

# Raccoon Abundance in Regards to Trash Cans Around Cal Poly Humboldt

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## INTRODUCTION

Animals and humans have always lived side by side. We have turned their home, once a lush green forest, into cities and housing for humans. Raccoons are one of many species that have adapted to this by relying on us for food. Our waste and trash have become a stable diet in raccoons at Cal Poly Humboldt. This might seem like a good thing but it does have dire consequences.

It can lead to human attacks by raccoons if the raccoons get too accustomed to being around humans and eating our trash. Raccoons can carry rabies and if a human contracts rabies they can die. Rabies has a 99% kill rate after symptoms set in.

Knowing the implications of how our trash is protected can lead to a much healthier life for both animals and people alike. I predict that we will see a lot more raccoons in trashcans of low quality. Low quality means that the trashcan is easier to get into by raccoons.

## METHODS

I set up 6 cameras in different locations across campus. Each location has a trashcan where I had seen raccoons many times while I lived on campus.

I kept the cameras up for about 2 weeks in hopes of capturing pictures of raccoons.

After the two weeks, I collected the cameras and downloaded them onto my computer and found around eleven pictures of raccoons.

	High Quality Trash Cans	Low Quality Trash Cans
Mean	1.5	1
Variance	5.5	6
Observations	6	6
Hypothesized Mean Difference	0	
df	10	
T Stat	0.36	
P value to one tail T Test	0.36	
t Critical one-tail	1.81	
P(T<=t) two-tail	0.71	
t Critical two-tail	2.23	



Table 1: The mean difference between the two types of trash cans and the amount of raccoons seen at both types.



Figure 1: A picture I captured during my time collecting data.

## RESULTS

The t test showed that the raccoons did not prefer to choose between a high density or low density trashcan. The data suggest that the raccoons do let trash can coverings come in between them and a meal for the night.

## DISCUSSION

What I found was a lot more interesting than I thought it was going to be. I found that the raccoons did not prefer any trashcan. They went to the trashcan that had food inside. It is important to know this information so that we may reduce animal and human conflict from happening.

We want to know what trashcans are working to keep wildlife out and to limit any sort of risk for wildlife and humans to have a conflict.

I think that Cal Poly Humboldt needs to implement wildlife proof trash cans around campus to stop the numerous interactions between humans and wildlife. I think that more data is needed to further these results.

What I would do differently would have more locations across campus and out the cameras out for longer in better positions.

## LITERATURE CITED

Kirstyn Brunner, Nardus Mollentze. 2018.99  
Rabies Virus, Trends in Microbiology 26(10): 886-887

National Geographic 2022.101  
<https://www.nationalgeographic.com/animals/mammals/facts/raccoon> Accessed 6 Feb 2022

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