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## **Developing sustainable whalewatching in the Shannon estuary**

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The concept of developing commercial whalewatching in the Shannon estuary based on bottlenose dolphins (*Tursiops truncatus*) was first discussed in 1991. In 1992 a study was commissioned to assess the feasibility of commercial boat trips to see the dolphins in the estuary. This study (Berrow, Holmes & Kiely 1996) showed that bottlenose dolphins were resident in the estuary and that it was a calving ground. Encounter rates with dolphins were very high suggesting this was one of the best locations in Europe to see dolphins. The presence of a resident group of dolphins facilitated long term planning and investment but the study recommended that whalewatching should be marketed with other sites of wildlife and cultural interest. However any development of whalewatching must also consider the conservation implications as bottlenose dolphins are entitled to full protection under the Irish Wildlife Act (1976).

A study commissioned in 1997 to examine the potential of special interest marine tourism in the West Clare peninsula identified the dolphins as the areas unique product which could be the basis for an image that is special to West Clare (Marine Institute, 1999). This study recommended that the dolphins should be integrated with existing tourism products to provide a package aimed at promoting West Clare as an activity zone, thus maximising the revenue and economic benefits to the region.

Whalewatching in the Shannon estuary developed slowly at first with only a small number of trips (c10-20) carried out during 1993 and 1994 (Berrow & Holmes 1999). In 1995 trip numbers increased significantly to 192 and between 1995 and 1997 about 200 trips were carried out annually involving around 2,500 people. This was estimated to be worth between €108,000-241,000 to the local economy (Berrow & Holmes 1999). During 1999 there was a 30% increase in the number of

trips and during the 2000 season visitor numbers increased by 300% to about 12,000 people. At present numbers are around 15,000 per annum. There has not been a concurrent increase in trip numbers as two new purpose built whalewatching vessels, with three times the capacity of previous vessels were launched during 2000 (Fig. 1).

### *Framework for Sustainable Development*

In response to the recognised potential of whalewatching to the Shannon region the Shannon Dolphin and Wildlife Foundation (SDWF) was formed in March 2000 to formulate and implement a plan for the development of sustainable whalewatching. The SDWF was established by a range of national, regional and local authorities and agencies including Dúchas, Marine Institute, Shannon Development Ltd., Clare County Council, Kilrush Urban District Council, Carrigaholt Development Association and Kilrush Chamber of Commerce. The initial aim was to attract and cater for 20-25,000 whalewatching visitors in 3-5 years which, using the multiplier for whalewatching in rural locations presented in Hoyt (2000), would make whalewatching in the Shannon region £1million tourism industry and have a very significant economic impact on local coastal communities.

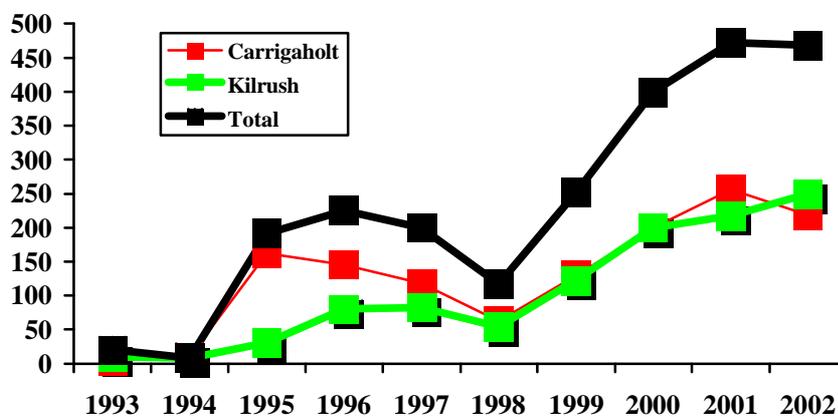


Figure 1. Number of whalewatching trips in the Shannon estuary (1993-2002).

A critical element in creating the framework for sustainable development was the designation of the Shannon estuary as a Marine Protected Area for bottlenose dolphins. The site and species involved

fulfilled the appropriate criteria for nomination as a Special Area of Conservation (SAC) under the EU Habitats Directive (1992) and thus inclusion in the Natura 2000 network as bottlenose dolphins are listed under Annex II – species whose conservation requires the designation of SACs.

### *Implications of SAC status*

Under the SAC legislation in Ireland the operation of commercial recreational activities such as whalewatching is a notifiable activity and all persons must obtain the written consent of the Minister for Arts, Culture, Gaeltacht and the Islands before whalewatching within the SAC. In order to obtain permission from the Minister, operators must fulfill certain requirements namely: abide by the Codes of Conduct and Conservation Plan, provide monitoring data and demonstrate competence in environmental education and species identification. The Codes of Conduct refer to the behaviour of vessels on the estuary and the Conservation Plan aims to control the total time whalewatching vessels are in the vicinity of dolphins. If operators agree to fulfill these requirements they are accredited under a scheme called Saoirse na Sionna (Freedom of the Shannon) and are awarded a dolphin flag to fly from their whalewatching vessels. The strength of this scheme lies in its promotion and only those accredited operators will have access to marketing and promotion from tourism agencies such as Bord Fáilte and Shannon Development Ltd. and visitors are encouraged to support only accredited operators with the assurance that these vessels are monitored and adopt good practices. The Codes of Conduct also apply to recreational craft using the estuary and they and the Conservation Plan are enforced by Dúchas.

Adopting the precautionary principal Dúchas will attempt to fix the total time allowed on dolphins to around 200 hours and this level will not be increased unless research and monitoring show there is no detrimental effect of the dolphins or their habitat.

### *Future Challenges*

At present the whalewatching industry in the Shannon estuary is small but is expanding rapidly. To develop a sustainable industry, where the resource is not degraded we must determine the carrying capacity of dolphins to tour boats and ensure that this is not exceeded. If the target of 20-25,000 visitors is to be achieved then, assuming a typical season of 100 days and an average ferry of

25 passengers then the environmental impact becomes 800-1,000 trips per season or 8-10 trips per day. Under the present Codes of Conduct vessels are limited to 30 minutes per group per trip which means dolphins could be subjected to between 4 and 5 hours of whalewatching per day. The ability of dolphins to tolerate this level of whalewatching is not known but if monitoring suggests that the dolphins are avoiding their preferred habitats or avoiding tour boats then the industry can be controlled under the SAC legislation.

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For a full version of this paper see:

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