

What is the surface temperature of the school Prairie compared to the black top ?

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Our Team

Photographer

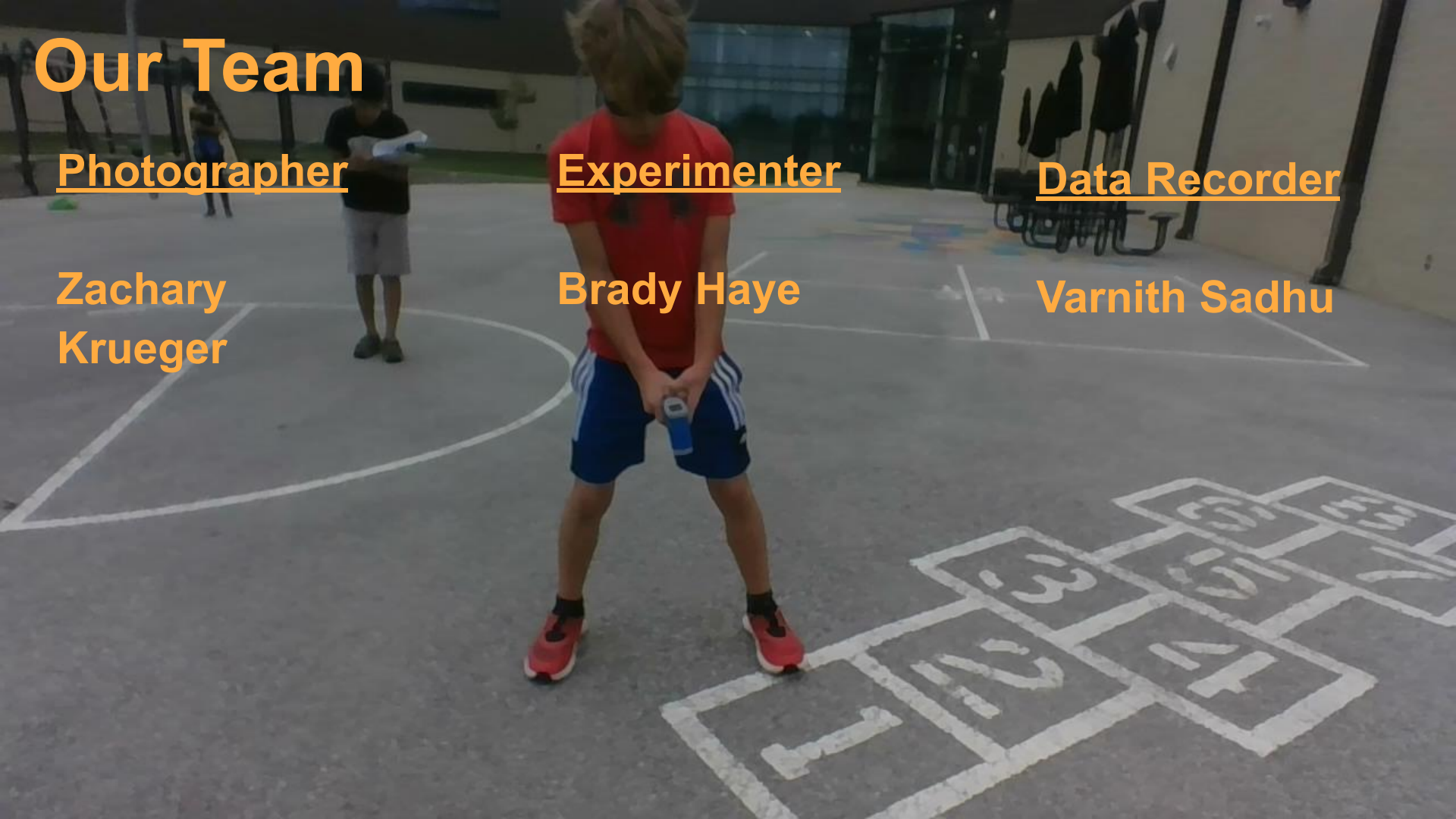
Zachary
Krueger

Experimenter

Brady Hays

Data Recorder

Varnith Sadhu



Why are Native Prairies Important ?

Prairie's are important because in prairies there are different kinds of plants and animals. They give animals and insects a home so they can live.



A 3D white figure is holding a large red question mark. The background is a transparent checkerboard pattern. At the top, there is a transparent UI overlay with five circular icons: a close button (X), a crop/resize tool, a menu (three dots), a back arrow, and a forward arrow.

Research Question & Hypothesis

RQ: What is the surface temperature of the school Prairie compared to the black top ?

