

Student Name: _____ Date: _____

Island Name: _____

Invasive species	Protected species
Global Conservation Status	
Pathways of Entry	
Prevention Methods	
Detection Methods	
Community Involvement	

LESSON FOUR**LAB 4.3 BIOSECURITY GAME****MATERIALS**

- Lab 4.2 Biosecurity Plan
- School/classroom to represent an island
- 50 images or objects representing the rats (invasive species)
- 120 images or objects representing seabirds, chicks, and eggs (protected species)
- 20-30 images of traps or methods of detecting and catching rats

SET-UP**RAT TEAM**

Assign 1/3 of the class or members of the school/community to act as rats. Distribute the rat images provided (or create your own). It is the job of the Rat Team to enter the bio-secure area and find the protected species habitat. Students may hide the rats in a back pack or bag to get it in the building but once in the building the invasive species must be out in the open. If you are specifically asked by the Biosecurity Team if you are harboring a rat, you must give it up and start over. If your invasive species is out in the open and you encounter a rat trap or are approached by a member of the Biosecurity Team you must give up your rat and start over.

SEABIRD TEAM

Assign 1/3 of the class or members of the school/community to act as protectors of the seabirds. Distribute the puffin images provided or create your own. It is the Seabird Team's job to figure out where the seabirds will reside on the "island". Select different areas to represent nesting colonies and breeding habitat. This information should not be shared with the Invasive Species. The invasive species will have to find them.

BIOSECURITY TEAM

Assign 1/3 of the class or members of the school/community to act as the Biosecurity Team. Distribute the images of rats or something similar to indicate the entry point or area is off limits to invasive species. Using the Biosecurity Plan created in Lab 4.2, go around your "island" (school or classroom) and post signs at entry points or any place you think an invasive species might enter. Think of ways an invasive might enter your "island" (e.g., inside a bag or box, in luggage, ventilation system). You may approach people and ask them if they are harboring a rat.

INSTRUCTIONS

1. Send the Invasive Species Team out of the area to plan their invasion before the Seabird team and Biosecurity Team start setting up.
2. Give each team time to set up and strategize.
3. Biosecurity Team and Seabird Team: Set up the nesting areas. Use one of the Biosecurity Security Plans developed in class to protect your island's seabirds.
4. Assign one person to keep tally of the rats and seabirds.
5. Start the game.
6. 1 seabird is added to the population for every rat that is detected.
7. 2 seabirds die for every rat that enters the nesting or breeding area.
8. 5 rats are added for every rat that encounters a seabird. This rat found food and reproduced.
9. Once a rat finds a seabird and reproduces it stops searching for food.

BE CREATIVE - HAVE FUN!!

Instructions: Record your progress at the end of each day. How many invasive species managed to get past the biosecurity team?

Day	Rats Detected	Rats Not Detected	Seabirds (alive)	Prevention/Elimination Methods
Start	0	0	100	
1				
2				
3				
4				
5				
Total				

Suggestions for improving the Biosecurity Plan.

LESSON FOUR

LAB 4.2 BIOSECURITY GAME





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Least Auklet (*Aethia pusilla*)



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