

**European Community Directive  
on the Conservation of Natural Habitats  
and of Wild Fauna and Flora  
(92/43/EEC)**

**Second Report by the United Kingdom under  
Article 17  
on the implementation of the Directive  
from January 2001 to December 2006**

**Conservation status assessment for  
Rare and occasional marine turtles**

Please note that this is a section of the report. For the complete report visit <http://www.jncc.gov.uk/article17>

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## Rare and Occasional Marine turtles

Historical records of sightings and strandings of marine turtles in the UK and Eire have been collated in the database 'TURTLE' (Pierpoint & Penrose 2002) and updated every year. The most recent data were used as basis for this report (Penrose & Gander 2007). Five species are recorded in the database. By far the most commonly reported (80%) is the leatherback turtle *Dermochelys coriacea*; the second most sighted species (12%) is the loggerhead turtle *Caretta caretta*. Records of Kemp's ridley turtles *Lepidochelys kempii* are infrequent, while records of green turtles *Chelonia mydas* and hawksbill turtles *Eretmochelys imbricata* are exceedingly rare (Penrose & Gander 2007).

Only the *Dermochelys coriacea* is considered to be a regular member of the British marine fauna (Gaywood 1997, Godley *et al.* 1998). The species exhibits physiological adaptations unique among reptiles that allows it to function in temperate waters. This species therefore is reported separately and a Conservation Status Evaluation Matrix has been completed. All other turtle species are believed to reach UK waters only when displaced from their normal range by adverse currents. A short summary of information for each species is presented here. In all cases, data are too scarce to be able to ascertain their conservation status.

### **S1224 *Caretta caretta* Loggerhead turtles**

*Caretta caretta* is found in all sub-tropical and temperate regions of the oceans and is of particular importance in Europe as it is the most common species in the Mediterranean Sea. In the Atlantic, important nesting sites are found in the Southern United States, in the Gulf of Mexico, in the Caribbean (mainly Bahamas and Cuba) and on Cape Verde Islands. In this species, the oceanic stage of juveniles can last from 7 to 12 years before recruiting to relatively shallow coastal habitats where they mature into adults. During the oceanic stage, juvenile turtles are associated with *Sargassum* drift lines as they follow large oceanic currents. In particular, their dispersal is associated with the North Atlantic gyre (Carr 1987) which is likely to lead to the transatlantic passage from the USA to the European shelf (Hays & Marsh 1997). Further indication of basin-wide movement has come from mtDNA analysis of juvenile loggerhead turtles from the Azores and Madeira (Bolten *et al.* 1998). Juveniles from the North African Coast are also thought to enter the North Atlantic gyre.

The 'TURTLE' database contains 104 records of *C. caretta* within UK waters; 70% are strandings. Most were found alive, although lethargic in cold waters. Some have been rescued and after specialist rehabilitative care they have been released in warmer waters off Spain. It is the oceanic stage of life that results in the greatest proportion of animals being recorded in UK waters (Witt *et al.*, in press). The average size for *C. caretta* recorded in the British Isles is approx 30 cm (range 13.5 – 110 cm). By far, the majority are 'first-passage' turtles and their arrival in UK is most likely mediated by North Atlantic current that flows adjacent to the continental shelf of Europe.

While individuals have been reported every month of the year, the majority is found between November and March. At this time of the year, sea water temperatures are low and often below the threshold of 9.5 reported to induce floatation in this species (Schwartz 1978). Witt *et al.* found that the temperature distribution for *C. caretta* reported dead was significantly lower than the temperature distribution for those reported alive. Spatially, there is an inverse

relationship between number of records and latitude and most sightings and strandings occur on west facing aspects. On the whole these results are taken as evidence that UK waters do not constitute a viable part of this species range.

### **S1226 *Lepidochelys kempii* Kemp's ridley turtles**

Adult *Lepidochelys kempii* exhibit a very restricted range, with foraging grounds concentrated in the nearshore waters of the northern Gulf of Mexico and with one major nesting location at Rancho Nuevo, Mexico. Females nest every year during mass synchronised nesting events. The oceanic life stage for this species is thought to be very similar to that of *C. caretta* and their dispersal is also associated to the North Atlantic gyre.

The 'TURTLE' database contains 25 records of *L. kempii* in UK waters. Their distribution and seasonality reflect the same patterns as described above for the *C. caretta* (Witt *et al* in press).

### **S1227 *Chelonia mydas* Green turtles**

*Chelonia mydas* occupies tropical and sub-tropical waters worldwide. In the Atlantic important nesting areas are found on Ascension Island, Guinea Bissau, Costa Rica, Yucatan, Florida, Venezuela and Suriname.

As adults they are exclusively herbivorous, foraging on seagrasses and benthic algae. Large migrations between breeding and foraging grounds can occur, for example the breeding population of Ascension Island, which has been tracked foraging in the coastal waters of Brazil (Luschi *et al* 1998). Post-hatching, *C. mydas* are also thought to recruit to the open ocean but information on their dispersal is extremely limited.

The 'TURTLE' database contains only 5 records for this species. One at sea, and 4 strandings. One of the stranded individuals was found alive (13 January 2003, Guernsey) and taken to the local aquarium for rehabilitation.

### **S1225 *Eretmochelys imbricata* Hawksbill turtle**

*Eretmochelys imbricata* occurs in the Atlantic, Pacific and Indian Oceans but tends to prefer tropical waters. Following the oceanic stage, which might be shorter than that of other species (1-3 years), *E. imbricata* recruits to coastal areas particularly on coral reefs where it feeds largely on sponges.

There is a single record of *E. imbricata* trapped in herring nets off Cork Harbour in Ireland. None are recorded within UK waters.

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