



**CALIFORNIA SCIENCE & ENGINEERING FAIR  
2018 PROJECT SUMMARY**

<b>Name(s)</b> Sebastian Antony; Gerson Cruz	<b>Project Number</b> <b>S1203</b>
<b>Project Title</b> <b>The Effects of Grazing Species on Native Plants</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The purpose of our experiment is to find a link between animals grazing on a plot of land and the biodiversity of native plants on that plot. Non-native/invasive plant species are endangering native plant species in the Wind Wolves area. If we can reduce the amount of invasive plants by having animals graze on that area then we can fix the environment at wind wolves.</p> <p><b>Methods/Materials</b> We measured out a five meter radius circle with a tape measure. Then we identified and tallied each species. Repeats were included. Then we measured biodiversity with the Simpson's index.</p> <p><b>Results</b> Our results indicated that grazing species have a positive effect on native plant species. But the grazing species has had a negative effect on the total biodiversity as a whole.</p> <p><b>Conclusions/Discussion</b> The importance is that this would allow for a return of native plant species and positively affect other endangered species of the environment. This would also help get rid of invasive plants which burn easily and are one of the main causes of wildfires.</p>	
<b>Summary Statement</b> We measure the effect that grazing has had on plant biodiversity and see how that has affected native and invasive plant species.	
<b>Help Received</b> We received help from a plant biologist at Windwolves Preserve named Brooke Wainwright.	