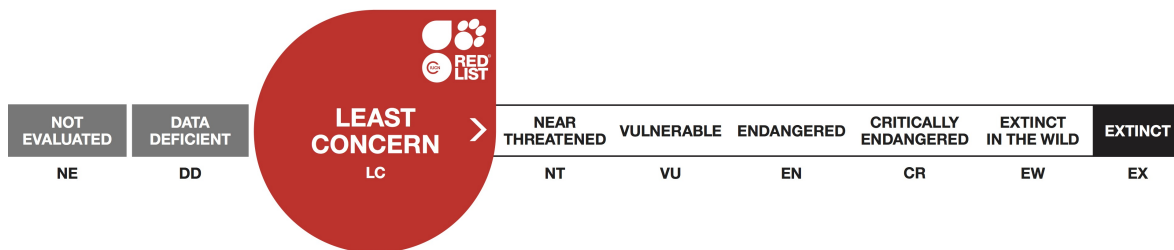


Stenella longirostris, Spinner Dolphin

Assessment by: Braulik, G. & Reeves, R.



View on www.iucnredlist.org

Citation: Braulik, G. & Reeves, R. 2018. *Stenella longirostris*. The IUCN Red List of Threatened Species 2018: e.T20733A50375784. <http://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T20733A50375784.en>

Copyright: © 2018 International Union for Conservation of Nature and Natural Resources

Reproduction of this publication for educational or other non-commercial purposes is authorized without prior written permission from the copyright holder provided the source is fully acknowledged.

Reproduction of this publication for resale, reposting or other commercial purposes is prohibited without prior written permission from the copyright holder. For further details see [Terms of Use](#).

The IUCN Red List of Threatened Species™ is produced and managed by the [IUCN Global Species Programme](#), the [IUCN Species Survival Commission \(SSC\)](#) and [The IUCN Red List Partnership](#). The IUCN Red List Partners are: [Arizona State University](#); [BirdLife International](#); [Botanic Gardens Conservation International](#); [Conservation International](#); [NatureServe](#); [Royal Botanic Gardens, Kew](#); [Sapienza University of Rome](#); [Texas A&M University](#); and [Zoological Society of London](#).

If you see any errors or have any questions or suggestions on what is shown in this document, please provide us with [feedback](#) so that we can correct or extend the information provided.

Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Mammalia	Cetartiodactyla	Delphinidae

Taxon Name: *Stenella longirostris* (Gray, 1828)

Synonym(s):

- *Delphinus longirostris* Gray, 1828

Infra-specific Taxa Assessed:

- *Stenella longirostris ssp. orientalis*

Common Name(s):

- English: Spinner Dolphin, Long-beaked Dolphin, Long-snouted Dolphin
- French: Dauphin longirostre
- Spanish: Delfín Tornillón, Estenela Giradora

Taxonomic Source(s):

Committee on Taxonomy. 2017. List of marine mammal species and subspecies. Available at: www.marinemammalscience.org. (Accessed: 31 August 2018).

Taxonomic Notes:

Recent genetic work indicates that the genus *Stenella* is paraphyletic, and it is likely that the Delphininae will be restructured in coming years (LeDuc *et al.* 1999, Perrin *et al.* 2013). Four subspecies of Spinner Dolphins are currently recognized: *S. l. longirostris* (Gray's Spinner Dolphin), *S. l. orientalis* (Eastern Spinner Dolphin), *S. l. centroamericana* (Central American Spinner Dolphin) and *S. l. roseiventris* (Dwarf Spinner Dolphin) (Perrin 1990, Perrin *et al.* 1999). There is a zone of hybridisation between Gray's Spinner and the Eastern Spinner where an intermediate form called the White-bellied Spinner occurs (Andrews *et al.* 2013). Smaller individuals in Arabian waters (Red Sea and Persian Gulf) (Van Waerebeek *et al.* 1999) and morphologically different animals in West Africa may represent as yet undescribed subspecies (Cadenat 1959, Jefferson *et al.* 1997). Several studies have demonstrated significant meta-population genetic structure, especially where relatively insular dolphin communities are strongly associated with island resting habitat such as in the Hawaiian Archipelago (Andrews *et al.* 2013) and in the South Pacific (Oremus *et al.* 2007).

