Data Dashboard Scavenger Hunt:

Student Handout (Bear)

INTRODUCTION

In this activity you and your classmates will explore the Snapshot Wisconsin Data Dashboard and use it to study the detection rates and activity of different Wisconsin animals.

Data Dashboard: datadashboard.snapshotwisconsin.org

You have been assigned the black bear as your species to study. On the left-hand side of the website you will see an area to *"Select species of interest"*. Select "Bear" under the species list to begin your investigation!

INVESTIGATION

1. In the blue box at the center top of the page, the number of "*Statewide bear detections*" for the selected species (bear) is reported. Use the slide tool in the lower left corner of the page to "*Select date range of data*".

    a. **How many statewide detections of bear are there from January 2018 to December 2023?** _____

    b. **How many statewide detections of bear are there from January 2018 to December 2018?** _____

    c. **How many statewide detections of bear are there from January 2023 to December 2023?** _____

2. In the center left of the page you will see a "*Presence Map*" of Wisconsin that displays the percentage of cameras which detected bear by county. Use the key in the upper right corner of the map to determine the different percentages that bear were detected in each county. You can also hover over each county on the map to see the county name and exact percentage.

    a. **Using the blank map handout provided, shade in the counties where bears are detected on 80% or more of cameras between January 2018 and December 2023.**

For the remainder of the questions, keep the date range at January 2018 to December 2023.

3. On the left-hand side of the page, under the species list, you will see an option to "*Select map mode*". Select "*Ecological Landscapes*" to explore the different ecological landscapes of Wisconsin where bears are detected. Hover over each landscape on the map to see the names and specific percentages.

    a. **What ecological landscapes detect bears on over 60% of cameras? Check all that apply.**

- ❑ Superior Coastal Plain
- ❑ Northwest Lowlands
- ❑ Northwest Sands
- ❑ Forest Transition
- ❑ North Central Forest
- ❑ Northern Highland
- ❑ Northeast Sands
- ❑ Northern Lake Michigan Coastal
- ❑ Central Lake Michigan Coastal
- ❑ Central Sand Hills
- ❑ Central Sand Plains
- ❑ Western Coulees and Ridges
- ❑ Western Prairie
- ❑ Southwest Savanna
- ❑ Southeast Glacial Plains
- ❑ Southern Lake Michigan Coastal

    b. **What ecological landscapes detect bears on less than 20% of cameras? Check all that apply.**

- ❑ Superior Coastal Plain
- ❑ Northwest Lowlands
- ❑ Northwest Sands
- ❑ Forest Transition
- ❑ North Central Forest
- ❑ Northern Highland
- ❑ Northeast Sands
- ❑ Northern Lake Michigan Coastal
- ❑ Central Lake Michigan Coastal
- ❑ Central Sand Hills
- ❑ Central Sand Plains
- ❑ Western Coulees and Ridges
- ❑ Western Prairie
- ❑ Southwest Savanna
- ❑ Southeast Glacial Plains
- ❑ Southern Lake Michigan Coastal

   c. **What are possible reasons that bears are detected in some ecological landscapes more than others? Explain your reasoning.**

      _____
      _____
      _____

4. In the center right of the page you will a see line graph that displays "*Animal Activity*". Below the graph are two blue buttons that allows you to view activity "*by Hour*" and "*by Month*".

   a. **What 3 *months* are bears detected most often?**

      _____

   b. **What 3 *months* are bears detected least often?**

      _____

   c. **Why do some months have more bear detections than others? Explain your reasoning.**

      _____
      _____
      _____

   d. **Within a 24-hour period, which two hours of the day show a *peak* in bear activity?** _____

      i. **Based on their peak hours of activity, do you think bears are diurnal, crepuscular, or nocturnal?** _____

5. Now navigate to the "*Detection Rates*" tab to view a bar graph of yearly detections, comparing bears to other animals. You can hover over each bar on the graph to see detailed statistics.

   a. **Are bears detected at a higher or lower rate than coyote?**

      _____

   b. **Do you think bear and coyote population levels impact one another? Why or why not?**

      _____
      _____
      _____
      _____