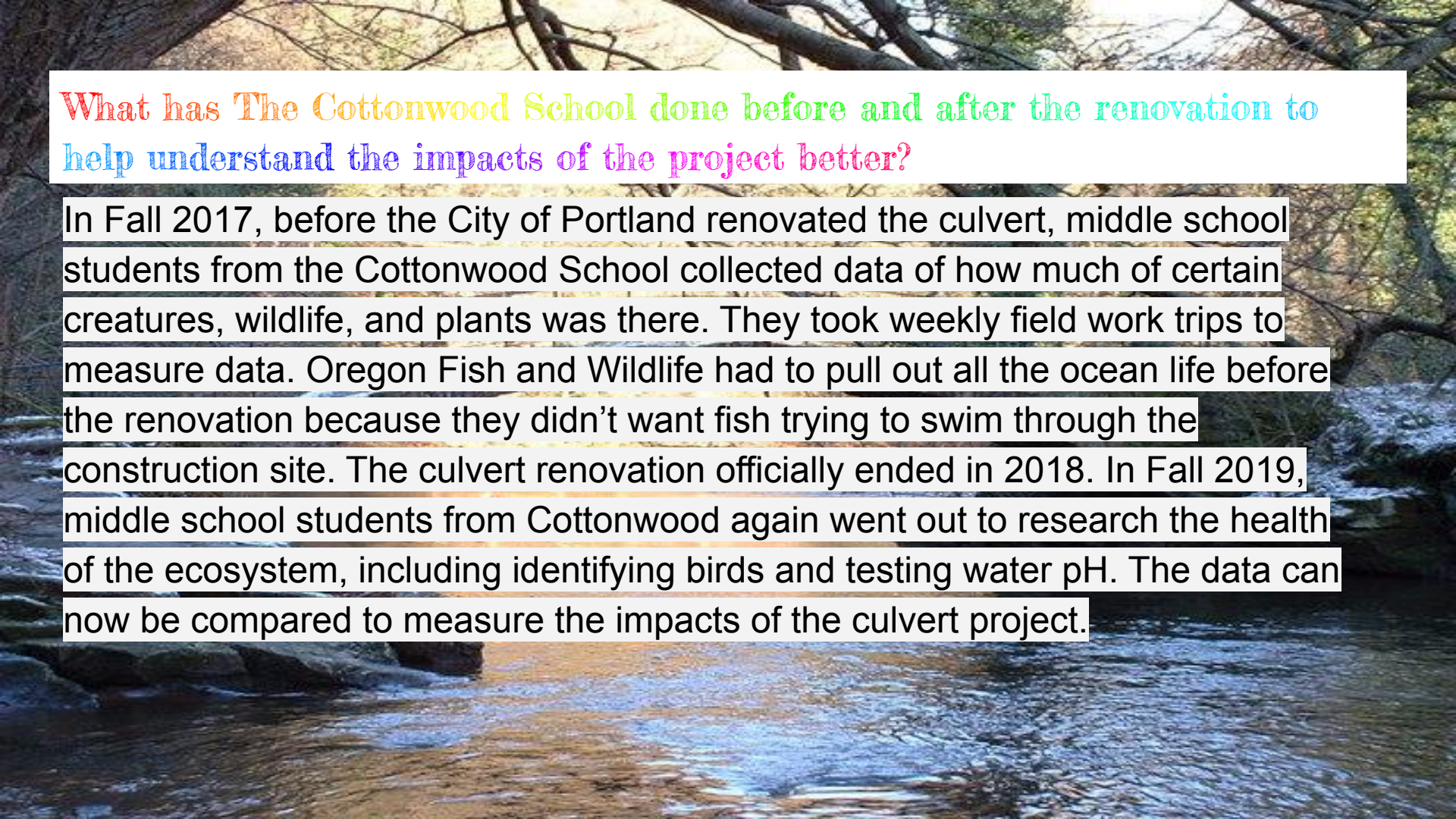

Oaks Bottom
Slide created by: Hadley, Gia, Rachel, Carver, and Aria

History Of Oaks Bottom

- Originally the land was used by Native Americans for the gathering of the wapato, or indian potato. This area was then filled with 400,000 cubic meters of construction waste.
- Following that, the area was slated to be a industrialized In the late 1960s. In 1959 the City of Portland obtained 115 acres of land which in 1969 would be combined with the property that was the landfill and had been original planned to be a industrialized.
- This land was purchased from the Donald M. Drake Company in an effort to stop the land from being turned into an industrialized area.Their (The City of Portland) reason for stopping the land from being industrialized was that everyone living in the suburbs around the area agreed that they did not want to have a huge industrialized area near them.
- In 1988 PP and R turned Oaks Pioneer Park into Oaks Oaks Bottom, making it a wildlife refuge in the process.



