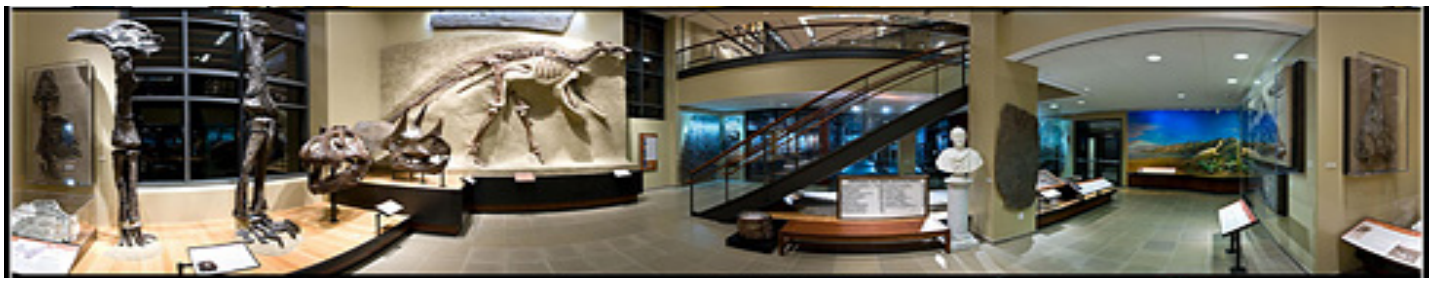
Amherst College

Vertebrate Hunting

Hints for Teachers (Middle School)



MUSEUM INFORMATION:

"Vertebrate Hunting" is a worksheet to practice scientific observation skills that was designed to be used in the Beneski Museum of Natural History in conjunction with the classroom curriculum; however, it can also be used independently.

- The museum does NOT provide copies of *Vertebrate Hunting*. Please prepare copies for your students.
- The *Beneski Museum of Natural History* displays the fossil remains of many different creatures throughout different periods of life.
- While exploring the exhibition, encourage your students to look above their heads to see specimens displayed at different levels of the museum.
- The *Beneski Museum of Natural History* can accommodate up to 45 children and chaperones at a time. Please consider splitting into smaller sub-groups when completing the Vertebrate Hunting activity.
- When your students arrive at the museum, they will be given a brief greeting by a museum staff member. After this greeting is a good time for you to talk to your students and chaperones about the *Vertebrate Hunting* activity.

PREPARING AN ACTIVITY:

- *Vertebrate Hunting* asks students to look closely at specimens and make thoughtful observations about what they are looking at, including size, preferably metric.
- The museum asks that students refrain from leaning on any of the glass cases while working. We recommend providing students with clipboards or notebooks to lean on.
- Vertebrate Hunting has a brief set of directions printed at the top for chaperones to use.

IN THE CLASSROOM:

Extend the fun!

- Have the students go over some basic metric measurements. This worksheet can be done using Standard English units, but most science uses metric units today.
- Maybe prepare 1 meter strips of paper with 10 decimeter marks. A paper yard stick with 1 foot marks will also work.

Amherst College

Vertebrate Hunting
Information for Chaperones

Complete this activity in the Beneski Museum of Natural History.

- Please allow your students a few minutes to explore the main and bottom floor before beginning the Vertebrate Hunting activity.
- Divide the students into groups, have each group begin with a different question. This way not all the students are looking for the same thing.
- The worksheet asks for the common name but see if your students can pronounce the scientific names as well.
- The height and length questions can be done in either standard or metric. Push students towards metric if the teacher has given the say so.

✓ Remind your students to look all around them, even above their heads.

✓ Remember: While most exhibits are in reach of students, remind them that the exhibits in the museum are fragile. Please do not allow them to touch any of the exhibits.

Acknowledgements

We wish to acknowledge and thank the staff of the following organizations for permitting us to share some of the best lab and field guide materials created for use in the Beneski Museum of Natural History.