UAE Taxonomic Note

Two subspecies may occur (Baldwin 2005).

Assessment Information

Red List Category & Criteria: Least Concern [ver 3.1](#)

Year Published: 2018

Date Assessed: February 20, 2018

Justification:

The Spinner Dolphin is one of the most abundant cetaceans globally (Perrin 2018). The sum of existing abundance estimates is more than one million dolphins, and as these estimates are from only a small fraction of the total distribution range of the species, total abundance is presumably much higher. The Eastern Spinner Dolphin population was listed as Vulnerable on the IUCN Red List in 2012 (<http://www.iucnredlist.org/details/133712/0>); it suffered large mortality in tuna-purse seine fisheries in the past, and is no longer thought to be declining but has shown no clear signs of recovery. Some island-associated populations of Spinner Dolphins are small, insular, and vulnerable to disturbance and other threats. Spinner Dolphins are taken throughout much of their range as bycatch in fisheries and as direct targets of hunting in some areas. There is little quantitative information on bycatch rates in most range states, but it is clear that as well as being one of the most abundant cetaceans, the Spinner Dolphin is one of the more frequently bycaught species. Direct removals are substantial in a few areas, notably the Solomon Islands (average of 214 spinners per year 2000-2002). The species was classified as Data Deficient (DD) on the IUCN Red List in 2008 and it remains data-poor in much of its range. However, given its generally high abundance and pan-tropical distribution, and in the absence of evidence that threats are significant throughout the species' extensive range, the Spinner Dolphin is assessed as Least Concern. There is not enough information to determine whether the global population has declined by 30% or more over three generations (therefore qualifying for listing as Vulnerable) but this is possible.

Previously Published Red List Assessments

2012 – Data Deficient (DD)

<http://dx.doi.org/10.2305/IUCN.UK.2012.RLTS.T20733A17837287.en>

2008 – Data Deficient (DD)

1996 – Lower Risk/conservation dependent (LR/cd)

Geographic Range

Range Description:

Spinner Dolphins occur throughout tropical and subtropical waters in both hemispheres from approximately 40°N to 40°S. They inhabit the Pacific, Atlantic, and Indian Oceans, including the Persian Gulf and the Red Sea, however they do not occur in the Mediterranean Sea.

Stenella longirostris longirostris is the most common and widely distributed subspecies. It occurs mainly around oceanic islands and near coastlines in the tropical Atlantic and Indian Oceans and in the central and western Pacific (Rice 1998). Distribution in many parts of East and West Africa as well as in South America is poorly known.

Stenella longirostris orientalis inhabits pelagic waters of the eastern tropical Pacific (ETP) east of about 145°W, from 24°N off Baja California (Mexico) to 10°S off Peru, but exclusive of the range of *S. l. centroamericana* (Perrin 1990).

Stenella longirostris centroamericana is found in coastal waters over the continental shelf of the ETP, from the Gulf of Tehuantepec in southern Mexico, southeastward to Costa Rica (Perrin 1990).

Stenella longirostris roseiventris is distributed in shallow waters of inner Southeast Asia, including the Gulf of Thailand, the Timor and Arafura Seas off northern Australia, and other similar areas off Indonesia and Malaysia. It is replaced in deeper waters by the larger pelagic subspecies *S. l. longirostris* (Perrin *et al.* 1999).

Country Occurrence:

