Delphinus delphis – Short-beaked Common Dolphin

Regional Red List status (2016)	**Least Concern***
National Red List status (2004)	Least Concern
Reasons for change	No change
Global Red List status (2008)	Least Concern
TOPS listing (NEMBA) (2007)	None
CITES listing (2003)	Appendix II
Endemic	No

*Watch-list Data

Short-beaked Common Dolphins live in aggregations of hundreds or even thousands of dolphins (Branch et al. 2007).

Taxonomy

Delphinus delphis (Linnaeus 1758)

ANIMALIA - CHORDATA - MAMMALIA - CETARTIODACTYLA - DELPHINIDAE - *Delphinus* - *delphis*

Common names: Short-beaked Common Dolphin (English), Kortbek Gewone Dolfyn (Afrikaans)

Taxonomic status: Species

Taxonomic notes: Until recently, two globally distributed species in the genus were recognised: the Short-beaked Common Dolphin (*Delphinus delphis*) and the Long-beaked Common Dolphin (*D. capensis*) as described by Heyning and Perrin (1994). The morphological differences described between *D. delphis* and *D. capensis* in the North Pacific (Heyning & Perrin 1994) were supported by molecular evidence from both mitochondrial and nuclear markers (Rosel et al. 1994). However, the genus appears to exhibit much morphological variation globally and the criteria used to distinguish between the two species in the North Pacific may not necessarily apply elsewhere (Best 2007). Samaai et al. (2005) examined a number of morphometric characteristics for a sample of 72 *Delphinus* specimens from South Africa and found the majority of specimens belonging to *D. capensis*. However, two specimens, stranded along the West Coast, showed cranial characteristics that fell within the range of *D. delphis* from the North Pacific, suggesting that this species also occurs in South African waters. The results for a third specimen fell between the ranges for *D. delphis* and *D. capensis*, although closer to *D. capensis* (Samaai et al. 2005). Unfortunately, the same molecular markers as used for the two sympatric species in the North Pacific failed to reveal any genetic distinction between these described morphotypes in South Africa (Best 2007).

Cunha et al. (2015) in a global analysis of *Delphinus*, which included nine specimens from the West Coast (Southwestern Atlantic) of South Africa, concluded that all specimens analysed from the Atlantic Ocean belong to *Delphinus delphis* and that *D. capensis* is genetically an invalid species. However, no specimens from South Africa's eastern coast were included in that analysis, and previous morphological evidence from South Africa's east and south coast did support the existence of *D. capensis* in these regions (Jefferson & van Waerebeek 2002; Samaai et al. 2005). Thus, further phylogenetic analyses are necessary to resolve the controversy surrounding the classification of *D. delphis* and *D. capensis*.

The non-concordance of morphological and genetic data for common dolphins results in much confusion and a more rigorous global revision is needed. For this reason, the species name *D. delphis* has been tentatively retained here for animals found offshore in the southwest Indian Ocean, as well as in the waters off South Africa's west and southwestern coasts.

Assessment Rationale

Until a thorough taxonomic examination of the *Delphinus* genus across the entire South African coastline is conducted, we retain the existence of two distinct morphotypes, *D. delphis* and *D. capensis* for this assessment. *Delphinus delphis* lives offshore and exhibits naturally low sightings. However, there are no known major threats and thus the Least Concern listing remains. There are no estimates of population size for the species in the subregion. The assumed large population size, large extent of occurrence and area of occupancy, the minimal threats, plus the global status of Least Concern suggest this species is probably of Least Concern within South Africa. Ongoing molecular research should help to resolve its taxonomic status and this species should be reassessed once further data are available.

Regional population effects: This is a wide-ranging and abundant species globally (Hammond et al. 2008), and thus rescue effects are possible.

Distribution

The Short-beaked Common Dolphin is an oceanic species that is widely distributed in tropical to warm temperate waters of all the major oceans (Perrin 2002), from nearshore waters to thousands of kilometres offshore. However, due to recent taxonomic changes, records in the

