

# PHEASANT OR QUAIL HABITAT & PREDATION GAME

*This activity is most suited for events where young participants are in small groups or classes. It takes about 10 – 30 participants to have a good interactive game. Size of the “habitat area” can vary with the size of the groups expected to participate.*

## Objectives

Participants shall:

- Be able to explain the habitat needs of pheasants and quail.
- Understand that the arrangement of cover types and feeding areas can impact the quality of the habitat.
- Be able to explain that habitat loss or degradation increases predation.

## Materials Needed

- Habitat Area (gymnasium or playing field about 50 feet X 100 feet)
- Pheasant or quail food. Food can be macaroni shells, beans, poker chips, candy (kids can keep the candy) or other items that can be spread as “food” and easily picked up. You will need 2-3 pieces per student per number of days you are simulating. For example, 20 students as pheasants or quail X 3 pieces X 5 days = 300 pieces total. Keep in mind that one day equals a 3 minute round
- Paper pheasant hats or sandwich bags that seal shut. Paper hats designate the pheasants in the game. Sandwich bags can do the same by representing the crop of a pheasant or quail
- Clothes pins to attach the sandwich bag to the player’s shirts (only one bag/pin per student)
- Orange vests for the “predators” to wear. There should be about one predator per five pheasants or quail
- Whistle or other device to start and stop rounds
- Hula hoops to serve as escape cover. One hula hoop per 3 – 5 students
- Watch or stop watch
- Signs for marking “shelter area”, “feeding area” and “escape cover”. (This may not be necessary if you use a gymnasium).

## Game Setup and Game Description (See Game Setup Diagram)

The game is played on a basketball sized area which is the pheasant or quail habitat. One end of the habitat is the “shelter area”. The “feeding area” is at the opposite end. The pheasant or quail food (candy, macaroni, etc) is scattered over the “feeding area” which is 1/3 of the entire area farthest away from the “shelter area”. Hula hoops are randomly scattered between the shelter and feeding areas. The hula hoops represent escape cover such as brush piles, grassy strips, cattails marshes, etc.

The pheasants or quail must collect three pieces of food each day in order to survive. Each “day” (in this game, each three minute round) all birds must **WALK** from the shelter area to the feeding area to get their food. The whistle is used to start and stop each day or round. The birds can only pick up one piece of food and then return to the shelter area; they must make three trips each day. If using “crops” the birds should put the food in their crop. Remember, the birds only get three minutes (which simulates a day) to harvest three pieces of food. The amount of time for each day can be shortened or lengthened depending how well the food is camouflaged.

Allow the birds to feed one or two days without predators in the habitat. Then allow the predators to enter the habitat. The predators only need to touch the birds to capture one. The birds can avoid predators if they are in the shelter area or escape cover (hula hoops).

## Procedure

- Identify students as pheasants or quail (prey) and predators with approximately one predator per five prey. Give pheasants or quail their paper hats or crop and predators their vests.
- Explain the set up of the pheasant or quail habitat area: Shelter Area, Feeding Area and Escape Cover (hula hoops). Explain the two ways that the birds can escape predation. One, standing in the shelter area or two, standing with one foot in the escape



*"Escape cover" arranged in the "feeding area"*

cover (hula hoop). **NOTE: ONLY THREE PHEASANTS OR QUAIL ARE ALLOWED IN EACH ESCAPE COVER (HULA HOOP).** Predators can run and need only to touch a pheasant or quail to capture it, pheasants and quail can **ONLY WALK**.

- Have the pheasants or quail stand in the shelter area. The shelter area is safe. No predators can access it. Explain to the pheasants or quail that they must gather three pieces of food each day in order to live. A day will be a 3 minute round during this game. Pheasants or quail begin in the shelter area and must **walk** to the feeding area. They will need to make one trip for each piece of the three pieces of food needed daily. Food should be placed in their crop (if used) before they leave the feeding area. Pheasants or quail need to return to the shelter area at the end of each day.

- When a predator captures one of the pheasants or quail it must walk that prey over to a designated spot outside the habitat area where the prey must remain until the end of that day. Predators can re-enter to capture more prey.

- Pheasants or quail can die each day in three ways:

1. Being captured by a predator
2. Not having three pieces of food at the end of the day
3. Not returning to the shelter area by the end of each day

- Using the whistle, signal the start and end of the first day (without predators in the habitat). Have quail feed a second day if time is available so

they get the hang of the game. Ask the students if any of the pheasants or quail had trouble collecting their three pieces of food. Adjust time of day if necessary.

- Before beginning the next day, have the predators enter the habitat area. The only areas they can not enter is the shelter area and escape cover.
- Conduct another day or two. Pheasants and quail may find it harder to get their food because they are spending time avoiding predators. Predators may become frustrated at their inability to capture prey despite an abundance of pheasants or quail because of an abundance of escape cover and shelter. Monitor activities closely.
- Before beginning the next day, introduce a change in the habitat. The landowner may want to change the habitat by reducing the escape cover to raise more crops or it may be winter and some escape cover may have been lost. Remove some of the hula hoops.
- Conduct another day. Suddenly the scales tip in favor of the predators and pheasant and quail numbers start to decline. The more escape cover or shelter is reduced, the more vulnerable the pheasants and quail become.
- Discuss what happened after each day. Ask students if escape cover helped their survival. Discuss how the habitat could be managed better for pheasants or quail by changing the arrangement of the habitat.

**NOTE: Prior to playing the game it would be beneficial to have a brief discussion about wildlife habitat.** This activity greatly simplifies many variables. The activity may be as elaborate and as realistic as your imagination will permit by varying seasonal conditions, limiting food to limit carrying capacity, changing arrangement of the habitat (moving or eliminating hula hoops) each day. Almost any way you do the activity, students will become aware of some of the considerations of habitat quality and predation.

### Activity variations:

- Limit the amount of food available at the start of each day. This can limit carrying capacity of the habitat.
- Position escape cover (hula hoops) in different patterns. See if arrangement of habitat can influence survival or the quality of the habitat.
- Use different proportions of pheasants or quail to predators
- Place feed closer to shelter so pheasants or quail don't have to travel so far.
- Simulate seasonal changes to habitat.

# Pheasant & Quail Habitat Game

