

Tree Cover and Temperatures

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Purpose

- ▶ Why is studying landcover and temperatures important?
 - Temperatures of different landcovers is important to study because changes to these temps can change rainfall patterns, cause death from excessive heat, increase the cost of energy from people using air conditioners, etc.
 - The study of landcover is important because different landcover has a different influence on soil types, water, weather patterns, etc.

How I Plan to Research & Hypothesis

- ▶ I plan on using this website below to look at the two locations and gather information on them. I will analyze the data I find to determine whether my hypothesis is correct or not.
 - ▶ <https://tahminehladi.users.earthengine.app/view/urban-heat-island>
- ▶ **Hypothesis:** I think tree covered land in rural areas will be slightly cooler than tree covered land in urban area.

Locations

Hocking Hills State Park

Longitude & Latitude: 39.4237° N, 82.5379° W

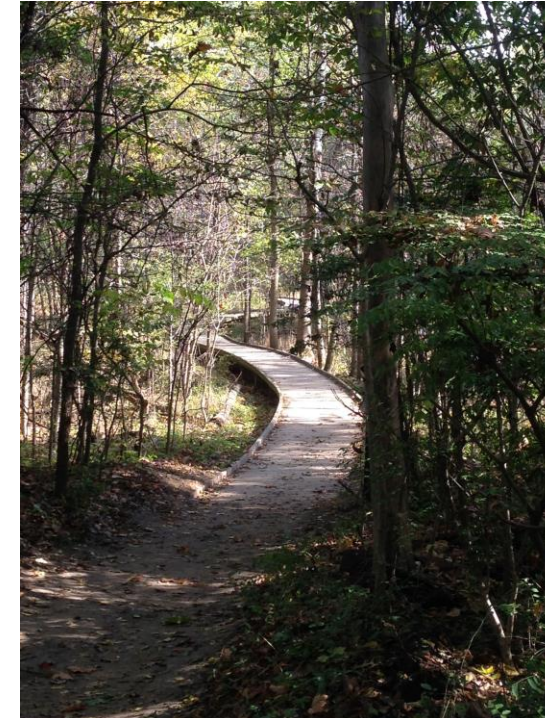
Elevation: 760 feet



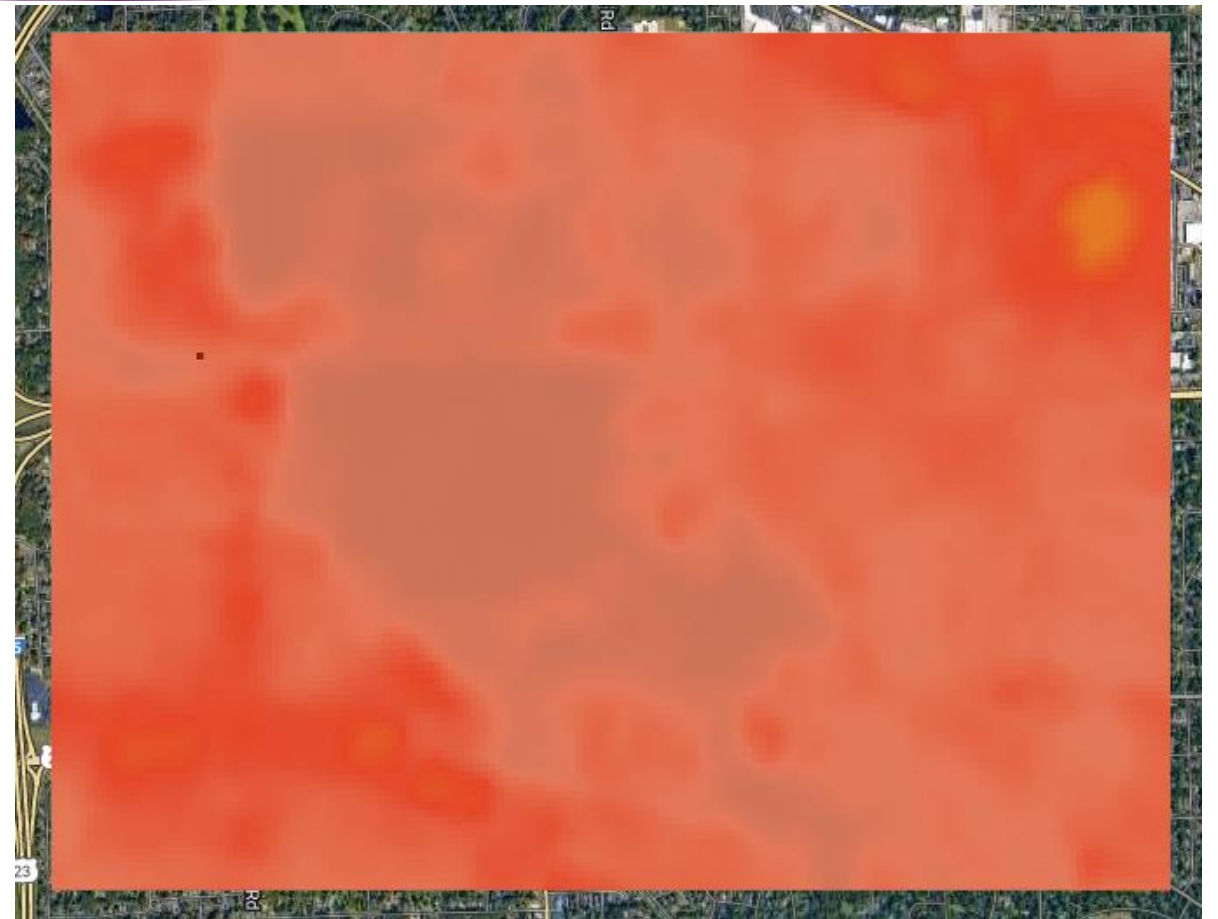
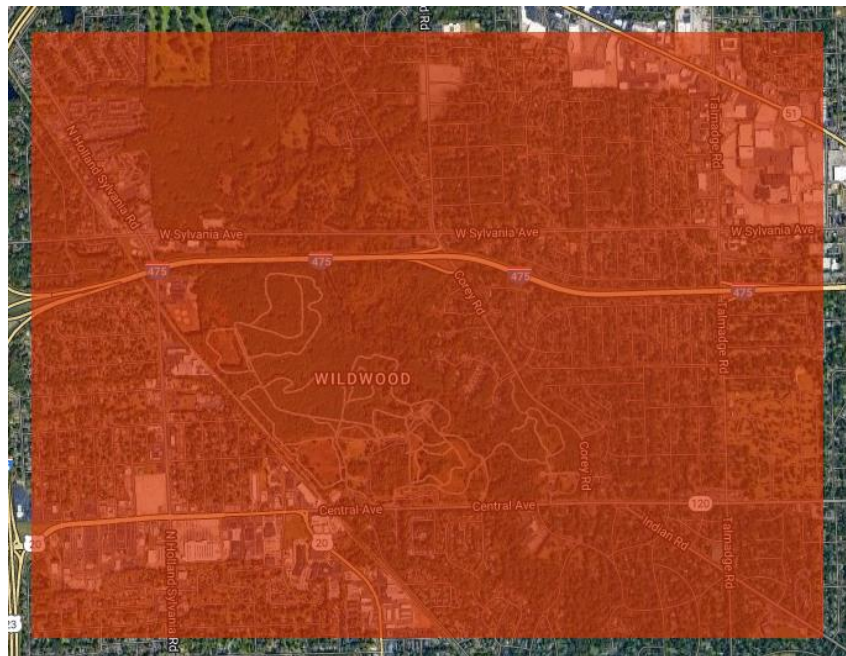
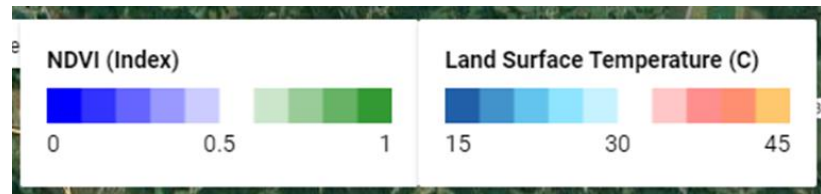
Wildwood Metro Park

