

**Complex Behavior: Killer Whales and How They Interact**

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INTD-255 Safe Return Doubtful: *History and Current Status of Modern Science in Antarctica*

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May 5th, 2025

Orcas are the largest member of the dolphin family. They are apex predators in their marine habitats which include Arctic, Atlantic, and Tropic seas. Killer whales are highly social animals with structure that exists outside of familial dynamics. In recent years, their behavior has been studied in depth. **Orcas, marine mammals with cognitive ability to communicate and problem solve, have been observed hunting in an organized fashion that is not normally observed in nature.**

Because Antarctica is the only continent on the planet with no human life or interference, biological observation is very valuable. Although there are humans present on Antarctica, they are studying a variety of sciences and have minimal impact on the environment. Every kind of study being done on Antarctica affects the world as a whole. Orcas being an apex predator in an ecosystem with very few genus is a field study opportunity that is not possible in any other place on earth. Orcas live in almost every part of the ocean but those that do inhabit the sea around Antarctica participate in a food chain with very few links: orcas, leopard seals, penguins, and fish. There are more species living in the ocean surrounding Antarctica, but these animals participate in the hunting patterns of Orcas. Orcas are the largest carnivores on earth and they are more wide-spread than any animal competing with their size. All over the world, Orcas exhibit different behaviors and have different social circles. In the Arctic, they exhibit a hunting style that Orcas in other seas will not. They all have different behavioral habits similar to humans. Our globalization has created similar cultural pockets that Orcas have. They have communities that consist of multiple families and they rarely interact outside of the communities.

## Complex Behavior in Killer Whales

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Within them though, there is a complex social structure comprised of multiple multi-generational families. These communities differ from any other marine mammal.