



Now That's a Quality Habitat!

STUDENT ACTIVITY INSTRUCTIONS

Materials Needed:

- Pencil
- Paper or Notebook
- Ruler
- Notes from Lesson 1 about King Rail

Introduction (Read before doing the activity)

A habitat is a place where an organism makes its home. A habitat meets all the environmental conditions an organism needs to survive. For an animal, such as the King Rail, that means everything it needs to find and gather food, select a mate, and successfully reproduce. The main components of a habitat are shelter, water, food, and space. A habitat is said to have a suitable arrangement when it has the correct amount of all of these. A quality habitat for any species has a suitable arrangement, but not all habitats are of the highest possible quality. For this activity, you are going to explore what a quality habitat for the King Rail might look like and design your own!

Activity Instructions:

1. Consult your answer to the concluding questions from Lesson 1 on what the essential habitat needs are for the King Rail to answer the following questions. *Note: If you can't find the answers in your notes, you can find them on https://www.allaboutbirds.org/guide/King_Rail/lifehistory*
 - a. What does the King Rail eat? Be as specific as possible. *
 - b. What does the King Rail need water for? What types of areas or structures might it look for to get water? **
 - c. What type of shelter or shelters does the King Rail require? Where does it roost? What type of nest does it make? What materials does it use to make its nest? What vegetation does it require to be safe from predators while looking for food? ***
 - d. What amount of space does the King Rail need to thrive in its environment? *Note: The answer to this question may not already be in your notes. Based on your answers to the questions above, how much space does all that require? Or you can think of it as how much land does the King Rail require? Make an educated guess.*

2. Now it's time to create your design for a quality habitat for the King Rail! Make sure to consider all the habitat requirements you answered above: food, water, shelter, and space.

- a. Create a map of your King Rail habitat on a blank sheet of paper.
- b. Make sure to label all the necessary components of the habitat.
- c. To keep things simple, make sure your map is in the shape of a rectangle.
- d. Color your map if you wish!

3. Congratulations! You have created a quality habitat for the King Rail.

Key:

*The availability of food is a crucial part of a habitat's suitable arrangement.

**Water is essential to all forms of life. Every habitat must have some form of a water supply. Some organisms need a lot of water, while others need very little.

***An organism's shelter protects it from predators and weather. Shelter also provides a space for eating, sleeping, hunting, and raising a family. Shelters come in many forms.

Conclusion

Your design of a quality habitat based on the essential needs of a species is what land managers, biologists, and conservationists aim to achieve. That is what habitat management is all about - meeting the needs of the species. Ideally, in this activity, you learned even more about the King Rail in Missouri and a little bit about what it takes to conserve a species.