What has The Cottonwood School done before and after the renovation to help understand the impacts of the project better?

In Fall 2017, before the City of Portland renovated the culvert, middle school students from the Cottonwood School collected data of how much of certain creatures, wildlife, and plants was there. They took weekly field work trips to measure data. Oregon Fish and Wildlife had to pull out all the ocean life before the renovation because they didn't want fish trying to swim through the construction site. The culvert renovation officially ended in 2018. In Fall 2019, middle school students from Cottonwood again went out to research the health of the ecosystem, including identifying birds and testing water pH. The data can now be compared to measure the impacts of the culvert project.

Ecological Importance

Animals

Oaks bottom is the home to over 200 native species and over a hundred invasive species. It provides food and water for each species and a safe environment to live

Humans

Oaks Bottom has many different uses such as stress relieving space and learning space.

Floodplains

Something that is also important about Oaks Bottom are the floodplains. The reason why they are important is because it shelters over 200 native species and 100 invasive species.

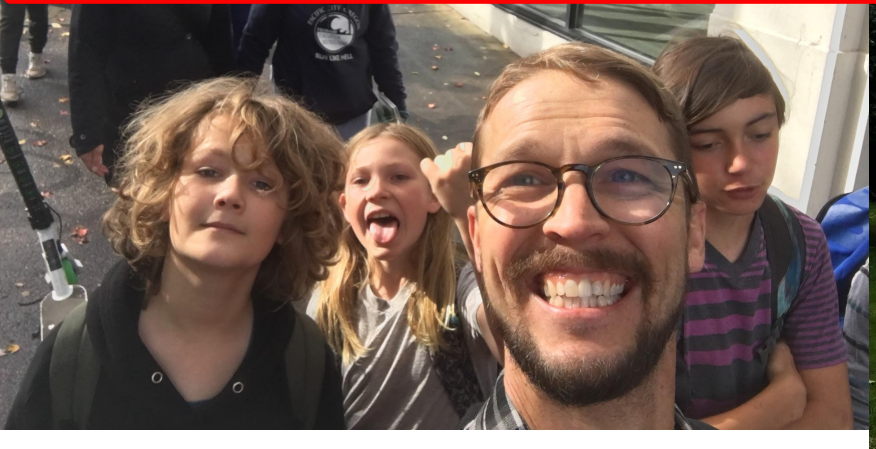
The Culvert Renovation

This culvert was made to make sure salmon can leave Oaks Bottom. The last culvert was too small for the salmon to swim through. So now that the new culvert was built, it is so much easier for salmon to swim through.

In conclusion, Oaks Bottom is a very important place for many. It is a home to many animals, plants, and lots of wildlife. It is also a calming place for many people. Our school has been doing research on Oaks Bottom for a long time and it is also a very important place to us and our community. Oaks Bottom has a place in many of our hearts.

transportation

Slide by Owen, Emma, Parker, Adam, and Ella



Directions to Oaks bottom

- Walked to 35 bus going south, boarded bus.
- Rode the bus.
- Got off at the SW Macadam & Sellwood bridge.
- Walked across the bridge.
- Walked down to oaks bottom through sellwood park.

conclusion

When you take the bus with a full class you have to be respectful to others. When you go onto the bus you have to go all the way to the back of the bus, and if any people look like they need a seat, give your seat to them. I think we did a great on the bus and we were very respectful to others.

What are sitspots?

Sit spots are a place you choose where you can sit and watch everything around you can also write of draw whatever you feel like doing. You can be peaceful.

For the most part we would sit for about 10 minutes, 5 for just sitting and then 5 for data and or drawing/writing

Sitspots are a huge part of our Oaks Bottom trips. They give us time to just sit and admire nature for a while, and the Oaks Bottom trips would be pretty different without them. Overall, sitspots are pretty cool, and we're glad that they were included when we visited Oaks Bottom.

