

UPLAND BIRD BIOLOGIST

STUDENT NAME:

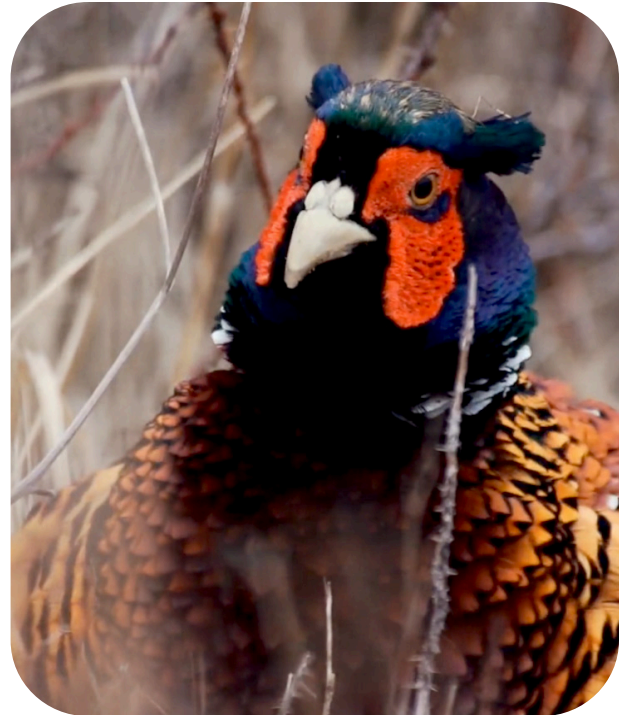
CLASS:

DATE:

YOUR WILDLIFE AREA'S NAME: _____

Greetings, Biologist!

Upland game birds are a family of heavy, ground-living birds that reproduce quickly, have tasty game meat, and are a classic favorite for the hunter. And thanks to good wildlife management practices, some upland gamebirds have increased in populations size – such as the North American Turkey! Unlike your team members, you know it's not from just creating habitat or hunting opportunities in **wildlife areas**. You know from wildlife research that population sizes can be also affected by **over-predation, diseases, and human-conflicts**. Additionally, you know there is a **capacity** to the number of animals that a habitat can support ... If there are too many animals in an area, the population could crash from starvation! And if too many animals are taken away by hunters, the populations will not grow to their potential. So your role is vital! With your research and management suggestions, the birds will beat the odds and grow to their maximum potential.



First, as a group, pick the **upland game bird species** your wildlife area will support: _____

To make sure the upland birds in your wildlife area are managed for success, research about the following:

- What animals are predators of your upland bird species? _____

- What are the benefits to predation of your upland bird species? The disadvantages?

- What are some methods to predator control that you can implement in your wildlife area? Which nonlethal or lethal methods would you use in your wildlife area? Include tools or structures in your diorama.

- What diseases or parasites are your upland birds susceptible to? How does it spread? _____

- What transport restrictions, sanitation, or barriers can you use to prevent diseases from entering your wildlife area? Include in your diorama. _____

- What human developments or activities are risks to your upland bird survival (for example, vehicle collisions)? What corridors or barriers can you build in your wildlife area to help the birds avoid these?

- You will introduce 50 of your game bird species to your wildlife area. What equipment and resources will you need to do this? _____

- You will have to monitor the population numbers of your game bird species. How will you monitor and sample the population? _____

