

How does the surface temperature compare between the School Prairie and the Farmlands?

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Our Team

Photographer

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Experimenter

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Why are Native Prairies Important?

- They provide shelter.
- They provide oxygen
- They provide food for wildlife
- Prairie root systems are drought resistant, holds soil in place, and absorbs water.



Research Question & Hypothesis

RQ: How does the surface temperature compare between the school prairie and the farmland.

Hypothesis: If we test the surface temperature between the prairie and the farmland. Then the farmland will be hotter because there is less shade.

Variables

- Dependent Variable

Surface Temperature

school prairie



- Independent Variable

Location...Prairie vs
Farmfield.

farmland



Materials

- IR Thermometer



Step by Step Procedures:

1. Pull out IR thermometer out of bag
2. Unpack thermometer
3. Turn on thermometer
4. Point at ground
5. Hold trigger for 5 seconds
6. Read the degree
7. Store data on page
8. Take nine surface temperature measurements
9. Take nine at three spots at farmfield and prairie
10. Compare the results




*Averages on bottom row

- ## Spot 1

Spot 2

Spot
3

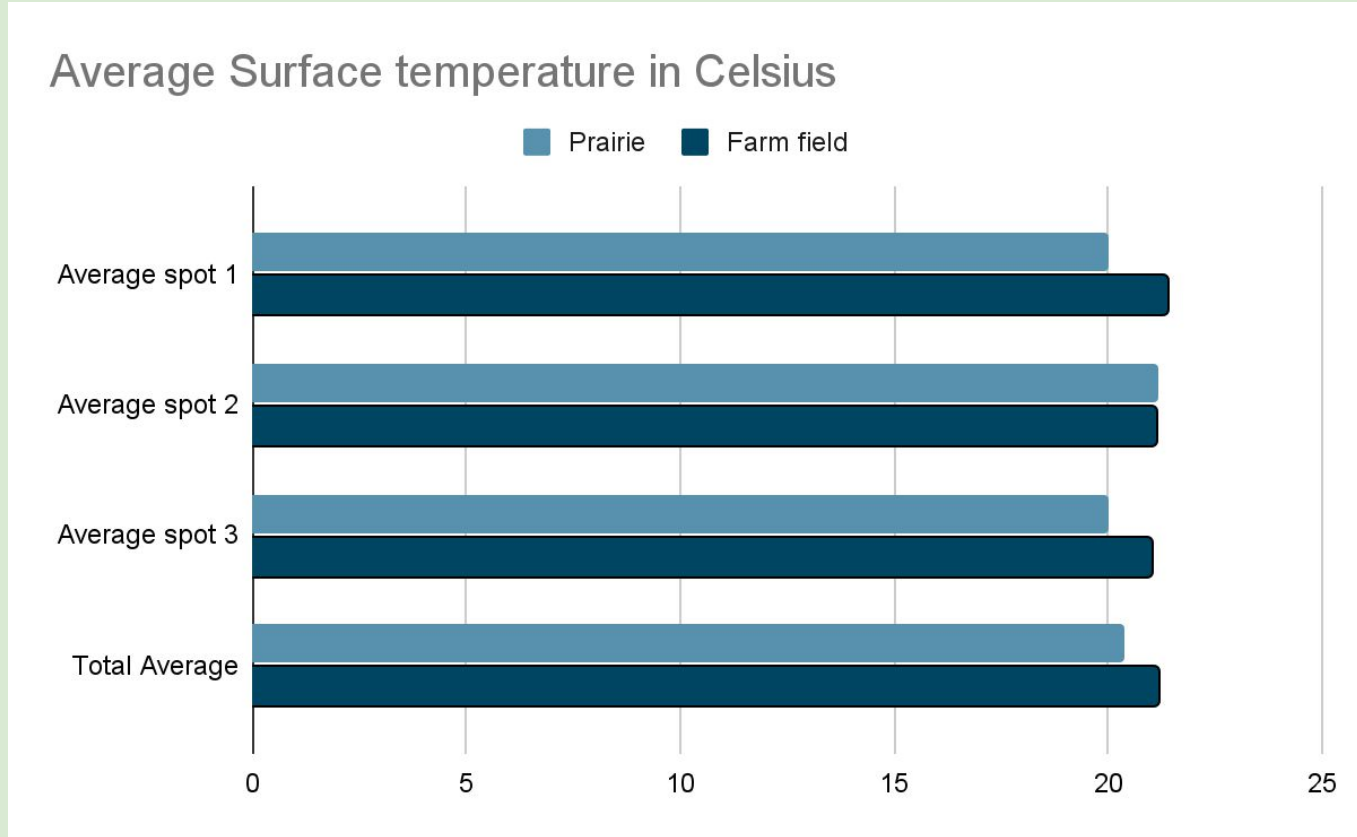
Prairie

		Farmfield																	
	22 .9	21 .8	21 .1	21 .1	21 .1	21 .1	21 .4	21 .6	20 .9	20 .8	21	20 .9	21	20 .9	20 .7	21	20 .9	21	
									Farmfield			Prairie							
	21 .2	20 .6	20 .6	20 .5	20 .3	20 .2	19 .6	20 .3	20 .3	20 .4	20 .6	20 .8	21 .4	22 .2	21 .7	21 .6	21 .4	21 .5	
	21 .4	21 .2	21	21 .2	21 .4	21 .3	21 .5	21 .6	21 .6	21 .6	21 .5	21 .4	21 .2	21	21 .2	21 .4	21 .3	21 .5	Prairie
	21 .2	20	20													21 .4	21 .1	21	Farmfield

Weather Conditions on the Day of Data Collection

- 1.Cloudy
- 2.Gloomy
- 3.Chilly
- 4.Windy

Results: How does the surface temperature compare between the school prairie and the farm field



Conclusions:

- Farmfield is warmer than the Prairie
- The weather was a key factor to results
- The plants shaded the ground in the prairie, the grass didn't do much in the old farmfield and it warmed up faster.

Discussion: Possible solutions!

Prairies can be important to have habitats and life as well as holding the soil in the ground and making it not be able to move therefore preventing erosion. Also we want people to acknowledge the importance of prairies and what they do to help the environment and people. Our data findings are important because they compare or express the results on paper to easily see them.

Questions? Collaboration? Thank You.

- Thank you to Mrs. Boros and Dr Haney who helped with this project

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