

Interim Report

School: Melrose High School

Project Title : Coyotes and Foxes

Area of Science: Ecology

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Problem Definition:

Our team has decided to do a project on coyotes and foxes and how they are moving into town and getting quite close to humans. They seem to have gotten comfortable with humans and thus might cause problems. Some of the problems they can cause are attacks on pets, and the making of messes around garbage containers.

The reason we choose this project was because all of us on our team like animals, and we wanted to do an animal project. So when we kept hearing about people talking about the increase in numbers of wild animals in our town, we decided to investigate.

Plan:

To solve this problem, we will be talking to town officials (dog catcher/ animal control especially), and to town residents to see if coyotes and foxes are becoming a problem for them. Specifically, we will see if they have lost any pets or if coyotes/ foxes have messed with their animals. Also, we will ask about any problems with trash and garbage being disturbed. This will give us an idea about how bad the problem has really gotten.

Next, we are making a computer model that will represent the town and the surrounding areas. It will show the populations of foxes and coyotes and how they move around an area. One variable will be about how comfortable or scared the predators are around humans. It will also show the rate of lost pets and damaged trash bins around the area.

Progress:

We have found in our research that coyotes are in all the states other than Hawaii, they also live in Canada and Mexico. Their range has increased over the years, and they live well around humans. They are now even found living inside of major cities! So our problem isn't unique to our area, and we think our project can help others from around the country.

Our team has begun a model on coyotes, and the foxes will act in very similar ways. The two WILL have unique differences though. The model shows a small town with countryside around it. The variables we have included so far are how fast the animals reproduce, how far they travel around, and how they react to humans. We next need to add a way of showing possible negative impacts from the coyotes and foxes.

Expected Results:

We hope that our model will show how coyotes and foxes can spread into new areas, and possible cause problems as they do. We think that the information we discover can help our local town officials to decide if there is enough of a problem for them to have to worry about. If so, what can they do to help the problem. Our program should be able to tell them if it would be more helpful to reduce their numbers, or to try to discourage them from being around humans.

Citations:

Meeting with Danny Burdine, Melrose Dog Catcher / Animal Control Specialist. November 2016.

Website: www.pestproducts.com/coyote.htm

Website: www.wildlifeanimalcontrol.com/coyotekeepaway.html

Brochures: New Mexico Department of Game and Fish

Encyclopedia Americana: Coyote article.