- Define what the biological carrying capacity is: _____

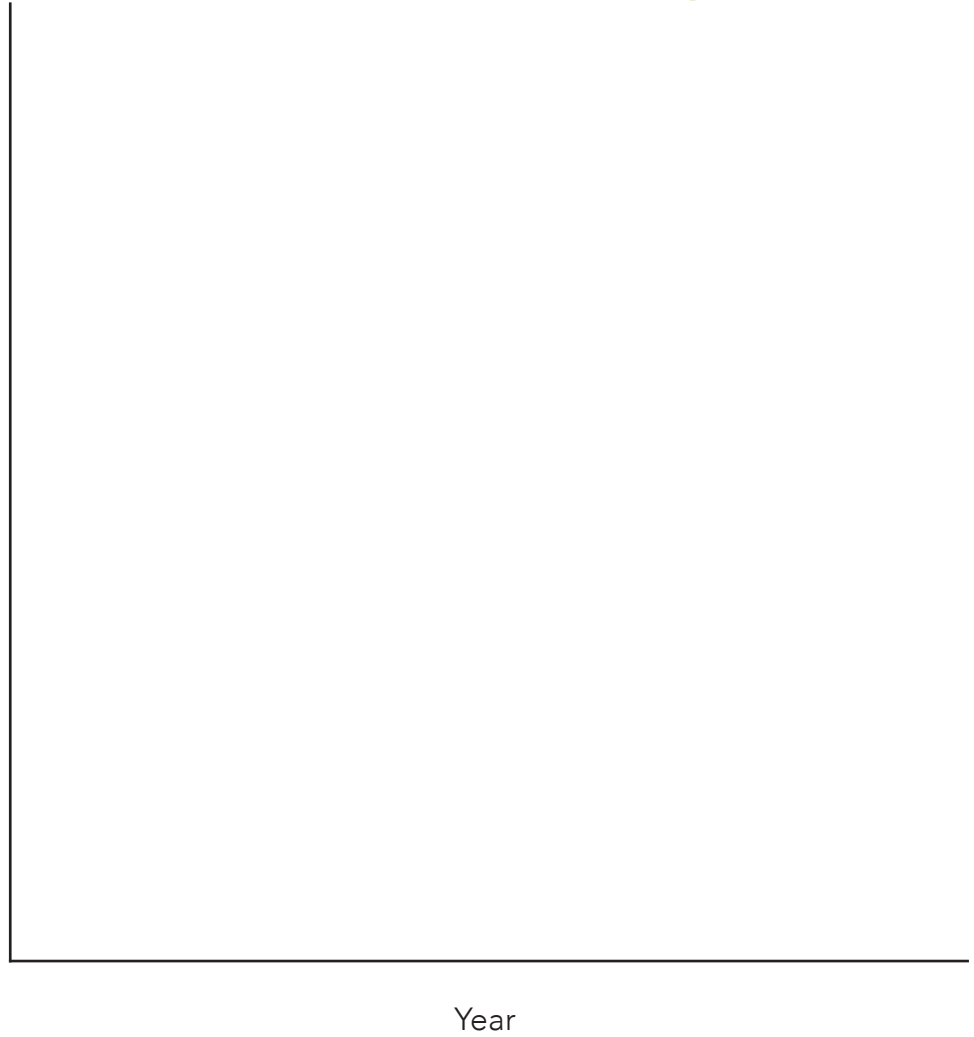
- Define what the maximum sustained yield is: _____

- Why is it important hunters pay attention to the carrying capacity and maximum sustained yield? _____

- What is a hunting permit? _____

Year	Population
0	50
1	98
2	189
3	355
4	634
5	1044
6	1546
7	2039
8	2426
9	2682
10	2831
11	2913
12	2955
13	2977
14	2988
15	2994
16	2997
17	2999
18	3000
19	3000
20	3000

Population



- Here are the population estimates you will sample within 20 years. Make a graph of your population estimates by plotting the data points. Connect the data points with a continuous line.
- According to your data, the biological carrying capacity of your wildlife area is: _____
- Take your carrying capacity and divide it by 2. This is your maximum sustained yield: _____
- Consult with your hunter mastermind about the maximum sustained yield to agree on the number of hunting permits you will give out each year for your upland bird species: _____
- Include your graph with carrying capacity and maximum yield results on the corner of your diorama.

Next, combine your research findings with your team members. As a group, use all of your discoveries to design and craft your own wildlife area upon a cardboard sheet. Then let your imagination run wild! You may paint, sketch, mold clay, cut construction paper, or even glue in natural resources like sticks, pebbles, sand, moss, grasses, branch clippings, and more. Your final masterpiece should indefinitely support your chosen game bird species and provide families (such as your own) with excellent hunting opportunities!

Your group will present your wildlife area diorama to the class with supporting research and reasons for your management practices. After a final vote, the group who ends up with the most “people” supporting their wildlife area will win the challenge!



Need more ideas for your game bird haven? Perhaps consider searching online or visiting wildlife areas near you that support your game bird species. You can discover their habitats and the wildlife managements occurring at the site.