

Project Description:

Although most research on great ape vocalizations has been on chimpanzees, recent field research has produced a catalogue of a wide variety of orangutan vocalizations. Geographic variation in orangutan vocalizations has been identified both within call type and in the presence of certain vocalizations among wild populations. This study aims to catalogue vocal recordings collected across AZA zoo-housed orangutan collections and compare these to those previously documented in the wild. We are especially interested in the context of vocalizations, in novel vocalizations, and in the extent to which keepers can identify the meaning of the vocalizations they hear and record.

The methodology required of this study is for orangutan keepers or other zoo personnel to opportunistically record vocalizations given by orangutans using digital recorders, to record details of the individual orangutans vocalizing and the context in which vocalizations are given, and to send all recordings to Cindy Cossaboon for further analysis.

Project Goals:

The primary goals of this project are twofold: 1) for the first time catalogue vocal recordings across zoos that house orangutans in an effort to identify both novel and universal orangutan vocalizations and 2) determine the extent of variation across the vocal repertoires of captive orangutans. Although a study of orangutan vocalizations is currently underway at the Indianapolis Zoo and vocalizations have been studied in the orangutan population at the Great Ape Trust of Iowa (both projects conducted by Dr. Serge Wich and colleagues, collaborators on this study), this is the first study to address the variation of captive orangutan vocal repertoires across the AZA orangutan population.

Anticipated benefits of this project include the standardization of the names used to refer to the more common orangutan vocalizations and a better understanding of what zoo-housed orangutans are communicating to one another and to their keepers. This study will also add to our academic understanding of orangutan vocal repertoires within as well as across institutions, which adds an interesting captive component to the study of orangutan cultural variation.

Significance:

There is little standardization of terms used to describe the vocalizations of zoo-housed orangutans across AZA institutions. The Orangutan SSP is interested in incorporating this project into a husbandry course currently being designed by Carol Sodaro and members of the Orangutan SSP steering committee, including both the PI and Co-Investigator. We hope to include as many AZA institutions as possible in this study in an effort to get a better idea of what vocalizations are given by zoo-housed orangutans and in what contexts, how closely these vocalizations approximate those given by wild orangutans, and the extent which captive orangutan vocalizations are variable across institutions.

Procedures:

Individual (keeper) will record vocalizations as produced by orangutan with either a recording device or cell phone. They will then record in detail on a supplied form, the date of the recording, individual that made the vocalization, and context of the vocalization. The individual will then save all vocalizations and forms to the investigator's drop box account on the internet.