Cephalorhynchus eutropia

Citation: Reeves, R.R., Crespo, E.A., Dans, S., Jefferson, T.A., Karczmarski, L., Laidre, K., O'Corry-Crowe, G., Pedraza, S., Rojas-Bracho, L., Secchi, E.R., Slooten, E., Smith, B.D., Wang, J.Y.. & Zhou, K. 2008. *Cephalorhynchus eutropia*. In: IUCN 2010. IUCN Red List of Threatened Species. Version 2010.4. www.iucnredlist.org>. Downloaded on 12 December 2010.



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Taxonomy [top]

Kingdom	ingdom Phylum		Class	Order	Family
ANIMALIA	IA CHORDATA		MAMMALIA	CETARTIODACTYLA	DELPHINIDAE
Scientific Nam	e:	Cephalorhyi	nchus eutropia		
Species Autho	rity:	(Gray, 1846)			
French - Dau	ean Dolp phin Du (Chili	nin, White-bellied Dolphi Tunina De Vientre Blar		

Assessment Information [top]

Red List Category & Criteria:	Near Threatened ver 3.1	
Year Assessed:	2008	
Assessor/s	Reeves, R.R., Crespo, E.A., Dans, S., Jefferson, T.A., Karczmarski, L., Laidre, K., O'Corry-Crowe, G., Pedraza, S., Rojas-Bracho, L., Secchi, E.R., Slooten, E., Smith, B.D., Wang, J.Y & Zhou, K.	
Reviewer/s:	Brownell Jr., R.L. & Cooke, J. (Cetacean Red List Authority)	
Contributor/s:		
Justification:		

The best available information indicates that the total population size is only in the low thousands, meaning that the number of mature individuals is likely to be fewer than 10,000 and therefore it is likely that the population size threshold for Vulnerable under criterion C is met. Subcriterion C1 requires an estimated continuing decline of at least 10% within the next three generations, or 42 years (14 years per

generation for this species according to Taylor *et al.* 2007). Although there is reason to suspect that this subcriterion would be met, no estimate of decline rate is available. Therefore, the species is best considered Near Threatened, pending better information on both numbers and rate of decline.

Bycatch rates are poorly known, several threats in addition to bycatch have been identified, and the species has a restricted range. Therefore, it is urgent that range-wide research be conducted on the current status of this species. Re-assessment should be a high priority once better information becomes available.

History:

1996 - Data Deficient

1994 - Insufficiently Known (Groombridge 1994)

1990 - Insufficiently Known (IUCN 1990)

1988 - Insufficiently Known (IUCN Conservation Monitoring Centre 1988)

Geographic Range [top]

Description:

This dolphin is found only along the Chilean coast (and possibly in southern Argentina), from about 30°S to Cape Horn, at the southern tip of South America. As is true of other members of the genus, it is found in shallow coastal waters, and sometimes enters estuaries and rivers. It occurs in the channels and fjords of southern Chile, and to a lesser extent along the west coast of Tierra del Fuego, such as in the Strait of Magellan. Its distribution appears to be continuous, although there may be areas of local abundance, such as Golfo de Arauco, the coast off Valdivia and the eastern side of Isla de Grande Chiloé (Goodall et al. 1988).

Countries: ve:

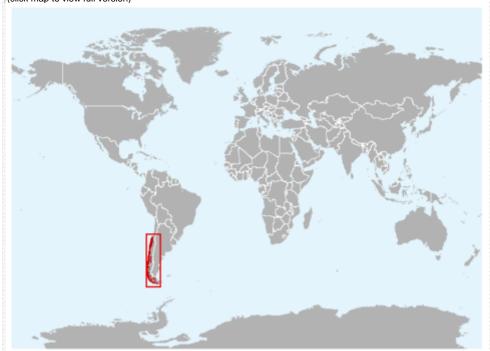
ence uncertain: ntina

FAO Marine Fishing Areas:

fic – southeast

Range Map:

(click map to view full version)



Population [top]

Population:

The only reliable abundance estimate is of 60 dolphins in an area of approx 270 km² off southern Isla Chiloé, Chile (Heinrich 2006). The total population appears to be very small (low thousands at most) although the perceived rarity of these dolphins may be due, to some extent, to the lack of boat traffic and fewness of trained observers in the channels, and to the animals' shyness and evasive behaviour. Based on information from 20 years ago, it has been suggested that Chilean dolphins are locally abundant in areas such as Bahia Corral off Valdivia, the Golfo de Arauco near Concepción and around Isla Grande de Chiloé . Groups of 20-50 have been seen on the open coast near the northern limit of the species' range (Goodall 1994). At least some Chilean dolphins near Chiloé reside in the same inshore waters year-round (Goodall 1994; Heinrich 2006).

Population Trend:



Decreasing

Habitat and Ecology [top]

Habitat and Ecology:

The Chilean dolphin is restricted to cold shallow coastal waters. According to Goodall (1994) it inhabits two distinct areas: (1) the channels from Cape Horn to Isla Grande de Chiloé and (2) open coasts, bays and river mouths north of Isla Chiloé, such as waters near Valdivia and Concepción. It seems to prefer areas with rapid tidal flow, tide rips, and shallow waters over banks at the entrance to fjords. The dolphins readily enter estuaries and rivers.