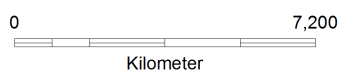
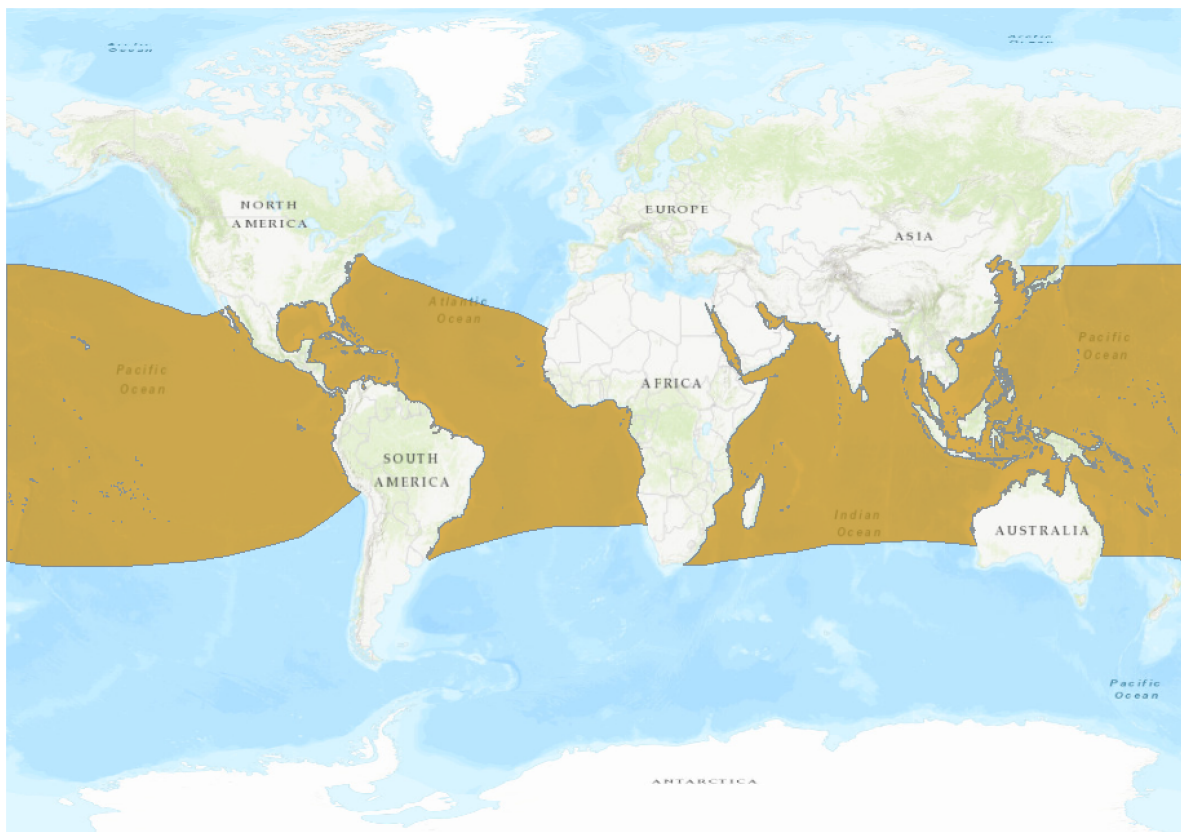
Native: American Samoa; Angola; Anguilla; Antigua and Barbuda; Argentina; Aruba; Australia; Bahamas; Bahrain; Bangladesh; Belize; Bermuda; Bonaire, Sint Eustatius and Saba; Brazil; British Indian Ocean Territory; Brunei Darussalam; Cabo Verde; Cambodia; Cayman Islands; China; Cocos (Keeling) Islands; Colombia; Comoros; Cook Islands; Costa Rica; Côte d'Ivoire; Cuba; Curaçao; Djibouti; Dominica; Dominican Republic; Ecuador (Galápagos); Egypt; El Salvador; Eritrea; Fiji; French Guiana; French Polynesia; Ghana; Guam; Guatemala; Guinea; Honduras; Hong Kong; India (Andaman Is., Nicobar Is.); Indonesia; Iran, Islamic Republic of; Israel; Jamaica; Japan (Honshu); Jordan; Kenya; Kiribati; Kuwait; Liberia; Madagascar; Malaysia; Maldives; Marshall Islands; Martinique; Mauritania; Mauritius; Mexico; Micronesia, Federated States of; Mozambique; Myanmar; New Caledonia; New Zealand (Kermadec Is., North Is.); Nicaragua; Niue; Northern Mariana Islands; Oman; Pakistan; Palau; Panama; Papua New Guinea; Peru; Philippines; Puerto Rico; Réunion; Saint Helena, Ascension and Tristan da Cunha; Saint Kitts and Nevis; Saint Lucia; Saint Martin (French part); Saint Vincent and the Grenadines; Samoa; Saudi Arabia; Senegal; Seychelles; Singapore; Sint Maarten (Dutch part); Solomon Islands; Somalia; South Africa (KwaZulu-Natal); Sri Lanka; Sudan; Suriname; Taiwan, Province of China; Tanzania, United Republic of; Thailand; Timor-Leste; Tonga; Trinidad and Tobago; Tuvalu; United Arab Emirates; United States (Hawaiian Is., New Jersey); United States Minor Outlying Islands; Uruguay; Vanuatu; Venezuela, Bolivarian Republic of; Viet Nam; Virgin Islands, British; Virgin Islands, U.S.; Wallis and Futuna; Yemen (Socotra)

