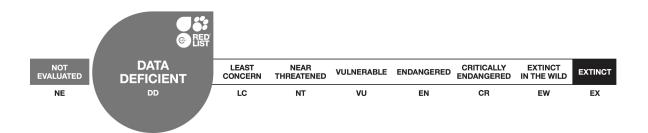


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# Cephalorhynchus heavisidii, Heaviside's Dolphin

## Assessment by: Reeves, R.R. et al.



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## Taxonomy

| Kingdom  | Phylum   | Class    | Order           | Family      |
|----------|----------|----------|-----------------|-------------|
| Animalia | Chordata | Mammalia | Cetartiodactyla | Delphinidae |

Taxon Name: Cephalorhynchus heavisidii (Gray, 1828)

### Synonym(s):

• Grampus heavisidii Gray, 1828

### Common Name(s):

- English: Heaviside's Dolphin, Benguela Dolphin, South African Dolphin
- French: Céphalorhynque du Cap, Dauphin de Heaviside
- Spanish: Delfín del Cabo, Tunina de Heaviside

### **Taxonomic Notes:**

Rice (1998) noted that the type specimen was donated by Captain Haviside (captain of an East Indiaman, not the surgeon Captain Heaviside, who sold non-cetacean anatomical specimens to the British Museum), and thus the proper common name should have been Haviside's Dolphin. However, common usage prevails and the species is generally known as Heaviside's Dolphin. A preliminary study of animals from Namibia and South Africa failed to indicate any unambiguous population structure in this species, but further studies using larger sample sizes are required to confirm this (van Vuuren *et al.* 2002).

## **Assessment Information**

| Red List Category & Criteria: | Data Deficient <u>ver 3.1</u> |  |  |
|-------------------------------|-------------------------------|--|--|
| Year Published:               | 2013                          |  |  |
| Date Assessed:                | July 1, 2008                  |  |  |

### Justification:

There is inadequate information to assess this species against the criteria and therefore it must remain listed as Data Deficient pending a credible estimate of population size and/or better information on population trend. Heaviside's Dolphins have a limited range and are not particularly common anywhere. Several threats have been identified, including entanglement in a variety of inshore fishing gear (e.g., beach seines, purse seines, trawls, and gillnets).

### **Previously Published Red List Assessments**

| 2008 – Data Deficient (DD) |
|----------------------------|
| 1996 – Data Deficient (DD) |

- 1994 Insufficiently Known (K)
- 1990 Insufficiently Known (K)
- 1988 Insufficiently Known (K)

# **Geographic Range**

## **Range Description:**

Heaviside's dolphins have a limited range, restricted to southwestern Africa (Angola to South Africa), with records from about 17°S to the southwestern tip of the continent. They are commonly seen along the west coast of South Africa in the Cape Town region (Rice 1998; Dawson 2002). Records extend along the entire west coast of South Africa and Namibia, and into southern Angola (J-P Roux pers. comm.), but as the cetacean fauna of Angola is poorly known, it is uncertain how far north the species' distribution extends there (Best and Abernethy 1994).

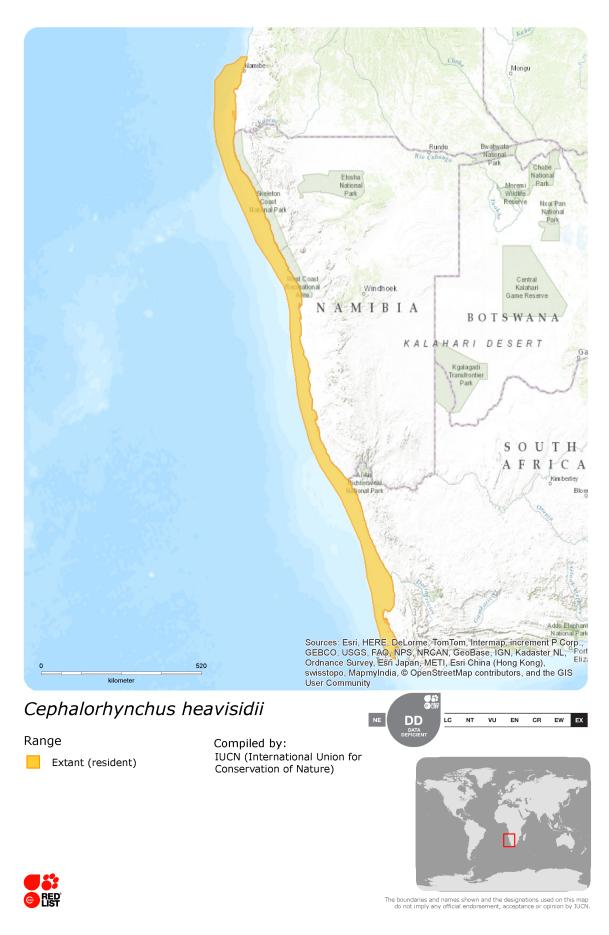
The map shows where the species may occur based on oceanography. The species has not been recorded for all the states within the hypothetical range as shown on the map. States for which confirmed records of the species exist are included in the list of native range states.