Thank you for watching this presentation, and we hope that you know a little more about sitspots, where they took place, and what other people's experiences are with them.

How the weather affected our data collection

- When it rained our data pages got wet.
- One day it was so cold that it was hard to move our fingers and write.
- It got foggy and hard to see the waterfowl sometimes.
- The mud from the rain made it hard to walk near the water.
- Some of our leaf rubbings were inaccurate because the leaves were wet.

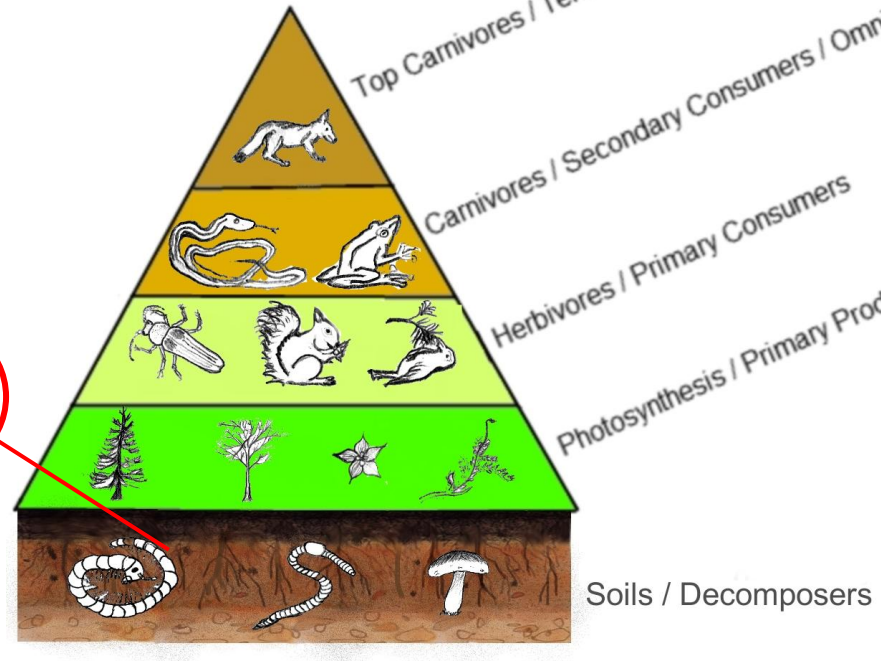
How the weather impacted the results of our data

- We had trouble identifying the trees because some of the leaf rubbings were less accurate because the leaves were wet.
- The rain, by making mud, changed the soil data.
- Some of the organisms acted differently on the cold and rainy days.
- On the last few trips we started to see the waterfowl in a different locations then the one they were in the first few days.

Why it's important to track the weather

We have to see if the organisms act differently to different weather types. When the weather changes our data changes with it.