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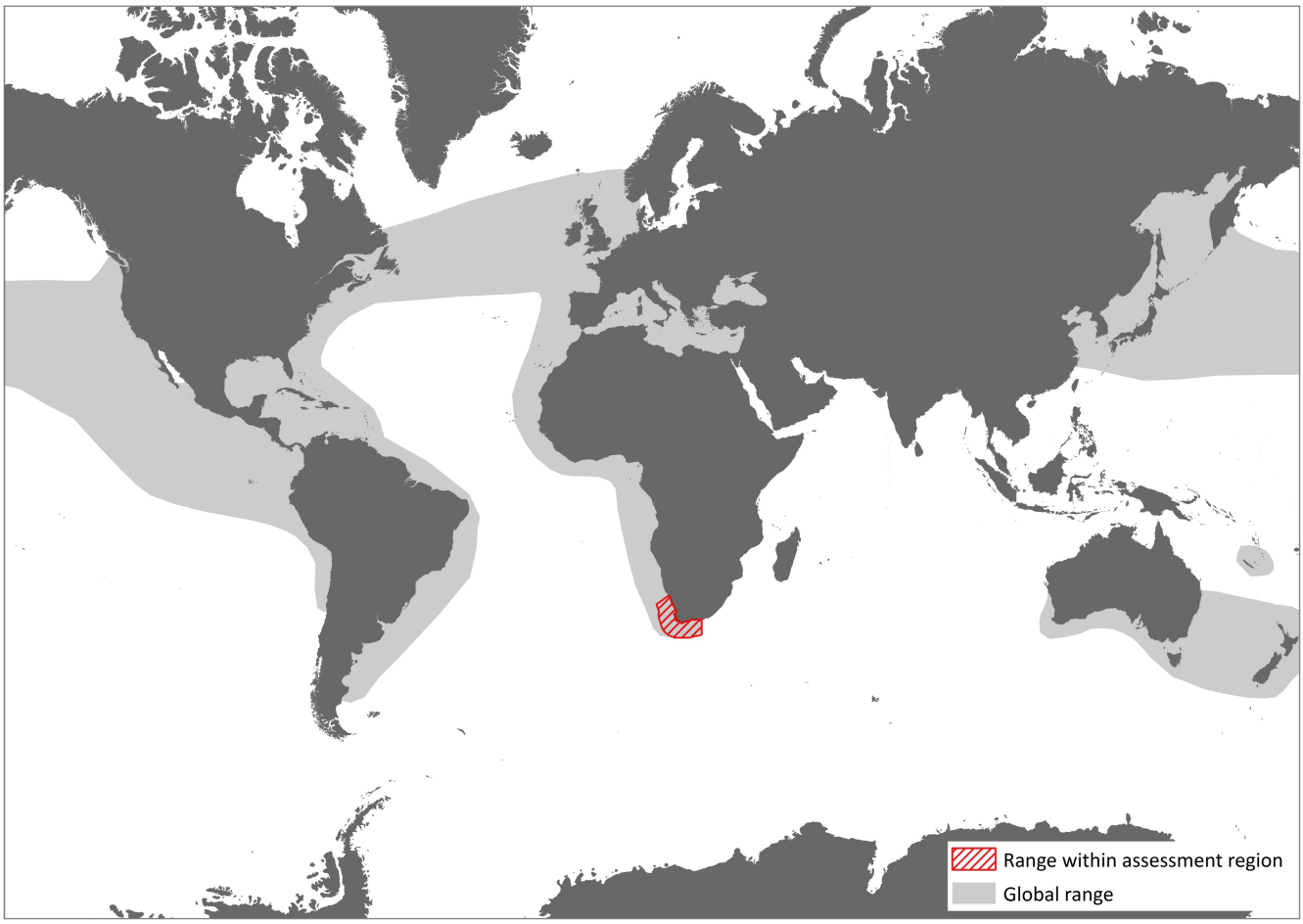

Figure 1. Distribution range for Short-beaked Common Dolphin (*Delphinus delphis*) within the assessment region (IUCN 2012)

literature are not always clear which species is sighted at sea, so the real distribution of the species is possibly wider (Best 2007). Short-beaked Common Dolphins have been reported off Africa's west coast from Gabon, Angola and South Africa (Best 2007), but previous records of this species in other parts of the Indian Ocean are now thought to have been of Long-beaked Common Dolphins (*D. capensis*: Jefferson & van Waerebeek 2002).

Population

Globally, this is a very abundant species, with many available estimates for various areas where it occurs. However, no abundance estimates appear to exist for the assessment region, as very few records are available. Model-based estimates of generation time are 14.8 years (Taylor et al. 2007).

