

Responses of Hector's dolphins (*Cephalorhynchus hectori hectori*) to vessel activity in Akaroa Harbour, New Zealand

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New Zealand is widely recognised as a world leader in whale and dolphin-based tourism. However, many questions regarding the impacts of tourism on targeted species remain unknown. Banks Peninsula is one of the strongholds of the endemic and endangered Hector's dolphin (*Cephalorhynchus hectori hectori*), a coastal species particularly vulnerable to disturbance. This population is subject to increasing attention from both commercial and privately owned vessels. Although the Banks Peninsula population is well researched, the effects of tourism activities remain unclear. Hector's dolphins have also recently been identified under the Department of Conservation Marine Mammal Action Plan as "a priority" species and a key objective is to "effectively protect" them "against avoidable adverse effects of tourism". A comprehensive study on the effects of interactions between vessels and dolphins in the area is therefore critical. This research is currently being conducted over three consecutive austral summers (November to March), commencing in 2005. Behavioural data is collected using three-minute group focal sampling using both land- and boat-based surveys. Theodolite tracking from six different land stations around the Peninsula is also being conducted to document dolphins' movements and their behavioural responses to vessel activity. Between 2005-2006 (n = 279 total hours observation) and 2006-2007 (n = 298 total hours observation), vessels were in the harbour more than 80% of the time that dolphins were present. Typically, dolphins socialised and milled more in the presence of boats at the detriment of assumed feeding activities and travelling. Final research findings will determine whether such levels of vessel activity are sustainable and provide effective management recommendations.