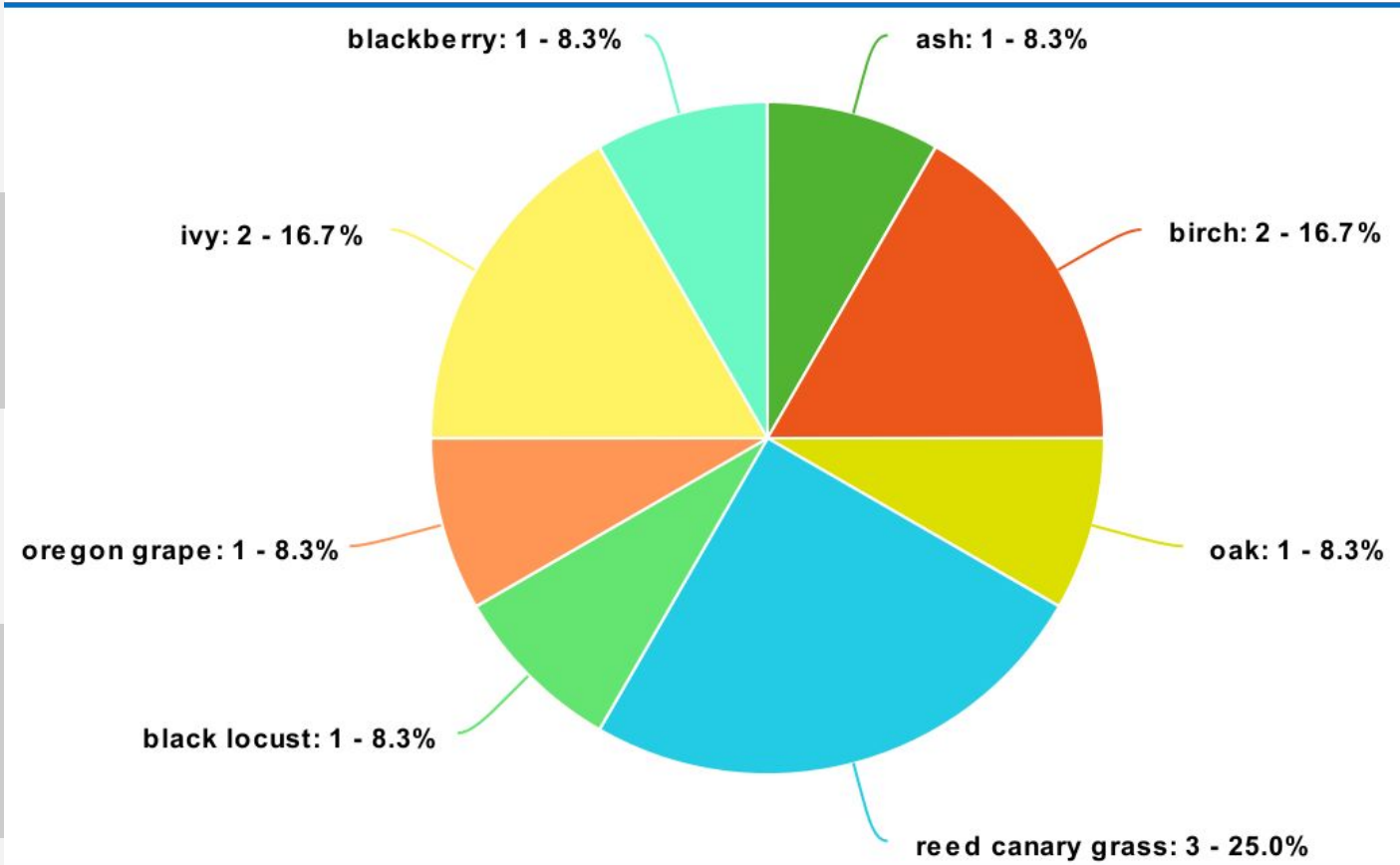
TROPHIC LEVEL!