Most sightings have been near shore and therefore the Chilean dolphin is considered a coastal species, although there has been little survey effort in adjacent offshore waters. Movements appear quite limited, with most dolphins resident in a small area. Individuals identified from natural markings on their dorsal fins have been shown to concentrate their activities in specific bays and channels (Heinrich, 2006; F. Viddi pers. comm., April 2007). Groups tend to be small (between 2 and 15), but relatively large aggregations (20-50) also have been reported (Goodall 1994). Although mixed groups of Chilean and Peale's dolphins have been observed, a clear pattern of spatial and temporal partitioning of coastal habitat by the two species was documented during a six-year study at Isla Grande de Chiloé (Heinrich 2006). This pattern might not apply in other areas, such as farther south in the Guaitecas Archipelago, where mixed groups are often observed foraging and socializing (F. Viddi pers. comm., April 2007).

Chilean dolphins feed on shallow-water fishes (e.g., sardines, anchovies, rock cod), cephalopods, and crustaceans (Goodall 1994).

Systems:

List of Habitats:

Freshwater: Marine

- 9 Marine Neritic
- 9.1 Marine Neritic Pelagic
- 9.10 Marine Neritic Estuaries

Threats [top]

Major Threat(s):

Chilean dolphins have been hunted for many years for food and crab bait. The crab bait fishery in southern Chile (Lescrauwaet and Gibbons 1994) and a variety of other fisheries (particularly coastal gillnet fisheries) are potentially serious threats. Fishermen in coastal areas north of Isla Chiloé harpoon dolphins or use those taken incidentally in their nets as bait for longlines targeting *róbalo* (*Eleginops maclovinus*), individual hooks targeting swordfish (*Xiphias gladius*) and ring nets for crabs (*Cancer sp.*) (Goodall *et al.* 1988). From Isla Grande de Chiloé south, dolphins have been used along with sheep, seals, sea lions, penguins, other marine birds, and fish for bait for the lucrative "centolla" (southern king crab) and "centollon" (false king crab) fishery. It was estimated in the early 1980s that two Chilean dolphins could be taken per week per boat at one cannery in Magellan Strait (Goodall *et al.* 1988), and in 1992 up to 600 dolphins (including the more numerous and approachable Peale's dolphin) were harpooned per year in the area near the western Strait of Magellan (Lescrauwaet and Gibbons 1994). Fishing areas since then have moved farther north and south, and alternative sources of bait (such as offal from the fishing and fish farming industries) have become more readily available. The killing of dolphins for bait presumably continues to some extent but unfortunately there is no reliable recent information on this issue. Although hunting is now illegal, fishermen in the area are poor and enforcement of the law in remote areas is difficult.

Incidental mortality occurs throughout the range. Although no estimate exists of total incidental mortality in Chile, at Queule, south of Valdivia, Chilean dolphins accounted for nearly half of the dolphins taken in gill nets set from some 30 boats (Reyes and Oporto 1994). This would imply a catch of some 65-70 Chilean dolphins per year at this one port (Goodall 1994). An unknown number of Chilean dolphins are caught in shore-based gillnets set by local people from Isla Chiloé to capture small native fish and introduced farmed salmon that have escaped from their cages (Heinrich 2006).

Aquaculture farms for salmon and shellfish also may have negative effects on Chilean dolphins, e.g. by restricting their movements and eliminating important habitat along the east coast of Isla Grande de Chiloé. Exclusion of Chilean dolphins from bays and fjords is due mainly to large-scale shellfish farming operations but also to salmon farms, although these latter usually are located farther from shore and in deeper water than that preferred by the dolphins (Kemper et al. 2003; Heinrich 2006; Ribeiro et al. 2007). It has been shown that boat traffic, mainly related to aquaculture, affects the behaviour of Chilean dolphins (Ribeiro et al. 2005). Finally, there is evidence that Chilean dolphins are sometimes caught incidentally in anti-sea lion nets set up around salmon farms in the fjords and channels (Francisco Viddi pers. comm., April 2007).

List of Threats:

- 2 Agriculture & aquaculture
- 2.4 Marine & freshwater aquaculture
- 2.4.3 Scale Unknown/Unrecorded
- 5 Biological resource use
- 5.4 Fishing & harvesting aquatic resources
- 5.4.1 Intentional use: (subsistence/small scale)
- 5.4.2 Intentional use: (large scale)
- 5.4.4 Unintentional effects: (large scale)

Conservation Actions [top]

Conservation Actions:

The species is listed in Appendix II of CITES.

Better information on the status of Chilean dolphins is needed. The species may be declining because of bycatch and the consequences of extensive modification of its limited habitat in Chile. Specifically, it is important to obtain abundance estimates, quantitative information on direct and incidental mortality, and better information on habitat use in relation to aquaculture and other human activities that may degrade or eliminate these dolphins' habitat. The rapid expansion of salmon (and shellfish) farming in southern Chile is a particular concern. It is also important to evaluate possible gaps in the distribution of Chilean dolphins.

List of Conservation Actions:

- 2 Land/water management
- 2.1 Site/area management
- 3 Species management

3.1 Species management3.1.1 Harvest management

Bibliography [top]

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