## THINKING ABOUT BIGFOOT

## An Activity for Biological Anthropology Courses

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This activity is designed for teaching about (i) science as an explanatory framework, (ii) primate behavior, and (iii) primate taxonomy. It consists of a series of four questions. They may be tackled by students on an individual basis or in groups; the questions may be asked separately or together; and the answers may be given orally or written. If discussing the questions in class, the length of class time spent on any one question can range from minutes to hours.

The topic is Bigfoot, which is also known as Sasquatch. If an instructor or students are not familiar with, or interested in, Bigfoot, then any human-like mysterious creature that is popular in folklore but for which its existence in reality is debatable can be substituted.

#### Questions:

# 1. Do you believe in the existence of extra-terrestrial, non-human, beings that have intelligence at least equal to that of humans?

The purpose of this question is to get students to begin thinking about the way they think, especially in regard to evaluating ideas and evidence. Typically, a majority of students will indicate that they do believe that intelligent extra-terrestrials exist, even if they(the students) don't believe the extra-terrestrials have visited earth.

When pressed by the instructor or other students to say why they believe, the believers usually wax philosophical about the vastness of the universe and about doubters being very close-minded and egocentric in thinking that humans have reached the pinnacle of evolutionary processes. When pressed further about the lack of evidence, many believers admit they don't have or need scientifically credible evidence. Understanding the vastness of space tends to be enough.

## 2. Do you believe in the existence of Bigfoot?

The number of believers of Bigfoot is typically about half of those that believe in extra-terrestrials. When the students who believe in extra-terrestrials, but not Bigfoot, are pressed by the instructor to explain why they believe in one but not the other, the typical response is that there is no physical evidence of Bigfoot. When pressed further, students often admit that their standards of evidence differ for each reported phenomena, their beliefs are somewhat intuitive, and they have no real framework for evaluating whether extra-terrestrials or Bigfoot are real. Student responses can effectively lead into a discussion of the usefulness of having a framework to use to evaluate things; culminating in lectures and discussion of the nature of science as an explanatory framework; what kinds of research and evidence will be necessary to accept claims of Bigfoot by the scientific community; and ways scientists have of evaluating claims.

3. Consider the behavior of Bigfoot as reported by those who claim to have seen them. How would you assess the claims based on what you know of the work of primatologists who have observed apes and monkeys in the wild?

This question stimulates students to work with the material they have learned, or are supposed to learn, about the behavior of non-human primates. Many reported behaviors of Bigfoot can easily be found on the internet.

4. If Bigfoot is indeed found, and generally fits the description based on previous sightings (e.g. bipedal, hairy, 7 – 9 feet tall), how would it fit within the taxonomic system of classification ? (eg. Does it meet the criteria for being classified as a member of the primates? Anthropoidea? Catarrhini? Hominoidae? Hylobatidae? Pongidae? Hominidae? Hominini? *Homo*?)

This question works well for reviewing the characteristics of the various taxonomic categories and the difficulty of classifying creatures that do necessarily fit into arbitrarily defined taxonomies. Dozens of characteristics of Bigfoot can easily be found on the internet.

I find it most useful to tackle questions 1 and 2 together. You can almost see students get confused as I make the switch from talking about extra-terrestrials to Bigfoot. Most students immediately see the value in having an established framework to evaluate things. I never give them notice of the questions in advance.

I also find it most useful to tackle questions 3 and 4 together, as a form of review. I find that most introductory level students still want to memorize things by staring at words on pages, such as list of characteristics of each of the primate groups. The questions make students engage with the material a bit more, which they appreciate.