

Environmental Changes

Mormon Cricket Management Plan

Estimated Time: 15-20 minutes

Age range: 3rd grade

What you need: a pencil, this page or a blank page for drawing, colored pencils or crayons

New Words

Ecosystem – all the living and nonliving things in an area

Organism – any plant, animal, or other living thing

Background Information:

Mormon crickets are insects that live on the ground (cannot fly) in the western United States and across much of Nevada. They like to eat flowering plants, grasses, shrubs, and crops that farmers grow. When there are a lot of Mormon crickets, they can hurt the health of soil, water, and range and cropland **ecosystems**. Even though Mormon crickets can eat a lot of things that are valuable to humans, these crickets **are not harmful and will not hurt you!** They are definitely large, and there can be a lot of them at one time, but they are just looking for some more tasty food to eat.

Below is a picture of a Mormon cricket. Have you ever seen one of these before? If so, write about a time you saw them. If not, look at the picture and write what you notice about this organism.



Mormon crickets in Nevada and other places can damage or destroy things. Here are some ways this can happen:

- Crops can be eaten by the crickets.
- Home gardens and landscapes can be eaten by crickets.
- Crickets can get run over by cars, making the road slippery to drive on.

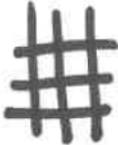
When Mormon crickets hatch and start eating their way across Nevada, there are some things that we can do to prevent them from causing the problems above. Let's discuss some of the solutions to these problems, and figure out which solution is the best for different problems.

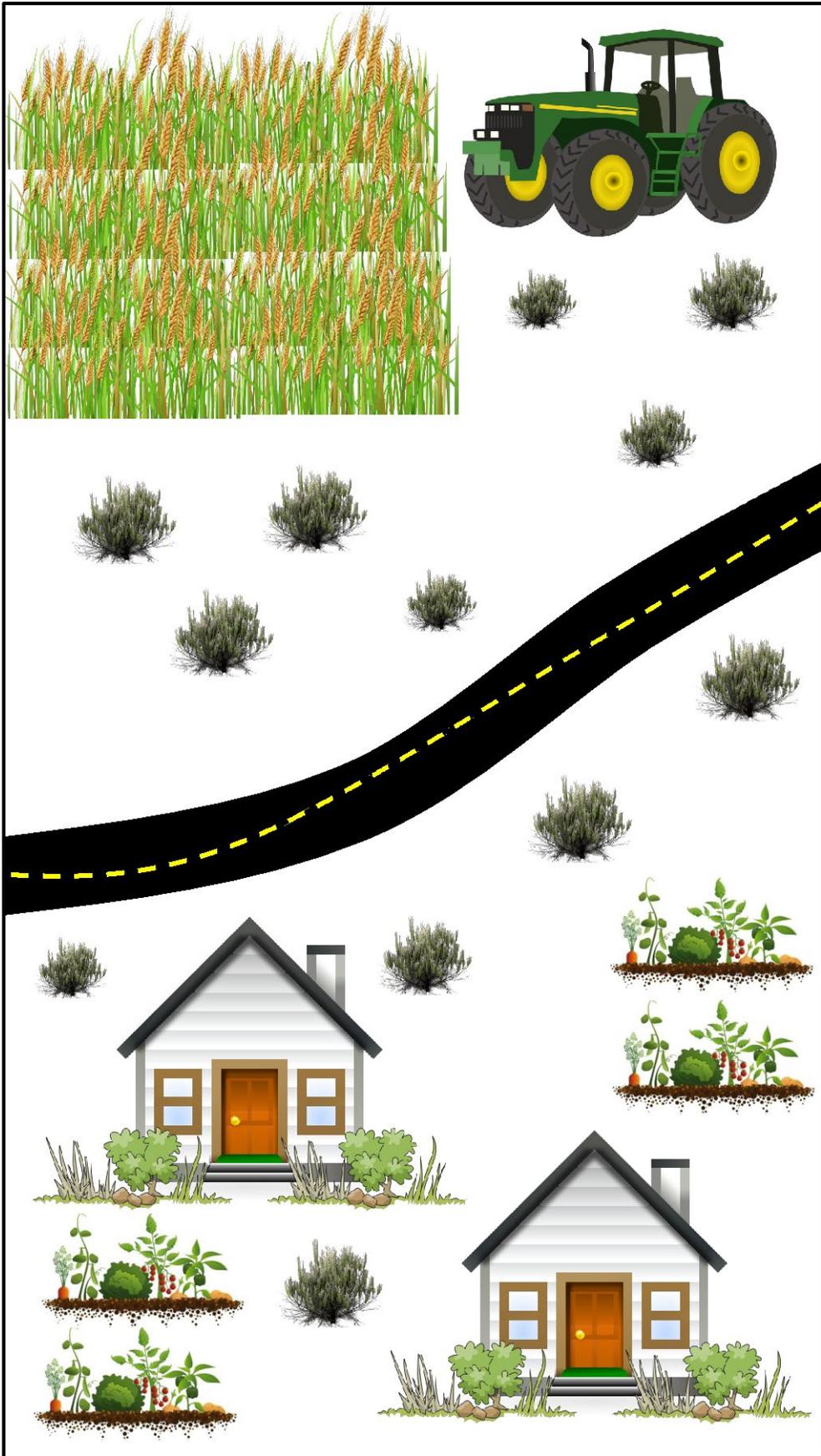
Habitat Solutions:

1. Farmers and homeowners could use **bait (something used to trap them)** around the outside of their fields or gardens to stop the crickets from eating their plants.
2. People can make **fences** out of chicken wire and plastic sheets to keep Mormon crickets away from plants.
3. Farmers and homeowners can **rake** their lawns and turn over the soil in their garden beds or fields to bring the eggs of the crickets to the surface, so they will freeze in the winter.

Instructions:

1. Look at the map below (page 3). The whole map is of an area where Mormon crickets will come to and there are several areas that need help to prepare for the crickets. **Circle** things on the map that could be food for the Mormon crickets.
2. Use the chart to plan what solutions from above you will use to help stop the Mormon crickets from eating all the plants on the map. **You have a budget of 100 points.**
3. Draw or sketch your solutions (answers) on the map to see if you protected everything that you circled as food in step 1.

	Points	How many?	Total	Symbols
Bait	20 x	_____	= _____	
Fencing	10 x	_____	= _____	
Rake	10 x	_____	= _____	



Observe your map and answer the questions below:

How will your plan help stop the Mormon crickets from eating all the plants?

Are there any other ways that humans can help stop the Mormon crickets?

What kinds of other animals could these solutions help besides humans?

For more information on Mormon cricket management, please visit:

<https://extension.unr.edu/publication.aspx?PubID=2346>

Sources:

Mormon cricket picture:

<https://www.google.com/url?sa=i&url=https%3A%2F%2Finsidenorthernnevada.com%2FContent%2FNEWS-Homepage-Rotator-%2FNEWS-Homepage-Main%2FArticle%2FNear-the-end-for-pesky-Mormon-crickets%2F31%2F175%2F41847&psig=A0vVaw1H9z3F9dJado2xQ9Vt2faM&ust=1590785701164000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCICynt41-kCFQAAAAAdAAAAABAD>