Longitude & Latitude: 41.6818° N, 83.6653° W

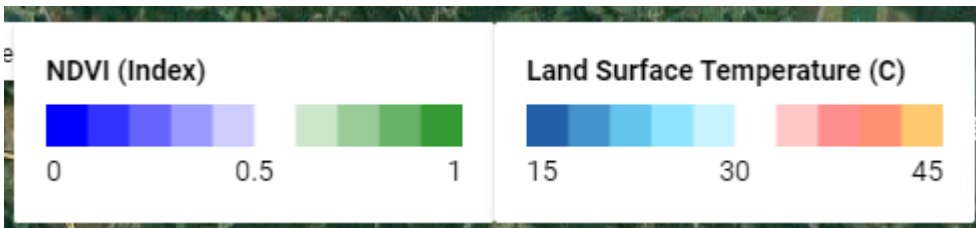
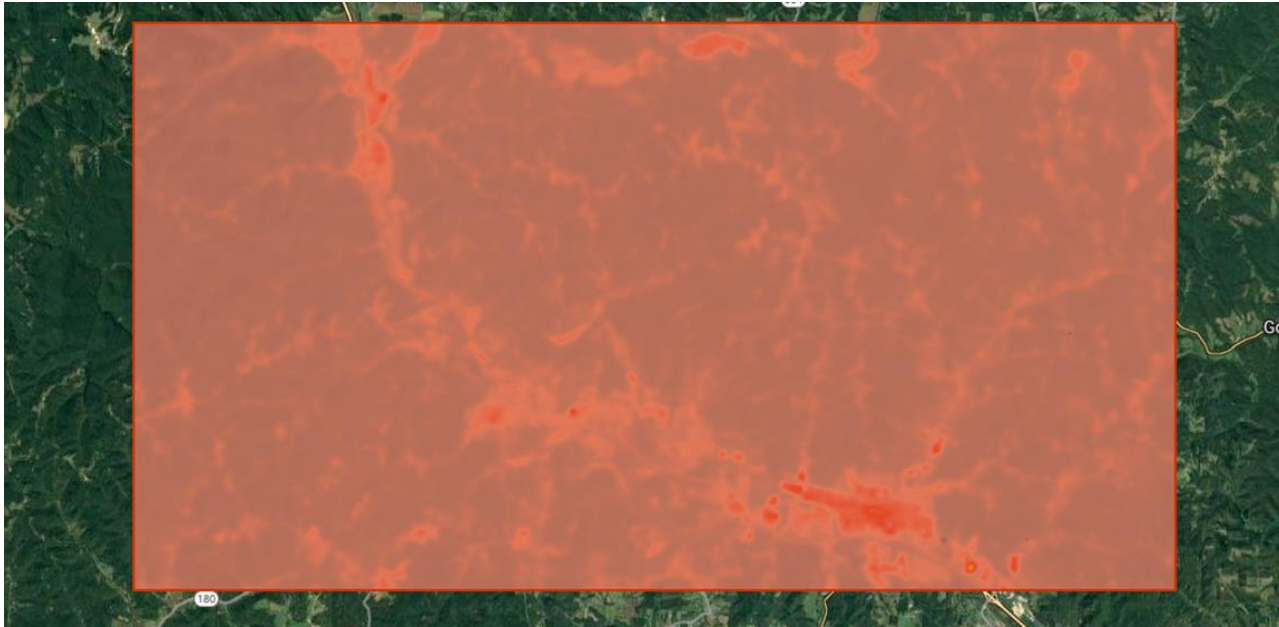
Elevation: 614 feet



Map of Wildwood Metro Park



Map of Hocking Hills State Park



Data Analysis

- ▶ As shown on the slides before, Hocking Hills State Park (rural) showed temperatures ranging from 36°C and 39°C.
- ▶ Wildwood Metro Park (Urban) showed temperatures ranging from 24°C and 27°C.

Conclusion

- ▶ I was wrong in my hypothesis. It was the urban area that showed the cooler temperatures, not the rural as I had thought.

Work Cited

- ▶ <https://observer.globe.gov/do-globe-observer/land-cover/science>
- ▶ <https://tahminehladi.users.earthengine.app/view/urban-heat-island>
- ▶ Google
- ▶ Pictures:
 - ▶ Ohio Department of Natural Resources. <https://ohiodnr.gov/go-and-do/plan-a-visit/find-a-property/hocking-hills-state-park> Accessed: 12/3/2022.
 - ▶ Pinterest. <https://in.pinterest.com/pin/328059154091412880/> Accessed: 12/3/2022.