How can we learn about big and magnificent species we can't always see or get close to?

By **Libby Christophers**

Have you ever wondered where whales go once they leave the surface, or how they live? Tamlyn Somerford from the Marine Science Department at the University of Otago has been answering these questions while investigating the lives of our mysterious sperm whales in Kaikōura. Her work is important because it helps us to understand our magnificent marine mammals, and how we can best protect them.

Tamlyn and her team can't always see the whales, but they can still learn lots about them. They use a special tool called an underwater hydrophone. It's a bit like a microphone, and it picks up the echolocation sounds made by the whales' activities, like feeding and communicating. This tool can tell the scientists how far away whales are, and in what direction.

When whales surface, scientists often can't (or aren't allowed to) get right up close to them. That means that Tamlyn's work also involves taking photos of whales for identification. Most whale species are very social and can recognize each other by patches of barnacles, scars, or the noises they make, just like we recognize the faces or sounds of our friends and family. Once Tamlyn knows what to look out for, or listen out for, she can get to know the whales more personally too.

Tamlyn using the underwater hydrophone. Photo: University of Otago Marine Mammal Lab

Sperm whale. Photo: University of Otago Marine Mammal Lab