

# Ecology Explorers

## Introduction

In our growing world, wildlife and human habitats are bound to overlap. Human-wildlife interactions, which occur in both rural and urban areas, can upset the survival of a species, as well as have impact on the humans of the area. It is important for us to try to live in harmony with the environment around us.

## Task

As a wildlife conservationist, you must be aware of the outcomes of human/wildlife interactions. You will be part of a panel of experts, each of whom will have studied a specific species that is currently endangered in your state. Your position requires you to know everything about your particular species, including the human interactions that occur, and how this human activity affects the organism's survival. You will prepare a presentation for the conservation board (or other assigned audience) that includes practical and economically feasible solutions to ensure the continued existence of all the species researched by your team.

1. With a fellow conservationist in your group, go to your team's [Seeing Reason](#) account and create a map to answer the following question under the project **Overlapping Habitats**: What happens when human and animal habitats overlap? Research the relationships between humans and animals using the Web sites below.

<b>General Resources on Habitats</b>
<a href="#">The rarest information around*</a>
<a href="#">Habitat Loss*</a>
<a href="#">Deforestation and Habitat Destruction*</a>
<a href="#">Wildlife Protection*</a>
<b>General Environmental Resources</b>
<a href="#">Environmental Protection Agency*</a>

2. Within your group, decide who is going to be the expert for each species assigned to your group. Individually, conduct research on your particular species, using the Web sites provided as a starting point for your research. Below are the animals assigned to each group:
  - Group 1: Southwestern United States
    - Mexican Spotted Owl
    - Mexican Gray Wolf
    - Colorado Pikeminnow
    - Mount Graham Red Squirrel
  - Group 2: Central and Southern Africa
    - Mountain Gorilla
    - Mountain Zebra
    - Black Rhinoceros
    - Riverine Rabbit
  - Group 3: South America
    - Jaguar
    - Scarlet Macaw
    - Golden-Rumped Lion Tamarin
    - Brazilian Tapir
  - Group 4: Asia
    - Snow Leopard

- Black Necked Crane
  - Red Panda
  - Bengal Tiger
  - Group 5: Australia
    - Greater Bilby
    - Numbat
    - Northern Hairy-nosed Wombat
    - Western Swamp Tortoise
3. Use the questions below to assist you in conducting your research and planning your report. You are responsible for handing in an individual report detailing the questions and answers assigned for your species. You and the other members of your team will also be responsible for proposing a series of recommendations that includes practical and economically feasible solutions to ensure the continued existence of all your species.

**Questions to be answered for each species:**

- Introduction
  - Hook – What interesting fact, startling statement, or quote could you use to hook your reader?
  - What background information should your reader know? Consider your audience and what they would already know.
  - What are you going to talk about in this report and why? Be sure to mention the full name of your species.
- General information
  - What is your animal and where is it found in the world?
  - What is the ideal habitat for this species? Describe and illustrate.
- Your animal's place in the ecosystem
  - What is the ecological niche for your species? Describe how it fits into its ecosystem as a producer, consumer, decomposer, or combination of these.
  - How would the destruction of your species affect the ecosystem?
  - What would happen if we do nothing to stop the decline of this species?
- Impacts on your species
  - What influences the biological success of your species?
  - Directly and indirectly, how do humans negatively impact your species?
- Conservation and politics
  - What factors could alleviate or diminish the negative human influences on your species?
  - How do politics on both sides of the conservation issue play a role in the survival of your species?
  - What are some solutions that could help reduce the negative impacts, but still support human and business interests? Describe feasible solutions your region can adopt to ensure the continued survival of this species. Justify your answers.
- Concluding paragraph
  - How can people and animals coexist? Write a conclusion of what you learned and why it is important. End with a strong plan of action for your reader to consider.

4. Once your research is complete, team up with one of your conservationist partners to share your research on your selected species. (This can be, but doesn't have to be, the person you partnered up with earlier.) Choose either or both species to explore further by going to your team's [Seeing Reason](#) account and creating a map to answer the following question under **Ecology Explorers: Species Success**: What influences the biological success of your species? This should help you develop solutions to ensure continued existence of your species.
5. Use the Research Paper Outline to guide the creation of your formal report. Make sure the end of your report has practical and economically feasible solutions to ensure the continued existence of your species.
6. Once all the conservationists in your group have completed the first draft of the research report on their species, meet together and present your draft findings. Use the Report and Presentation Scoring Guide to peer assess your draft reports. This is the time that you can ask the other members of your group for advice on revising your writing.
7. The final product of this Webquest will have your group choose a presentation format that will provide an overview of your species, compare the needs/issues of all four species, explain the human/animal interactions that occur, and include practical and economically feasible solutions to ensure continued existence of the species. Your group will present your findings to the conservation board or other assigned audience.
  - Decide as a group which presentation format your group will use: Web page, multimedia presentation, poster, video, or even a play. If you have another idea for your group's presentation, obtain prior approval from the teacher.
  - Assign roles for the creation and presentation of the report. Ensure that the work is divided among the members fairly.
  - Include in your presentation:
    - A brief overview of each of the species
    - Native habitat/location of the species
    - A comparison of the needs/issues of all the species
    - Reasons for your species' decline in population
    - Recommendations for economically feasible/practical plan that would help all four species survive
    - A bibliography of your research sources

## Guidance

- Review the Report and Presentation Scoring Guide before, during, and after researching and writing your report and preparing your presentation.
- Make sure you spend an adequate amount of time at each Web site. There is a lot of valuable information in each of the sites provided.
- **Read, read, read.** You won't get adequate answers if you only go to one research source. Make sure you read the information on the Web page or book. Look at the subtitles/links to help guide you to the sections you are looking for.
- Take notes as you do your research. Bookmark any Web sites that you find useful so that you can refer to them again quickly if necessary.
- Keep in mind the rules defining plagiarism. Plagiarism occurs when you steal or use the ideas or writings of another and present these writings or ideas as your own. You are not allowed to borrow passages from books, articles, or Web sites without identifying them.