

Introduction and background

The Himalayan Blackberries are a invasive non-native species that is found on the Northern West Coast of the United States and is rapidly spreading. We are trying to investigate what allows the Himalayan Blackberry to prosper and become so invasive. We want to find out if the nitrogen content in soil is a leading component of the invasiveness. This is important because the Himalayan Blackberries are one of the leading causes to what chokes out any native species.

Research methods

We planned to take samples of soil in two areas:

- Areas surrounded with Himalayan Blackberries
- Areas that are not surrounded by the Himalayan Blackberries

We will use the data from the areas tested and compare the levels of nitrogen together. We are trying to find any differences in the consumption of soil from both areas and to see if there are any significant effects. We used the Rapitest soil test kit by Luster Leaf.

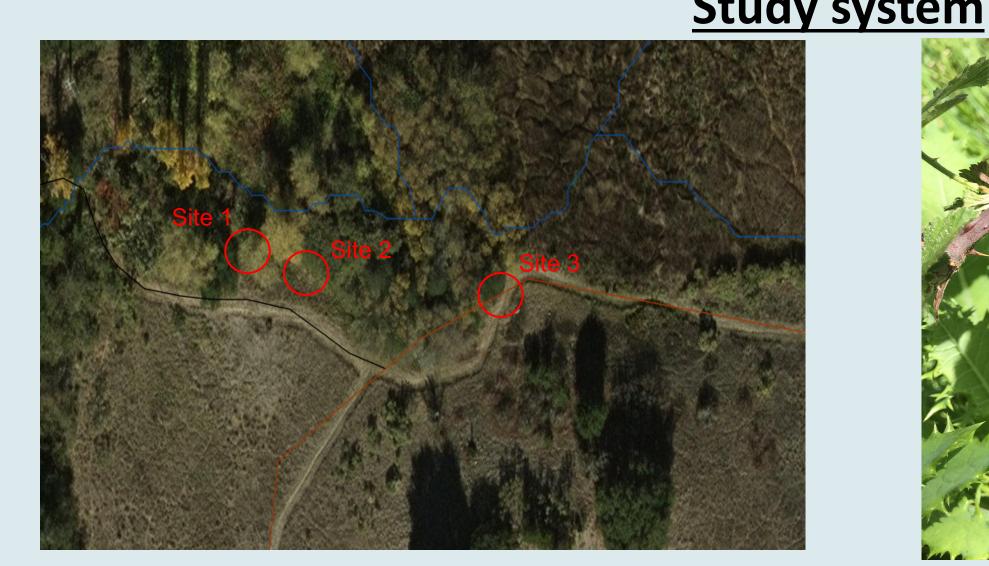


Figure 1: A map of FOP (Fairfield Osborne Preserve) including the sites we have tested in red

Study system

What is the Relationship Between Soil Nitrogen and Himalayan Blackberry Growth? Gabriel Dantoc, Bryce Imai, Armen Kazarian, Brady Harris Science 120 Spring 2017, Sonoma State University, Rohnert Park, CA 94928

Results

		Site 1 (oz. / 10	0 sq. ft.)	Site 2 (oz. /	100
Areas		N2 – N	3	N3	
containing					
Himala	yan				
Blackbe	erries				
Areas not containing Himalayan Blackberries		N2		N1	
KEY N1(D			N2(Def		

KEY	N1(Depleted)	N2(Deficient)	N
Shrub (foliage)	22.0 - 22.5	14.0 - 14.5	N

Figure 5: Measurements of the Nitrogen in Rapitest Soil Test Kit by Lus

We found that nitrogen was me samples were taken near the so Himalayan Blackberries that wit without ranged from N1 - N2 but with the blackberries it majority N3 - N4

There definitely is a correlation between the nitrogen and Himalayan Blackberries.



Figure 2: An image taken of the Himalayan Blackberry bush at FOP

Nitrogen is more profound nearer the Himalayan Blackberries. This reveals that the blackberries favor areas with nitrogen. This also shows that there can be another reason or source that allows the species to grow rapidly and widely.

- Department Of Agriculture.



Site 3 (oz. / 100 sq. ft.)	Acknowledgeme We would like to the following their input and help throughou
N3 – N4	 Dr. Martha Shott Dr. Jeremy Qualls Dr. Nathan Rank SSU, Center for Environmen Education Manager, Suzann
N2 3(Adequate) N4(Extra)	Discussion
/A N/A er Leaf uch higher when oil of the thout. The soil	What we are trying inspect is provokes the Himalayan Blac invasiveness. Whether this is them to grow sporadically ar areas with native species. We come up with a new approad

Conclusions

with nitrogen.

References

Field Guide for Managing Himalayan Blackberry in the Southwest. (2015, February). United States

https://www.fs.usda.gov/Internet/FSE DOCUMENTS/stelprd3828954.pdf

• SOII, J. (2003, March 30). Controlling Himalayan Blackberry. Retrieved March 28, 2017, from https://www.invasive.org/gist/moredocs/rubarm01.pdf

