## Researchers watch humpback whales

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http://www.coolum-news.com.au/story/2010/10/08/peregian-whales-reseach/

MORE than 50 whale researchers from 14 countries have bunked in at Peregian Beach studying the impacts of undersea oil and gas exploration methods on the Eastern Australian Humpback whale population.

Members of the Humpback Acoustic Research Collaboration (HARC) are conducting a five-week study on how humpback whale behaviour is affected by noise from "seismic airguns", instruments that create sound waves by firing compressed air into the ocean.



Scientists are conducting experiments with humpback whales at Peregian Beach as they migrate back to their summer waters in Antarctica.

An estimated 15,000 humpback whales are currently migrating south to their summer feeding grounds in Antarctica, after mating and calving off central Queensland during the winter months.

At a public information night at the Peregian Beach Surf Club recently, University of Queensland researcher Dr Michael Noad said at least 3000 of the creatures will pass within 10kms of the Peregian Beach shoreline during the period of the project.

"This makes Peregian one of the best places in the world to track and observe humpbacks. It's not unusual to see 100 during a 10-hour period at the peak of the migration," he said.

Crews positioned in a Sunshine Beach apartment and on Peregian's Emu Mountain are using binoculars and surveyors' theodolites to spot and position the animals. A grid of offshore hydrophones acoustically monitors and tracks singing male whales. All this data is transferred wirelessly to the team's base in Horizon Apartments at South Peregian.

Crews in vessels are placing suction-cupped devices monitoring sound, depth and number of tail strokes on the humpbacks as they swim down the coast from Sunshine Beach to Peregian where a small airgun is used to create underwater sounds.

"We know from previous years' work observing whales how they typically behave. What we are looking for is subtle changes in behaviour to determine whether or not seismic air guns are having an effect," Dr Noad said.

The study builds on several successful previous studies done from Peregian where humpbacks were tracked acoustically.

"We learned that males often sing while they are 'escorting' females with calves. There's still much we don't know about humpback whale behaviour but we do know they are breeding very well. The population is now back to around 15,000, up from around only 200 in 1962 when commercial whaling by Russian factory ships in the Southern Ocean killed 14,000 of them between 1960 and 1962 and nearly wiped them out," he said.

The project is the first in a series of studies over the next four years in collaboration with the University of Sydney, Curtin University, and the Australian Marine Mammal Centre.

