# Small Cetaceans

## Local Biodiversity Action Plan

### Species English Name (Scientific name)

SMALL CETACEANS (DOLPHINS & PORPOISES INCLUDING HARBOUR PORPOISE (PHOCOENA PHOCOENA))

## Ecology

This is a grouped action plan covering the following species:

**Harbour porpoise Phocoena phocoena**
The harbour porpoise is the smallest and most commonly seen cetacean in British waters reaching approximately 2m in length. Harbour porpoises have a distinctive triangular dorsal fin and have a dark grey to bluish back and pale belly.

**Bottlenose dolphin Tursiops truncates**
The bottlenose dolphin is probably Britain's most popular small cetaceans reaching up to 3.8m in length. They are a social animal and intelligent animal, which communicates by echolocation in groups of up to 100 individuals.

**Risso's dolphin Grampus griseus**
Risso's dolphins reach up to 3.8m in length and are stocky with a blunt head with grey back and white undersides. Like other dolphin species they are highly social occurring in groups of up to 50 individuals.

**White-beaked dolphin Lagenorhynchus albirostris**
White-beaked dolphins reach up to 3m in length and have a characteristic greyish white patch behind the dorsal fin. They are mostly black or grey with pale undersides.

**Common dolphin Delphinus delphis**
Common dolphin is the commonest dolphin species easily identified by the 'hourglass' pattern on its flanks which creates a dark V below the dorsal fin. Reaching up to 2.2m in length the colour and patterning of the common dolphin varies considerably.

## Current status

Status changes for these species is difficult to assess due to lack of quantitative data.

***Harbour porpoise Phocoena phocoena***
There is some evidence of a decline in numbers of small cetaceans in UK waters since the 1940s. The recent "SCANS" survey of small cetaceans in the North Sea, Channel and Celtic Sea indicated the population in those waters was approximately 350,000.

***Bottlenose dolphin Tursiops truncatus***
The bottlenose dolphin is locally frequent nearshore off the coasts of western Ireland, north-east Scotland, in the Irish Sea, and in the English Channel. Studies indicate a resident population of 130 bottlenose dolphins in the Moray Firth whilst the population in Cardigan Bay has been variably estimated at 130-350 bottlenose dolphins.

***Risso`s dolphin Grampus griseus***
Although present in UK waters throughout the year, numbers are greatest between May and September. The major UK population occurs around the Hebrides, with a regular presence in the Northern Isles, and in the Irish Sea, particularly around Bardsey Island. A study in the North Minches of Scotland has identified at least 142 individuals but no population estimate has yet been made.

***White-beaked dolphin Lagenorhynchus albirostris***
This species is common in UK and Irish waters. A population estimate of between 4000-13,300 was made in July 1994 for the North Sea and Channel with a further estimate in the same area of 6000 to 18,500 small dolphins (both white-beaked and white-sided dolphins, but not differentiated).

## Threats

* Four main human activities are recognised as currently likely to be detrimental to dolphins: activities leading to ecosystem changes; interactions with fisheries; boat activities; and contaminant

inputs.
* Ecosystem changes resulting from the widespread over-exploitation of marine biological resources have the potential to affect reproduction and survival of all dolphins and porpoises including the depletion of their prey or food.
* All the dolphin species considered here have been recorded as by-catches (incidental/accidental capture) of various fisheries. There is evidence of substantial numbers of dolphins caught in pelagic trawls (targeting tuna, hake, bass, horse mackerel, mackerel and herring) in the south-west approaches and the Celtic Sea. Post-mortem studies of 138 common dolphins washed ashore on UK coasts between 1990 and 1995 revealed at least 62% of animals died as a result of by-catch.
* Boat activities (merchant shipping, seismic, military and recreational) in coastal waters pose threats to dolphins and porpoises by direct physical damage (collisions, and propeller damage) and by the sounds introduced into the environment, where potential harm may be caused by direct auditory damage at close distances and interference with navigation, food-finding, and communication further away. In recent years, seismic activities have started in the Iris Sea, parts of the Channel, and along the Atlantic Frontier, west and north of Scotland and Ireland, following earlier emphasis on the northern and central North Sea.
* Contaminants, including organocholorines, may impact the reproductive potential or cause suppression of their immune system. High concentrations of bioaccumulating chemicals have been detected in the tissues of marine mammals, and long-lived animals such as cetaceans are more at risk of accumulative heavy pollution burdens than shorter-lived ones. In Cardigan Bay, a few years ago the body of a dead bottlenose dolphin calf was found to have one of the highest levels of contaminants such as PCBs, DDT and mercury ever found in a mammal.
* Global climate change may also have an effect on small dolphins but impacts on marine mammals are very difficult to predict

## How are we helping to conserve small cetaceans in the Cheshire region?

* Nationally the Natural History Museum is creating a database of stranded cetaceans.
* Several international and national organisations are involved in the conservation of cetaceans,
* Experiments to increase the acoustic detectability of fishing nets have been undertaken to reduce by-catch.
* Guidelines to minimise the effects of acoustic disturbance from seismic surveys have been agreed with the oil and gas industry and published by DEFRA.
* Post mortem and tissue studies of stranded corpses are carried out on stranded specimens to establish the cause of death and condition of the animals at the time of death.
* Conservation, management and research action is being undertaken and planned under ASCOBANS.

* In 1998, the EU Fisheries Council decided to ban the catching of tuna with drift-nets by 1 January 2002.
* Guidance has been drawn up by DEFRA and JNCC to encourage recreational users (including whale-watching operators) to minimise disturbance to dolphins.
* Regionally, Dr. John Baker is responsible for carrying out post-mortems on fresh strandings in Wales and the North West of England.
* Simon Hayhow, Fleetwood Museum, is attempting to collate all cetacean records for 'old' Lancashire, which incorporates Merseyside.

## Objectives, targets and actions

Objectives, targets and actions to help conserve small cetaceans in the Cheshire region can be found on the Biodiversity Action Reporting System (BARS) along with full details of our progress so far.

## How to find out more about small cetaceans

Whale and Dolphin Conservation Society - www.wdcs.org
BBC Wildfacts website - www.bbc.co.uk/nature/wildfacts/factfiles/125.shtml

## Contact details

LBAP Chair Christine Smyth