Hypothesis: We think the prairie's surface temperature will be colder than the blacktops surface temperature because in the prairie there is all of the plants and tall grass that make it colder.

Variables

Dependent Variable

- The Surface temperature

Independent Variable

- The location Prairie V.S Blacktop



Materials

- IR Thermometer



Step by Step Procedures:

1. We take the IR thermometer and change it to celsius.
2. We take the IR thermometer and go to the school prairie and pick 3 spots and measure surface temperature.
3. We go to the blacktop and pick three spots in black top and measure the surface temperature.
4. Then we compare the surface temperature of the school prairie and the black top.

280 × 720



GREedge

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Data Table

1. Prairie 20., 20.3, 20.5, 20.2, 20.2, 19.9, 20.5, 20.7, 21
2. Prairie 19.8, 19.7, 20.1, 20., 19.9, 20, 19.8, 20.4, 20.4,
3. Prairie 20.5, 20.4, 20.4, 20.4, 20.5, 21.3, 20.4, 20.2

Average surface temperature is for the prairie: 20
Average surface temperature for the blacktop is: 22

1. Blacktop 22.1, 22.2, 22.3, 22.5, 22.3, 22.2, 22.2, 22.5, 22
2. Blacktop 19.9, 19.7, 20.1, 20, 19.9, 20, 19.8, 20.4, 20.4
3. Blacktop 22.4, 22.1, 22, 22.3, 22.4, 22.5, 22.3, 22.1, 22.3

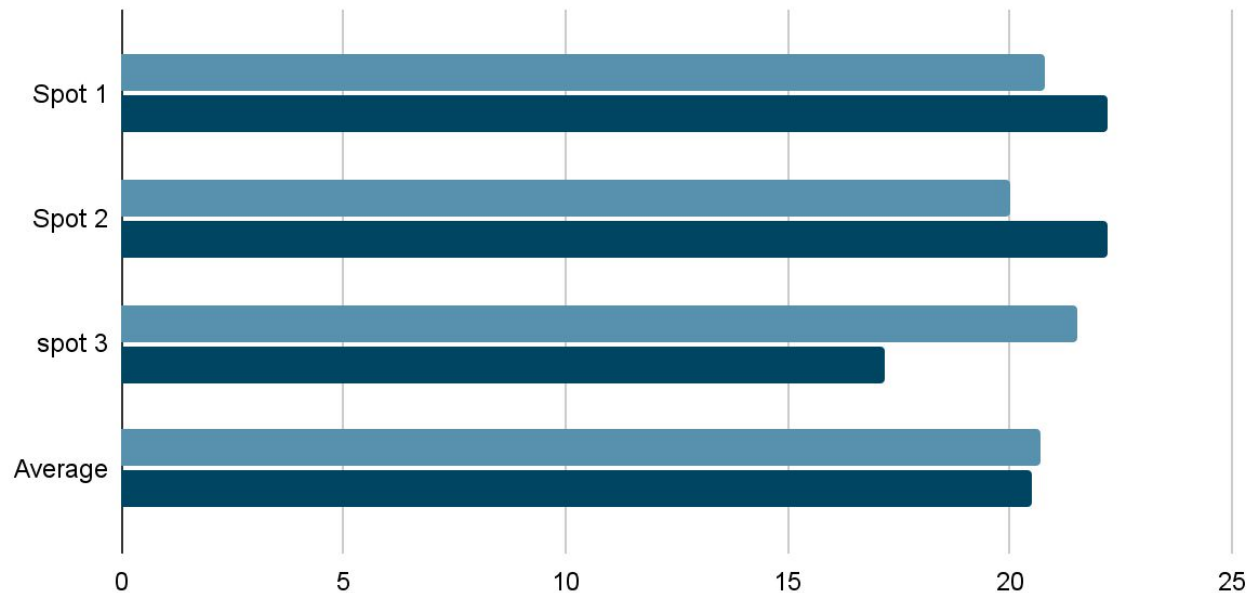
Spot 3:

