



# Orca Communication

Orca  
OrcaLab News  
About OrcaLab  
Whales in Danger  
Free Corky Campaign  
Shop & Support  
Links



Communication lies at the core of orca social awareness. Family members are seldom out of hearing range of one another. Their calls, as loud as a jet plane's engines, echo over many miles in the ocean. Everyone knows where he or she is and where everyone else are. Given the strength of their attachments to each other, this must have a very calming effect on them. Communication is an essential ingredient of the glue that brings harmony to the orca community.

Orcas make three types of vocalizations: clicks, whistles and pulsed calls. The clicks are part of the whale's sonar and are used for echolocation: for finding and locating food sources, for defining other objects in the ocean and locating the whale in its environment. Whistles are typically continuous tone emissions that may last for many seconds.

Calls, simply put, are pulsed signals which have discrete patterns that can be recognized by ear and by spectrogram. They are the main component of the orca communication repertoire. Dr. John Ford categorized the discrete call types for the orcas of Washington State and British Columbia. He discovered that each pod has its own collection of calls which he referred to as their "dialect". He was then able to define larger acoustic groups or "clans" by grouping together pods which share common calls. Only pods which share common calls are part of that clan. The Northern Resident Community has three clans, whereas the Southern Resident Community has just a single clan, as do the Transient orca of this coast. There is variability within call types, even for different maternal groups within pods and clans. This is a useful tool for identifying groups in the absence of visual identification e.g. at night or from remote locations. It has also been used to identify the pods and communities of orcas captured in the 1960s and '70s. The differences in vocal call types between clans does not seem to inhibit the various maternal groups and pods within a community from coming together and socializing.

The role of these calls is not precisely known. However, the different calls are certainly a way for the whales to keep track of each other over large distances, in the dark, or when large congregations occur. Though it has not been demonstrated, there is certainly potential for communication of complex specific information in calls. Sometimes groups are very vocal and at other times the groups may be silent. The calls are not necessarily modified in sound level to accommodate whales travelling close together.

[Orca Social Organization](#)

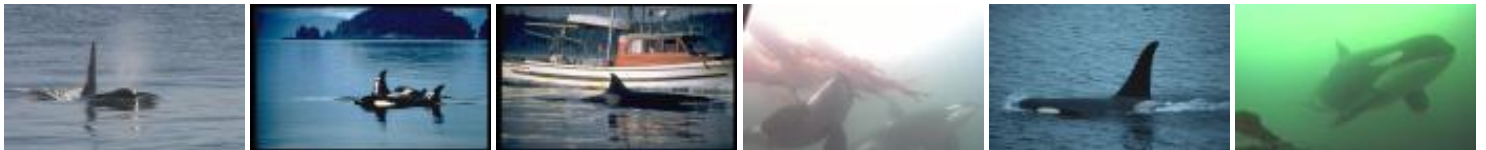
[Resident Orcas](#)

[Transient Orcas](#)

[Northern Resident Community](#)



Print PDF



Copyright OrcaLab 2001. Web design by Anna Spong: [aspong@orcalab.org](mailto:aspong@orcalab.org)