Prairie Dogs

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69 Melrose High School

Team Members

Tyann Ray Turner Ham Lauren Riley Josh Broome

Teachers

Mrs. Rebecca Raulie Mr. Alan Daugherty

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Executive Summary:

Gathered Information

There are different kinds of prairie dogs. In our area we have two of the species. Black-tip prairie dogs which are named for the black color on the tip of their tails. The other type of prairie dog looks exactly the same without the black tip on their tails. Prairie dogs do not hibernate even though they are mammals. In the winter, they stay in the ground as long as possible, but come out when they get hungry.

Plan of Action

We plan to learn the easiest way of getting rid of the prairie dogs or how to relocate the ones that are damaging farmer's crops and other people's yards. We also plan to make a StarLogo TNG presentation representing how quick they spread.

We Have Learned...

As an argument that all life is valued, prairie dogs contribute to other animals. As in burrowing owls, white-tailed rabbits, badgers, weasels, snakes, and even foxes. There are many different types of prairie dogs, we are not sure of all the names but the ones we know are white-tailed, Mexican prairie dogs, and white bellied prairie dogs.

Problem

We want to know how to control the existence of the prairie dogs. We will do this by creating an environment with predators already existing. Then we will put prairie dogs in it and make them reproduce, eat, and make new holes. In this part of the country prairie dogs take over many acres of land, and cause problems for many people. In our project we are trying to figure out how to help control the prairie dogs.

Method

Our method of demonstrating this problem and how we are planning to solve it is by using a model on StarLogo TNG. Also, we used power point, and Microsoft word. Our model has prairie dogs that eat, reproduce, and make new holes.

Results

We made a model on StarLogo TNG to demonstrate how the prairie dogs reproduce, and how they die off caused by the amount of food in their environment and the number of predators. We found the results to be similar to what we expected. Some of the problems we have encountered are that when our coyotes reproduce they create prairie dog pups. We learned computers do exactly what you tell them to do even if it's not what you mean! Also another problem we encountered was that we couldn't get the prairie dogs to stamp random holes, instead they stamped a sequence of holes.

Screen Shot

Here is an example of our screen on StarLogo TNG.

Conclusion

They spread once they need to find more food or better land to live in, they can spread pretty fast depending on the quality of the land and food around them. They will usually spread faster in unpopulated territory. People can slow them down by building structures on the land, setting traps, or by poising them and causing them to either relocate or die off. The main way people get rid of prairie dogs is by poising them because it is the quickest and most effective way to go.

Bibliography

In our project we used the following sites to look for research and information on prairie dogs:

http://www.scsc.k12.ar.us/2002Outwest/NaturalHistory/Projects/RoarkJ/default.html

http://www.nationalgeographic.com/burrow/pdog.html

http://www.desertusa.com/dec96/du_pdogs.html

http://mountain/prairie.fws.gov/species/mammals/btprairiedog/ http://cahe.nmsu.edu/pups/1/L-201.pdf

Also for more information we talked to some people in the community about their knowledge on prairie dogs. Many of them live out of town and have dealt with prairie dogs before.

Software

The software we used is the following:

Microsoft PowerPoint; for all presentations on our project.

Microsoft Word; for all documents on our project.

StarLogo TNG; for the modeling of our project.