Abstract

Vocal communication is the main mean of communication for cetaceans. Just like the species themselves, their repertoires are diverse, consisting of tonal, pulsed, and combined calls, with frequency and amplitude modulation. The two groups of cetaceans, Mysticeti (baleen whales) and Odontoceti (toothed whales), produce sounds of different parameters, mainly frequency, bandwidth, and duration.

Both production and contextual learning can be found in cetaceans. It is used to acquire two types of sounds: signature calls and songs. Signature calls are present only in species living in stable groups or fission-fusion society. They are used as an identification tool to maintain cohesion and contact with conspecifics. Songs are present in most baleen whales, but only humpback and bowhead whales´ change within and between seasons. They use vocal learning to conform to one type used by all individuals.

It is also employed during vocal development in ontogenesis, together with maturation. Calves and juveniles´ calls are chaotic, lacking in structure. With age, they gain stereotypy and resemble adults´ repertoire.

Key words: cetaceans, vocal communication, signature calls, vocal learning, cultural transmission