Name(s)	Project Number
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Project Title

How Does the Presence or Absence of Iceplant Affect the Growth of Dune Buckwheat Plants in the Ballona Wetlands?

Abstract

Objectives/Goals
I wanted to see if the growth of Dune Buckwheat plants in the Ballona Wetlands was affected by the presence or absence of living or dead Iceplant. I believe that Dune Buckwheat plants will grow most when they live where there has not been any Iceplant for a great amount of time.

Methods/Materials
At site 1, I removed dense living iceplant and immediately planted 4 Dune Buckwheats. At site 2, where there was dead Iceplant detritus covering the soil, I left the detritus, removed all grasses and planted 4 buckwheats. At site 3, where there had not been any living or dead iceplant for a long period of time, I removed all grasses and planted 4 buckwheats. I observed the growth patterns of the plants in the 3 sites over an 8 week period.

Results
On average, the Dune Buckwheat plants in site 1 had the most increase in foliage volume from week 1 to week 8, while the Dune Buckwheat plants in site 3 grew the least from week 1 to week 8.

Conclusions/Discussion
My conclusion is that foliage volumes of Dune Buckwheat plants in my study increased the most when they were planted in soil that recently had living Iceplant removed. The average volume increases for site 2 (Iceplant detritus) and site 3 (no recent Iceplant) were very similar and were much less than the site 1 (Iceplant recently removed) volumes. There are many factors that could have contributed to my results, such as if rain affected the nutrients in which the plants needed to live.

Summary Statement

My project tested the growth patterns of Dune Buckwheat plants in the Ballona Wetlands when living under the presence or absence of Iceplant over an eight week period.

Help Received

Teacher helped plant and water plants weekly; Loyola Marymount University professor, Dr. Philippa Drennan, helped design project.