- Amherst Public Schools
- Brown University
- Four Rivers Charter School
- Greenfield Community College
- Holyoke Community College
- McAuliffe Regional CPS
- Mount Holyoke College
- Northampton Montessori School
- Northampton Public Schools
- Smith College
- University of Massachusetts
- Williamsburg Schools

Amherst College

Hunt of the Vertebrate Fossils

Name: _____

The Beneski Museum of Natural History has one of the most outstanding collections of vertebrate fossils in New England. **Your goal: Find and "capture" vertebrates. You "capture" vertebrates by naming them, estimating their size and making quality observations**. **Never touch the display!**

Vertebrate to capture.	Observations:
1. Mammoth Ice Age Mammal Exhibit Scientific name of organism _____ Size estimate (length and height) L: _____ H: _____ Read informational plaque. What was one fact from the plaque you found interesting?	Observation (this can be a sketch, notes, and thoughts about the specimen on display)
2. Mastodon Ice Age Mammal Exhibit Scientific name of organism _____ Size estimate (length and height) L: _____ H: _____ Read informational plaque. What was one fact from the plaque you found interesting?	Observation (this can be a sketch, notes, and thoughts about the specimen on display)

3. Irish elk Ice Age Mammal Exhibit Scientific name of organism _____ Size estimate (length and height) L: _____ H: _____ Read informational plaque. What was one fact from the plaque you found interesting?	Observation (this can be a sketch, notes, and thoughts about the specimen on display)
4. Cave Bear Ice Age Mammal Exhibit Scientific name of organism _____ Size estimate (length and height) L: _____ H: _____ Read informational plaque. What was one fact from the plaque you found interesting?	Observation (this can be a sketch, notes, and thoughts about the specimen on display)
5. Dire Wolf Ice Age Mammal Exhibit Scientific name of organism _____ Size estimate (length and height) L: _____ H: _____ Read informational plaque. What was one fact from the plaque you found interesting?	Observation (this can be a sketch, notes, and thoughts about the specimen on display)

6. Saber-Toothed Cat Ice Age Mammal Exhibit Scientific name of organism _____ Size estimate (length and height) L: _____ H: _____ Read informational plaque. What was one fact from the plaque you found interesting?	Observation (this can be a sketch, notes, and thoughts about the specimen on display)
7. Moa Extinction: the Human Factor Scientific name of organism _____ Size estimate (length and height) L: _____ H: _____ Read informational plaque. What was one fact from the plaque you found interesting?	Observation (this can be a sketch, notes, and thoughts about the specimen on display)
8. **The Evolution of the Horse** *(pick one)* Evolution of the Horse Exhibit Scientific name of organism _____ Size estimate (length and height) L: _____ H: _____ Read informational plaque. What was one fact from the plaque you found interesting?	Observation (this can be a sketch, notes, and thoughts about the specimen on display)

9. Brontothere Wall of Mammals Exhibit Scientific name of organism _____ Size estimate (length and height) L: _____ H: _____ Read informational plaque. What was one fact from the plaque you found interesting?	Observation (this can be a sketch, notes, and thoughts about the specimen on display)
10. Archaeopteryx Limbs and Feathers Scientific name of organism _____ Size estimate (length and height) L: _____ H: _____ Read informational plaque. What was one fact from the plaque you found interesting?	Observation (this can be a sketch, notes, and thoughts about the specimen on display)
11. Eryops Milestone: Vertebrate Evolution Scientific name of organism _____ Size estimate (length and height) L: _____ H: _____ Read informational plaque. What was one fact from the plaque you found interesting?	Observation (this can be a sketch, notes, and thoughts about the specimen on display)

12. **Hominid Skulls** (pick one) Human Evolution Scientific name of organism _____ Size estimate (length and height) L: _____ H: _____ Read informational plaque. What was one fact from the plaque you found interesting?	Observation (this can be a sketch, notes, and thoughts about the specimen on display)
13. Dunkleosteous Milestone: Vertebrate Evolution Scientific name of organism _____ Size estimate (length and height) L: _____ H: _____ Read informational plaque. What was one fact from the plaque you found interesting?	Observation (needs to be original, not from label or partner)