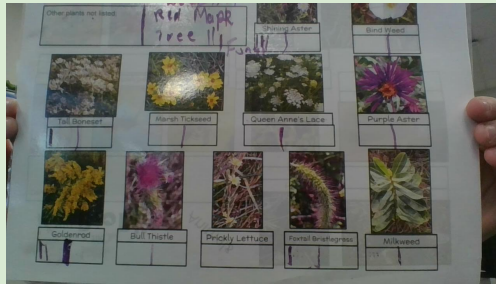
Cloud Cover: Overcast

Cloud Opacity: Opaque

Data Table

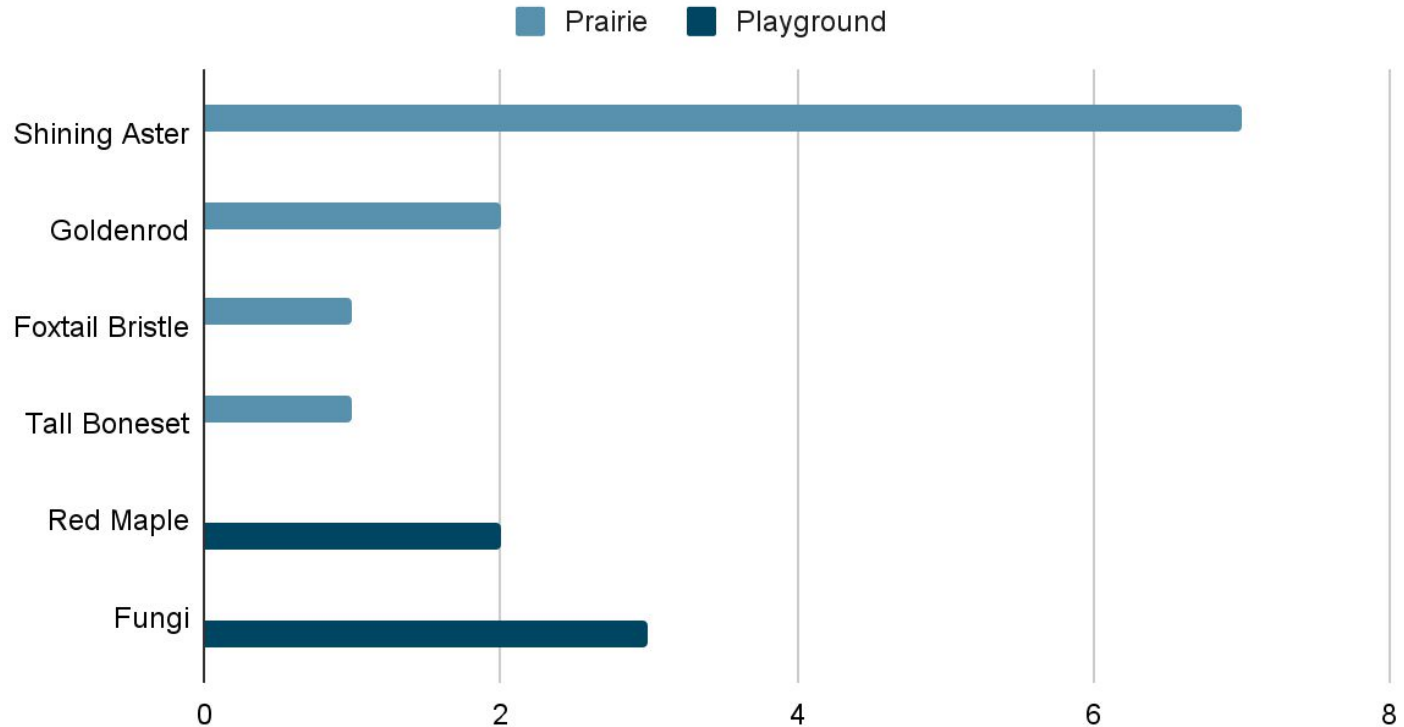
Independent variables → Dependent variables ↓	Tall Prairie Grass vs.	Playground (Grass)
Spot 1:	Shining Aster: 7	Red Maple: 1
Spot 2:	Goldenrod: 2 Fox Tail Bristle Grass: 1	Red Maple: 1
Spot 3:	Tall Boneset: 1	Fungi: 3
Total (Average):	11 (3.7)	5 (1.7)

There is a split in the middle for each location. The right side is the prairie and the left is the grass playground.



Results: How does plant diversity compare between the school prairie and the grassy part of the school playground?

Plants in Areas



Conclusions:

- The prairie has more plants than the playground.
- The playground has less diversity with plant life, when compared to the prairie which has an abundance of plant diversity.
- The playground tends to have more trees than pollinating plants.

Discussion: What does this mean?

This data is important because it shows the importance of native prairies. Prairies sustain plant species, and provide pollen for local animals. Schools should plant more prairies since they provide an ecosystem rather than a playground which usually only has grass and weeds. Prairies provide life and many other benefits. One benefit is, it provides a learning environment. Teachers can teach kids about plants and animals. One last benefit is that it will show people the importance of plants and animals. The more plant diversity there is the more animal diversity there is.

Discussion: Possible solutions!

Some ideas of solutions for this problem are

One solution to get people to install prairies is, that you can encourage people to get involved with their community. It will encourage people to see their friends and community members. It will also help people realize that we need to help our environment. A last solution is to install one at a school like here at HPI. It will encourage kids to be happy about science and not dread the subject. That is just two of many reasons of why people should install native prairies.



Questions? Collaboration? Thank You.

We'd like to thank our teacher for all of the help with the slideshow! We hope that you can carry out a lot questions leading out from ours! If you wanted to we could also possibly collaborate with anybody while they are doing a science experiment!



Our teacher: Amy Boros
5th/6th Grade Science Teacher
Hull Prairie Intermediate School
Perrysburg, Ohio
aboros@perrysburgschools.net