

Team Number: McCurdy 1

School Name: McCurdy Charter School

Area of Science: Environmental Science

Project Title: Bug Infestation in Carson National Forest

We are studying the effects of the eastern tent caterpillar in Carson National Forest. So far we have split the team in two. Team one “Broadsword 1-1” is fronting the task of coding which consists of Christopher Maestas and Ramses Martinez. Team 2 “Guardian 1-1” is tasked with research of the eastern tent caterpillar, and consists of Michael Trujillo, Jesus “Chuy” Gonzalez, and Isaiah Marquez. So far team 1 has had little success with implementing dynamic variables such as predators, weather conditions, time of year, and a forest which has a density based off of Carson National Forest. Team 2 has had more success finding information on the eastern tent caterpillar. Information such as the caterpillars life cycle, they will turn into moths in 6-8 weeks after hatching, there can be egg clusters from 100 to 150 eggs, and they will abandon their “tent of webs” after pupation into a moth. Our team goal is to implement satellite images of true density of Carson National Forest and code for the dynamic variables that affect tent caterpillars.

Team Members:

Michael Trujillo

Ramses Martinez

Isaiah Marquez

Christopher Maestas

Jesus “Chuy” Gonzales

Sponsoring Teacher(s):

Melissa Berryhill

Project Mentor(s)

Often the most difficult decision a scientist embarking on a study faces is in determining what they are going to test. This involves eliminating a lot of great things that could be tested.

Another component to keep in mind is that it is ideal to develop research in which the results can be utilized, in this case forestry management.

If you haven't already, I'd recommend developing a list of things you could study and then narrow it down by how doable you and your teacher think it is.

For example:

- study the life cycle of eastern tent caterpillar and how it impacts tree infestation
- study the reproductive cycle of “ ”
- study the effect that a late frost has on caterpillar infestation
- study the role that drought plays on infestation
- provide a scenario for the role that a warmer climate might have on infestation. Would your scenario predict more frequent infestations?

These are just some suggestions to consider.