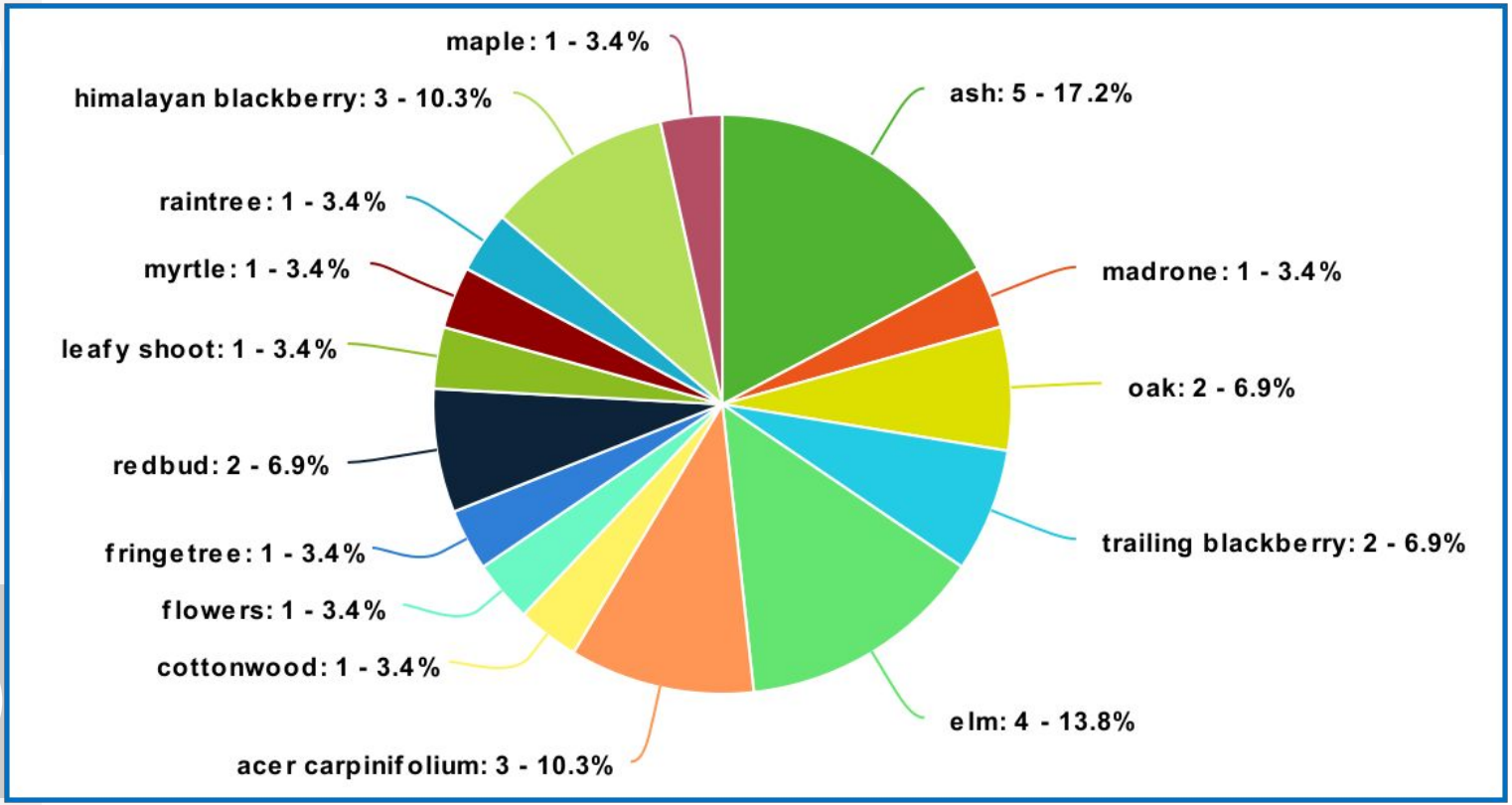
There on the bottom

DECOMPOSERS COMPLETE THE CYCLE OF NUTRIENTS AND MAKES THEM AVAILABLE TO NEW SPECIES AFTER OTHER SPECIES DIE.

DATA FROM TWO YEARS AGO



DATA FROM THIS YEAR



Culvert

This is the data before the culvert was built

Temp: The average temperature at Oaks Bottom is 54°F

PH: The average pH at Oaks Bottom is 6.09

The average dissolved oxygen at Oaks Bottom is 33.0 F we think they ment % because farinthite is not the correct way to show dissolved oxygen.

Culvert

And this is the data after the colver was built

Temp: the average temp mean is 49.71°F

Ph: the average of the ph is 5.98

The average of dissolved oxygen is 69.21%

The dissolved oxygen went up by 36.21% and this means there is more Oxygen in the plant animals and organisms which is good because you need oxygen to live. ph dropped 0.16% the ph dropped which could be bad so it would be good to monitor over time. the temp dropped as well 4.29%.

And lower temp is good because you don't want water to hot because it's better for the water to be cool for the animals and plants in the water. As we mentioned in slide 4 they like around 68°F.

2 years ago year's info summary Soil

The texture of most of the soil was the same for the most part. Mostly wet sandy and rocky. The moisture from last year though got really high, it started around 19% of moisture the it got really low two days after the first test. It dropped down to a nine. As the days went on the moisture started getting higher and higher. All the way up to a 47%. The reason this happening is because, we start this project in the beginning of portland's rainy season so as days go on its going to rain even more, that's why the moisture percentage went up so high.

This years summary

This year we did not get as consistent information as we did last year but what we did get shows a fairly consistent soil temperature, and also moisture levels. The average temperature was about 10 degrees celsius. The average soil moisture was about 55%. For comparison the average soil moisture from before the culvert was about 26%. Meaning it has decreased by 100%. Also for comparison, last year's average soil temperature was 20 degrees celsius, meaning it has also dropped.

The Impact Of The Culvert On Waterfowl

It seems that the culvert had a mixed effect on the waterfowl in oaks bottom.