

## Scotland's whales at risk from military exercises

The safety of western Scotland's whales and dolphins has been called into question following an incident involving naval sonar. This took place during the major NATO military exercise, Joint Warrior, in Scottish waters.

The Hebridean Whale and Dolphin Trust (HWDT) conducts regular boat surveys for whales and dolphins on the west coast of Scotland using observers and hydrophones (underwater microphones). On the 12<sup>th</sup> May, they observed two minke whales within an hour displaying unusual and worrying behaviour. At the same time they heard military sonar on the hydrophone – sometimes so loud that they could not keep the headphones on. The whales were both moving in the same direction at high speed, regularly leaping clear of the water. This behaviour, known as 'porpoising', is more typical of dolphins and rarely seen in undisturbed whales.

HWDT and WDCS, the Whale and Dolphin Conservation Society (WDCS) have renewed their call for a full and transparent Environmental Impact Assessment to be conducted by the Ministry of Defence for the exercise.



Joint Warrior is a major exercise led by the UK and involving 12 NATO and Allied Nations. At-sea operations are conducted for two weeks and occur twice every year. Up to 85 aircraft, 22 ships and 3 submarines operate during this massive international exercise. Military sonar, used during the exercises, emits intense loud noise that can disturb and harm whales and dolphins, which rely on their sensitive hearing to navigate, find food and communicate. Naval sonar, more commonly linked to mass strandings events of deep diving whales, has also been associated with minke whale strandings in the Bahamas and in North Carolina. On the west coast of US, close to Seattle, similar rapid fleeing behaviour has been observed from killer whales and dolphins in response to sonar.

The west coast of Scotland is well-known for its populations of minke whales which migrate to the area in the summer months to feed in the rich and productive waters. Decreases in sightings of minke whales have already been reported off the west coast of Scotland during naval activities. It is not known how any disruption in the whales' feeding behaviours will affect populations in the long term.

HWDT and WDCS have joined forces to monitor important whale habitat in the Minch, western Scotland, during the Joint Warrior exercise as a result of ongoing environmental concerns. WDCS has been conducting land-based whale and dolphin observations in

northwest Scotland, whilst HWDT has been surveying from its dedicated research vessel, *Silurian*, using visual and acoustic techniques.

Nienke van Geel, HWDT's Biodiversity Officer said "Seeing minke whales porpoising many times successively is very unusual. Both whales moved very fast, too fast for us to keep up with them to try to take identification pictures. We estimated they were traveling at least at 15 knots. Our research has already shown a decline in minke whale sightings in the last few years, so we're worried about anything that might adversely affect the population."



WDCS's Head of Scottish Policy, Sarah Dolman added "Western Scotland is one of the most important marine habitats in Europe. We are concerned about the potential impacts that these massive and regular exercises, including Exercise Joint Warrior, are having on our marine wildlife. The UK Ministry of Defence should conduct a full and transparent Environmental Impact Assessment – like those currently being undertaken by the US Navy – as a matter of urgency"

Local Gairloch Marine Wildlife Centre owner and marine biologist, Ian French, shares these concerns. "We continue to see reduced numbers of animals when the exercises are taking place locally and this is affecting our business. Strandings that coincide with naval activities, and sightings of rarely seen species, lead me to believe that these animals are being driven inshore. Marine tourism in Scotland is important and the navies operating in these waters need to do so responsibly"

### **Editor's notes**

This is not the first time that minke whales have been involved in incidents related to naval sonar. In one of the best documented mass strandings that occurred in the Bahamas in 2000, a minke whale stranded in an incident that also involved a dozen beaked whales (a species commonly associated with naval sonar strandings). A minke whale also stranded with thirty-four short-finned pilot whales and two pygmy sperm whales stranded in the Outer Banks, North Carolina in 2005, coincident with a sonar exercise use about 90 nautical miles southeast of the stranding area. The government reported that the stranding had a number of features in common with other 'atypical' sonar-related strandings.

Joint Warrior is taking place from 11 – 21 May and 5 – 23 October.