



**Designing for Wildlife
7th Grade Project Worksheet**

Name: -----

Class: tuesday, thursday

The purpose of this project is to design a solution to a problem facing wildlife on Cape Ann. Your solution will be something that people can build and install that will help wildlife. You will be planning, then sketching, and then building a model, of your designed solution. This should be your own original work based on your own ideas.

1. Target species: squirrels

2. Problem addressed (check one)

Habitat fragmentation

Hazardous road crossings

Squirrels often get killed because they are so small that when they cross the road, cars don't see them and they run over them.

Structures trapping animals

Declining specialized habitat. Kind of declining habitat: _____

Dams blocking upstream travel

Subsidized predators

Other-Your own idea _____

3. Your solution (*summarize what you planned to design/build to solve the problem*):

A bridge over the road that looks like and is in the shape of a tree branch. The bridge will attach to the trees on either side of the road.

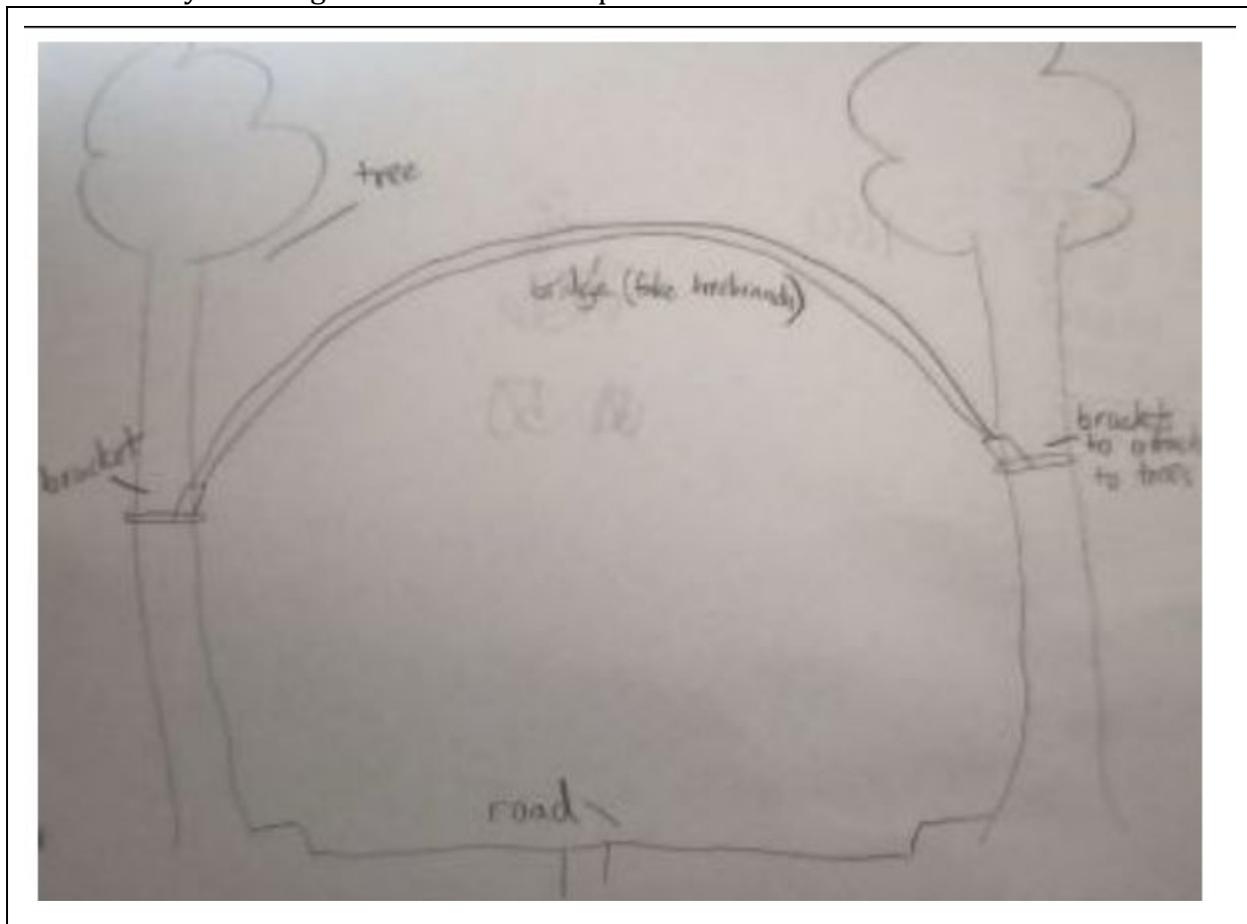
4. Explain in 2-3 sentences how your solution will help solve the problem?

It will make it so that the squirrels have a safe place to cross the street that they will cross naturally.

5. What impacts will the solution have on the natural environment? Think about how it will affect other wildlife, or the land or water.

The brackets on the trees could hinder tree growth.

6. Sketch your design here. Label all the parts:



9. Choose 2 or more features of your design and explain how they work together to make your design work effectively.

- Features:
 - It looks like and is in the shape of a tree branch.
 - It attaches to a tree.

How these features work together: It makes it more natural for the squirrels to cross the road on what looks like a tree branch.

10. Materials needed. On the left, write which materials you'll use to build the model. On the right, write what materials you'd use if actually building the full scale project. For example, for the model, you might use clay in the model to represent what would be concrete if the project was actually built.

For Model	Real World Material
Rolled up paper	tree
Pipe cleaner	Metal Bracket on tree
straw	Metal Pole between the brackets

11. Based on feedback, what would you need to change to make your design more effective or easier to implement? List at least two changes.

I made it less expensive by making it just a pole and I made it more accessible by putting in a tree.

12. Imagine that you have to convince your town to help you build and install your designed solution. Explain below:

- How your design will work

It will be a place for squirrels to cross the road that they will go to naturally and is inexpensive.

- How it will help wildlife

It will limit the amount of squirrels that get hit by cars.

- At least two limitations (things your design *cannot* do).

Larger animals like deer can not cross the bridge. The design could hinder tree growth.