Current population trend: Unknown

Continuing decline in mature individuals: Unknown

Number of mature individuals in population: Unknown

Number of mature individuals in largest subpopulation: Unknown

Number of subpopulations: Unknown

Severely fragmented: No

Habitats and Ecology

Short-beaked Common Dolphins appear to have a preference for upwelling-modified waters, areas with steep sea floor relief, and extensive shelf areas, but they are widespread in warm temperate and tropical waters (Evans 1994). In the eastern tropical Pacific, they prefer equatorial and subtropical waters with a shallow thermocline, relatively large seasonal changes in surface temperature, and seasonal upwelling (Reilly 1990; Fiedler & Reily 1994).

Associations with other marine mammal species are common. Schools in the Eastern Tropical Pacific (ETP) are sometimes associated with Yellowfin Tuna (*Thunnus*

Table 2. Threats to the Short-beaked Common Dolphin (*Delphinus delphis*) ranked in order of severity with corresponding evidence (based on IUCN threat categories, with regional context)

Rank	Threat description	Evidence in the scientific literature	Data quality	Scale of study	Current trend
1	*5.4.3 Fishing & Harvesting Aquatic Resources*: accidental bycatch in shark-nets.	-	Anecdotal	-	Unknown
2	*11.1 Habitat Shifting & Alteration*: climate change may cause reduction in area of occupancy or food resources.	-	Anecdotal	-	Increasing

albacares), and have thus been involved in tuna purse-seine fishing operations (Gerrodette 2002). Mixed-species groups of *D. delphis*, *Stenella coeruleoalba* (Striped Dolphins) and *Grampus griseus* (Risso's Dolphins) have been observed frequently in the pelagic waters of the Gulf of Corinth, Greece (Frantzis & Herzing 2002). The prey of *D. delphis* consists largely of small schooling fishes and squids (Perrin 2002) and stomachs of two individuals from South Africa confirmed that, as mainly myctophids (97.1% by number) and squid (*Loligo* spp., 2.3% by number) were found (Best 2007). Assessment of parasite and stomach content data suggests that they have a more offshore habitat than the Long-beaked Common Dolphin (*D. capensis*) in the assessment region (Best 2007).

Data Sources and Quality

Table 3. Information and interpretation qualifiers for the Short-beaked Common Dolphin (*Delphinus delphis*) assessment

Data sources	Indirect information (expert knowledge)
Data quality (max)	Suspected
Data quality (min)	Suspected
Uncertainty resolution	Expert consensus
Risk tolerance	Evidentiary

Use and Trade

There is local opportunistic medicinal and food use of stranded animals.

Threats

Although the Short-beaked Common Dolphin is one of the most prominent species in by-catch in fisheries around the world, there does not appear to be any overlap with major fishing operations within the assessment region. Takes have been recorded in other purse-seine fisheries in the Indian Ocean and off the west coast of Africa (Simmons 1968). Best (2007) points out that there is potential for bycatch of the species in the midwater trawl fishery off South Africa and Namibia, so this threat should be investigated. Their offshore distribution within the region suggests that habitat loss from industrial activity along the coastline is not a major threat. If their habitat requirements are very specific with respect to water temperature (for example, thermocline and water temperature range), climate change effects may impact on this species in the future.

Conservation

The species is listed in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and Marine Living Resources Act (No. 18 of 1998). No conservation interventions are required for the assessment region at present.

Research priorities: The lack of knowledge regarding the abundance, distribution and seasonality of this species suggests that survey studies should be undertaken to determine actual distribution of the species in local waters. Current research conducted by Port Elizabeth Museum and Nelson Mandela Metropolitan University is investigating the taxonomy of the species along the South African coast using material from stranded and incidentally bycaught animals. Once the taxonomy is resolved, life history studies (age, growth reproduction, diet) as well as research on habitat/niche requirements should be investigated to understand the potential impact of climate change. Threat assessments should be carried out.

Encouraged citizen actions:

- Use information dispensed by the South African Sustainable Seafood Initiative (SASSI) to make good choices when buying fish in shops and restaurants (for example, wwfsa.mobi), FishMS 0794998795.
- Save electricity and fuel to mitigate CO_2 emissions and hence rate of climate change.
- Buy fresh produce that has been grown in pesticide-free environments.
- Buy local products that have not been shipped.
- Reduce boat speed in coastal environments and do not approach or chase dolphins in boats or skis.
- When participating in whale/dolphin watching tours, use only official tour operators and ensure regulations are upheld.

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Details of the methods used to make this assessment can be found in *Mammal Red List 2016: Introduction and Methodology.*