Average

Graph of Results

Points scored

Prairie Black Top

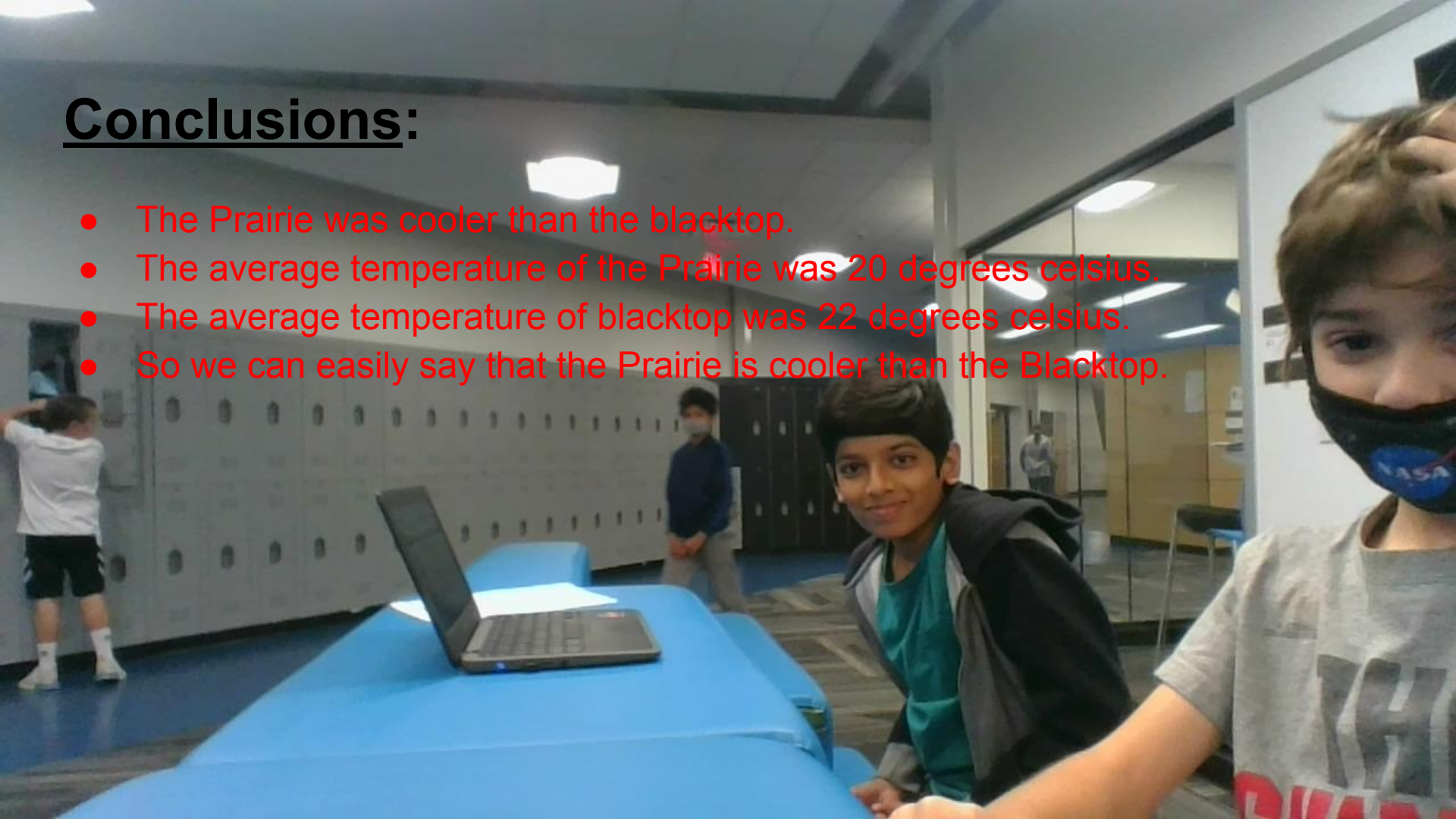


Weather Conditions on the Day of Data Collection

The weather was cloudy and cold outside in the prairie and the black top and there were clouds covering the entire sky and the cloud name is altostratus. The cloud was opaque and the sky color was milky.

Conclusions:

- The Prairie was cooler than the blacktop.
- The average temperature of the Prairie was 20 degrees celsius.
- The average temperature of blacktop was 22 degrees celsius.
- So we can easily say that the Prairie is cooler than the Blacktop.




Discussion: What does this mean?

This data/finding is important because if we know how cool it is outside in the prairie, then we can find out what animals can live there and what plants can go there. If we know how cold the blacktop is we can know if students can play or not in that cold.

We should also plant native prairie plants because it's home to many animals and insects. In the summer I think the prairie would be cooler than the blacktop because it has too much tall grass which makes sunlight not touch the ground and make it cooler.

Questions? Collaboration? Thank You.

- Thank the people who helped you with this project
- Invite audience to ask questions and possible collaborate with your students.
- Give them your teacher contact info (or school) so they can reach out.

A photograph of two young boys standing in a field of tall, dry grass under a cloudy sky. The boy in the foreground is wearing a red t-shirt with a black Under Armour logo and blue shorts with white stripes. He is holding a blue and silver device, possibly a camera or a small telescope, and looking down at it. The boy in the background is wearing a black t-shirt and is looking down at a piece of paper he is holding. In the background, there are some houses and a fence.

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