

Abstract

For carnivorans, as well as for other groups of animals, it is very important to be able to recognize other individuals. In this thesis, I focused on individual vocal variation in carnivoran's calls. I reviewed studies which described individual variability of calls in carnivorans. I focused on studies which used diskriminant analysis to quantify individual variation in calls. I updated the review of Insley et al. (2003) who suggested that the ability of individual recognition is more advanced in the Otariidae compared to Phocidae. My quantitative comparison on individual variability of Otariidae and Phocidae voices shows that the reason could be that Otariidae have more individually distinct voices. Furthermore, I compared the individuality in calls of other carnivorans. The comparison results do not support the hypothesis that animals living in groups have individually more variable voices than the animals living solitary or in pairs. However, individuality seems to be influenced by ontogeny as it is easier to individually recognize calls of adults than calls of juveniles.

In general, there have been many studies published about vocal individuality in carnivorans, but most of the research was done on just two very social families: Otariidae and Phocidae. It is necessary to study other carnivora groups as well to carry out proper komparative studies on factors that might influence individual variation in calls of carnivorans.

Keywords: individua variation, identity signalling, vocalization, acoustic communication, calls, mammal