

Fishing threatens rare dolphins in tourist hotspot, study says

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Hector's Dolphins. Credit: Steve Dawson

New research by University of Otago scientists has shown that the Hector's dolphin, an endangered species found only in New Zealand, is more at risk from amateur fishing in Akaroa Harbour than had been thought.

Akaroa harbour is the largest harbour on Banks Peninsula, near Christchurch. It is home to a valuable dolphin-watching industry, which takes visitors to see and swim with Hector's dolphins.

The team, comprising dolphin experts Professor Steve Dawson, Associate Professor Liz Slooten, and [statistician](#) Associate Professor David Fletcher, moored three "T-POD" acoustic devices in the inner, middle and outer parts of Akaroa Harbour. The devices logged the high-frequency echo-location signals of Hector's dolphins over an entire year.

"Because Hector's dolphin echo-location clicks are very different from those of other dolphins in New Zealand, we can tune the T-PODs to detect them specifically," Prof Dawson said.

He says previously it was thought that Hector's dolphins were present in the inner harbour only in summer.

"Because of this, amateur fishers were given a concession allowing them to set unattended set nets in this area for seven months of the year (1 April - 30 September). The nets, made of nylon mesh, can entangle dolphins and prevent them from surfacing for air," he says.

The devices have a small detection radius, of about 200 metres. Despite this representing less than 1% of the inner harbour area, Hector's dolphins were detected on 41% of the days during the [recreational fishing](#) concession period when set nets could be used.

"This shows that dolphins use this area much more regularly than previously thought, and that the concession offered to amateur gillnetters is not safe for the dolphins," he says.

"A crucial problem for Hector's dolphins is that in several key areas the protection does not match the dolphins' distribution. The new research shows this is true in Akaroa Harbour, but it is also true offshore around Banks Peninsula, where aerial surveys have shown that the dolphins range much further offshore than the protection extends. A large part of that population is essentially unprotected."

The research also revealed how the [dolphins](#) use the harbour varies with location, season, time of day and tide. The research was published yesterday in the scientific journal *Endangered Species Research*.

Provided by University of Otago

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