



Bacteria Bayou

The dirtiest bayou in south Mississippi

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Introduction

❑ We wanted to find out which bayou in south Mississippi was the grossest and what factors make it the most bacteria filled.

Methods

First we gathered our materials to conduct our studies. After we had the materials to collect or samples we drove to two separate locations in a bayou and collected two samples of 1 liter of bayou water. We then drove to another bayou in a different city and collected two different samples. We did this for 3 seperate locations. We then brought our samples to our school lab and tested them for salinity, ph, and clarity. We then used or samples and grew bacteria colonies to see which location has the most bacteria and what causes it . We then waited two weeks for the bacteria to grow and collected our data.

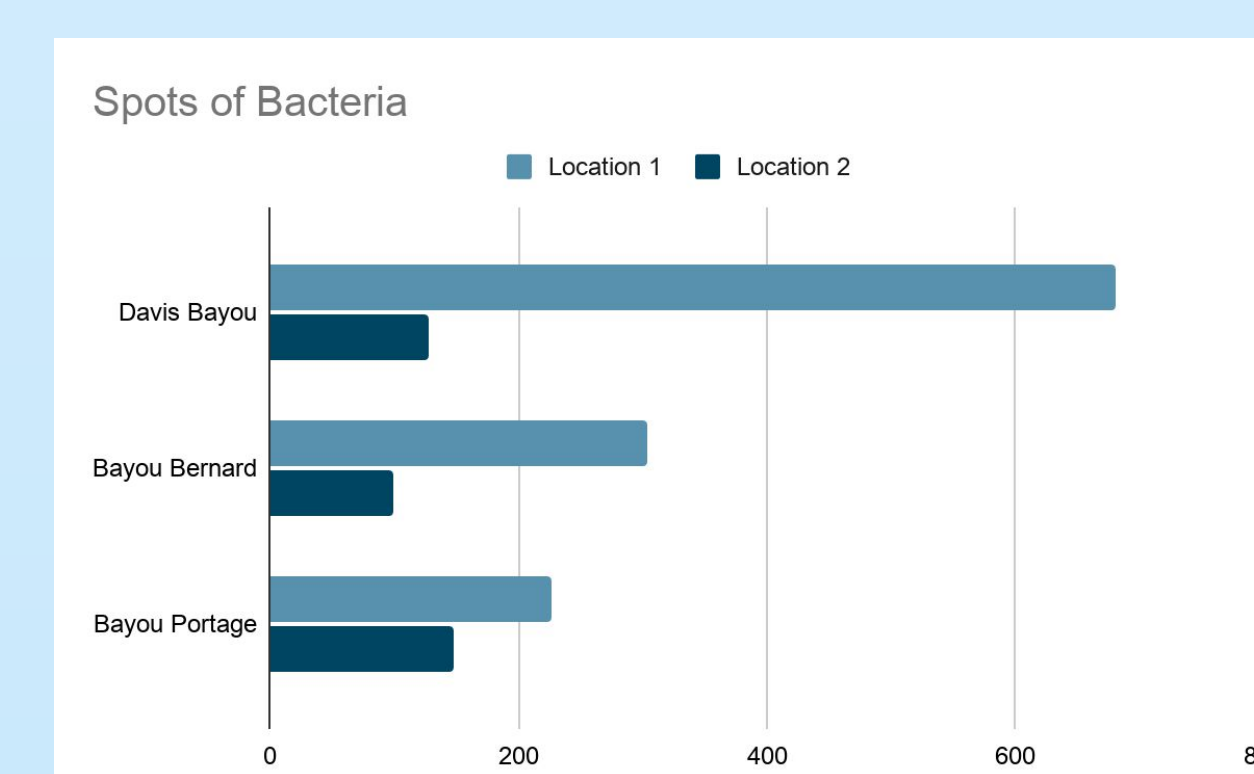
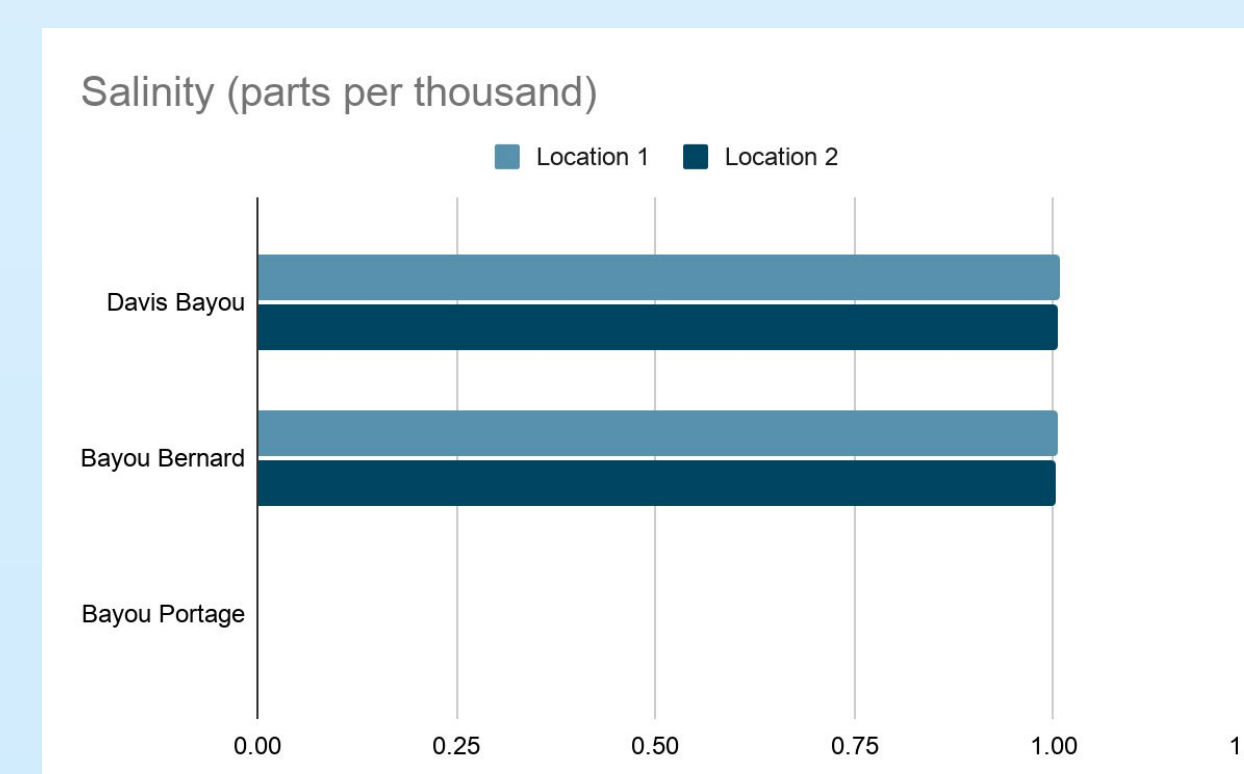
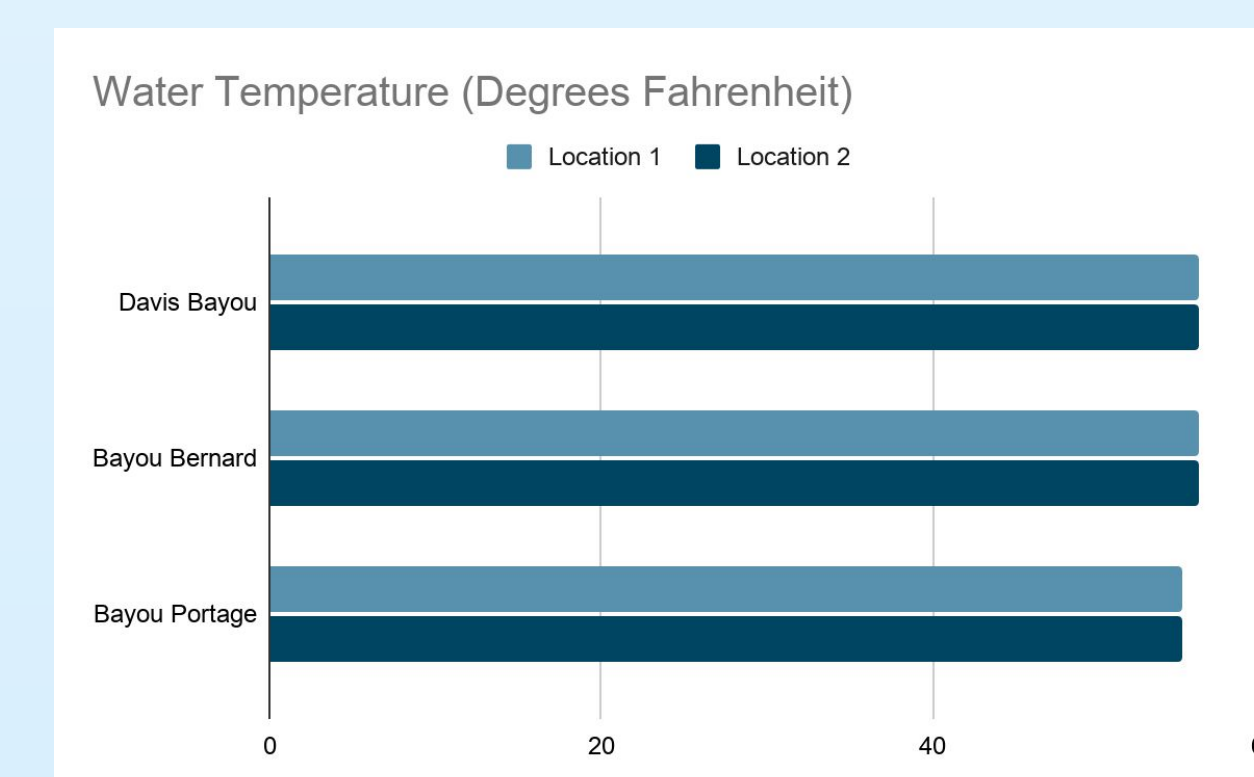
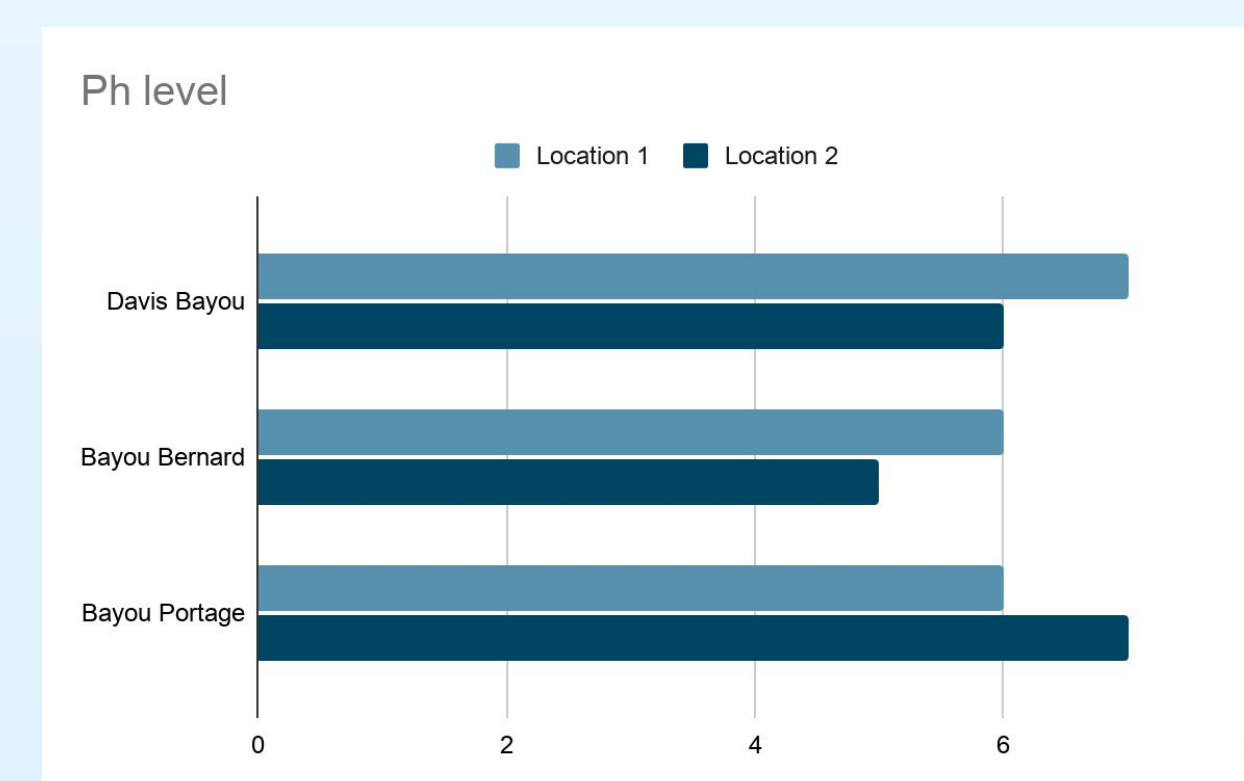
Contacts

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Results

Our results showed that usually lower pH led to a lower levels in bacteria. Also water with a higher salinity had higher levels in pH. Location one in Davis Bayou located in Ocean springs had the most bacteria with 680 spots on the petri dish. It also had the highest pH and highest salinity. The least amount of bacteria came from Bayou Bernard in Gulfport which had the lowest pH and the fourth highest levels of salinity.



Discussion



We wanted to see which factors affected bacteria growth in our water, if any. We tested pH level, salinity, clarity, depth, and temperature. We concluded that higher salinity resulted in more bacteria growth. There was no correlation between the other factors.



References

<https://www.insider.com/does-ocean-water-kill-germs>

<http://www.brooklyn.cuny.edu/bc/ahp/CellBio/Growth/MGpH.html#:~:text=Most%20bacteria%20grow%20best%20around,loving%20microbes%20are%20called%20acidophiles.>