### **Country Occurrence:**

Native: Angola (Angola); Namibia; South Africa (Northern Cape Province, Western Cape)

FAO Marine Fishing Areas: Native: Atlantic - southeast

# **Distribution Map**



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## Population

No range-wide survey has been conducted for this species. A published estimate of 800 -1,000 (Carwardine 2002) is not based on a survey and is only a guess. Surveys off the coast of southern Africa yielded approximate densities of 4.69 sightings per 100 nautical miles within 5nm of the coast, with relatively fewer sightings further offshore (Best 1984). Griffin and Loutit (1988) stated that Heaviside's dolphins were the cetaceans most frequently seen from the Namibian coast.

Current Population Trend: Unknown

## Habitat and Ecology (see Appendix for additional information)

This is a coastal, shallow-water dolphin seen mainly in waters less than 100 m deep (Best and Abernethy 1994). It is generally associated with the cold, northward-flowing Benguela Current. Rice and Saayman (1984) speculated that some subpopulations may be resident in particular areas year-round, although this was questioned by Best and Abernethy (1994). Satellite-linked tagging indicated that in summer female Heaviside's dolphins occupied home ranges of up to 1,000-2,000 km<sup>2</sup> over periods of up to 54 days, with a strong onshore-offshore diurnal pattern of movement (Elwen *et al.*, 2006). More than 85% of sightings were in water with surface temperatures of 9-15°C (Best and Abernethy 1994).

The diet of Heaviside's dolphin consists mainly of juvenile hake (individuals well below the modal length of commercially caught fish) (Sekiguchi *et al.*, 1992). Other demersal fishes, pelagic schooling fishes, and cephalopods (including octopus) are also taken (Best and Abernethy 1994).

Systems: Marine

## Use and Trade (see Appendix for additional information)

Some illegal hunting has been reported, though it is probably not at a significant level.

## **Threats** (see Appendix for additional information)

In general, Heaviside's dolphins appear to face fewer threats than other members of its genus. Although fully protected legally, some killing with hand-thrown harpoons or guns has been reported (Rice and Saayman 1984; Best and Abernethy 1994). Heaviside's dolphins are susceptible to entanglement in inshore gear such as beach seines, purse seines, trawls, and gillnets (Best and Abernethy 1994; Peddemors 1999).

Concern has been expressed about the potential effects of pollution and boat traffic (Culik 2004). However, organochlorine levels in a small sample of Heaviside's dolphins failed to indicate significant exposure to DDT in the coastal waters of South Africa's west coast, where the scarcity of arable land and low rainfall may help minimize pesticide residue inputs to the marine environment (De Kock *et al.* 1994). Also, low human population densities and the scarcity of large ports along most of the species' range probably help reduce the possibility of adverse effects from boat traffic (Best pers. comm.).

## **Conservation Actions** (see Appendix for additional information)

The species is listed in Appendix II of CITES.

More information is needed on the distribution of the species in Angolan waters in particular, as well as on the nature and extent of directed and incidental catches. More research emphasis should in future also be placed on possible detrimental interactions due to the overfishing of prey stocks, especially hake. Increased inshore fishing pressure will inevitably increase interactions between the fisheries and Heaviside's dolphins (Peddemors 1999).

# Credits

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Reviewer(s): Brownell Jr., R.L. & Cooke, J.

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# **External Resources**

For Images and External Links to Additional Information, please see the Red List website.

# Appendix

# Habitats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

| Habitat  | Season | Suitability | Major<br>Importance? |
|--|--------|-------------|----------------------|
| 9. Marine Neritic -> 9.1. Marine Neritic - Pelagic | -      | Suitable    | Yes                  |

## Use and Trade

(http://www.iucnredlist.org/technical-documents/classification-schemes)

| End Use      | Local | National | International |
|--------------|-------|----------|---------------|
| Food - human | Yes   | Yes      | No            |

## Threats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

| Threat   | Timing    | Scope             | Severity               | Impact Score |
|--|-----------|-------------------|------------------------|--------------|
| 5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.1. Intentional use: (subsistence/small scale)       | Ongoing   | -                 | -                      | -            |
|  | Stresses: | 2. Species Stress | es -> 2.1. Species mor | tality       |
| 5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.3. Unintentional effects: (subsistence/small scale) | Ongoing   | -                 | -                      | -            |
|  | Stresses: | 2. Species Stress | es -> 2.1. Species mor | tality       |

# **Conservation Actions in Place**

(http://www.iucnredlist.org/technical-documents/classification-schemes)

| Conservation Actions in Place                               |  |
|---|--|
| In-Place Education  |  |
| Included in international legislation: Yes                  |  |
| Subject to any international management/trade controls: Yes |  |

# **Conservation Actions Needed**

(http://www.iucnredlist.org/technical-documents/classification-schemes)

### **Conservation Actions Needed**

3. Species management -> 3.1. Species management -> 3.1.1. Harvest management

## **Research Needed**

(http://www.iucnredlist.org/technical-documents/classification-schemes)

#### **Research Needed**

1. Research -> 1.2. Population size, distribution & trends

1. Research -> 1.5. Threats

3. Monitoring -> 3.1. Population trends

# **Additional Data Fields**

## Population

Population severely fragmented: No

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