# Animal Identiﬁcation from Owl Pellet

*External Observations*

Length (cm): Width (cm): \_\_\_\_\_\_\_

Physical appearance description:

*Internal Observations*

Number of skulls (or pairs of jaw bones) found in your owl pellet:

Did you find any insect wings or exoskeleton? Yes No

If yes to the above question, list the number of wings and identify the exoskeleton:

Were you able to find bones other than the skull? Yes No

If yes to the above questions, list the types of bones found, e.g. vertebrate.

Complete this table based on the skulls found in your pellet.

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| --- | --- |
| **Species** | **Number of Individuals** |
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|  |  |
|  |  |

Assuming that the owl produces two pellets per day and the species found in your pellet are a good representation of the prey that owl will eat all year, how many individuals of each prey species would this owl consume in one year?

# Class Data

How many pellets did your class examine? How many of each prey species was found from all the pellets examined by your class:

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| --- | --- | --- |
| **Species** | **Number of Individuals** | **Average per Pellet** |
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Kentucky has 40,409 square miles, and assuming one owl per two square miles, this means that Kentucky could have about 20,200 barn owls. Based on the average calculated above, how many of each prey items are consumed by barn owls each year in Kentucky?

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| --- | --- |
| **Species** | **Number Consumed in Kentucky per Year** |
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# Questions (Place a check in front of the correct answer)

1. The major senses an owl uses in locating prey are:
	1. vision and hearing
	2. hearing and smell
	3. smell and taste
	4. vision and touch
2. Typically a barn owl produces how many pellets in a day?
	1. zero
	2. one to two
	3. three to four
	4. five or more
3. All the following are true about a food chain except:
	1. it shows the relationship between producers and consumers
	2. it shows the relationship between plants and animals that eat the plants or that eat other animals
	3. it only shows energy flowing in one direction
	4. it is a more elaborate version of a food web
4. Were you surprised by the number of prey items found in your pellet? In the pellets observed by your class?
5. What is most surprising about the number of prey items that your owl would consume in a year?
6. Based on the class data, what does this mean about the reproductive output for the prey items to prevent the prey from going extinct? Think about the evolutionary relationship of the owl and the prey items.
7. Do you feel that the barn owl is a selective pressure on the prey items? Is the barn owl driving evolution of the prey items? Explain.