Name(s)	Project Number
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Project Title

Local Lagoons: Comparison of Lichen Populations in Coastal Sage Scrub

Abstract

Objectives/Goals

I chose to study lichens in the Coastal Sage Scrub Community of Northern San Diego county lagoons because lichens are very important to our Earth, 8% of our Earths solid surface is covered by lichens. Lichens are biological indicators of change in our ecosystem and air quality. My goal was to see if there was a difference in the kinds of lichens found in each location I explored and to see if there was any kind of difference in the number of lichen species documented at each lagoon.

Methods/Materials

I visited three local lagoons. I documented each lichen species I encountered on a log form I created. I photographed the lichen and measured the distance from the highway using a laser rangefinder. I also measured the width of the lichens using digital calipers and recorded the soil temperature, air temperature, and light conditions.

Results

At one location, Agua Hadonia, I found only three species of crustose lichen; at the other two lagoons, I had found two or three categories of lichen, crustose, foliose, and fruticose. For example, at Batiquitos, the number of crustose species observed was twelve and the number of foliose species was two. At San Elijo, the number of crustose species observed was eight, the number of foliose species observed was two, and the fruticose species was two. All lichens at all three lagoons were found on trees or bark, or boulders.

Conclusions/Discussion

To conclude, 81.5% of the lichens I encountered from the three lagoons were crustose, 13.2% of the lichens discovered were foliose, and only 5.3% of the lichens found in all three lagoons were fruticose. I documented lichen species present in the Coastal Sage Scrub community at three local lagoons.

Summary Statement

My project compares lichen populations in the lagoons in the coastal sage scrub of northern San Diego county.

Help Received

My mother and father drove me to the lagoons so I could collect my data.