FAO Marine Fishing Areas:

Native: Atlantic - southeast, Atlantic - eastern central, Atlantic - southwest, Atlantic - western central, Atlantic - northwest, Indian Ocean - eastern, Indian Ocean - western, Pacific - eastern central, Pacific - western central, Pacific - southeast, Pacific - southwest, Pacific - northwest


Distribution Map

Stenella longirostris



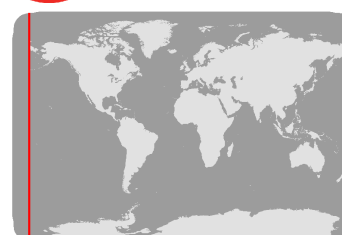
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community

Range

 Extant (resident)

Compiled by:

IUCN (International Union for Conservation of Nature)



The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.



Population

The Spinner Dolphin is the most common small cetacean in tropical pelagic waters (Perrin 2018). It was considered the most abundant cetacean species in the Indian Ocean (Ballance and Pitman 1998) and the Red Sea (Notarbartolo *et al.* 2017), and it was by far the most common cetacean encountered, and also had the largest mean school size, in the Maldives (Ballance *et al.* 2001), Tanzania (Braulik *et al.* 2018), and Pakistan (Gore *et al.* 2012). There were an estimated 801,000 (coefficient of variation (CV)=37%) White-bellied Spinners (*S. l. orientalis* – *S. l. longirostris* intergrades) in the ETP in 2000 (Gerrodette *et al.* 2005). The Eastern Spinner, which is the dolphin most heavily affected by the ETP tuna fishery, numbered about 613,000 (CV=22%) in 2003 (Gerrodette and Forcada 2005). Despite large reductions in bycatch mortality since the 1970s, this population appeared to be recovering at an estimated rate of only 1.1% per year during the early 2000s, an estimate that was not statistically different from zero (Gerrodette and Forcada 2005). Estimated abundance in the southern part of the Sulu Sea and northeastern Malaysian waters was 4,000 (Dolar *et al.* 1997), and in the southeastern Sulu Sea, about 31,000 (CV=27%) (Dolar *et al.* 2006). In Egyptian waters of the southern Red Sea, line-transect surveys in 2010, 2011, and 2012 generated an estimate of 6,961 (CV=0.26) Spinner Dolphins (Costa 2015). Although survey effort has been limited, the small number of records suggests that Spinner Dolphins are present but less abundant in the Atlantic (Weir 2010, Carretta *et al.* 2017) than in the Indian or Pacific Oceans. Island-associated populations of Spinner Dolphins are often genetically distinct and inhabit relatively small areas. For example, the Hawaii Island ('Big Island') stock was estimated as 631 (95% confidence interval (CI) 524–761) from surveys conducted between September 2010 and August 2011 (Tyne *et al.* 2015a), and a population of Spinners on the leeward coast of Kauai Island was estimated as 601 (CV = 0.20) for the period October to November 2005 (Carretta *et al.* 2017). Abundance of Spinner Dolphins on the southwest coast of Mauritius was estimated using photo-identification data collected between April 2008 and June 2010, as ranging between 138 and 399 individuals (Webster *et al.* 2015). At the South Pacific island of Moorea, Spinner Dolphin abundance in 2002 was estimated using mark-recapture as 135 (95% CI 112-163) (Oremus *et al.* 2007). There is no global abundance estimate for this widely distributed species. The abundance estimates listed above add up to more than a million dolphins. However, the vast majority of the species range remains unsurveyed, therefore the actual abundance is presumed to be considerably greater.

Current Population Trend: Unknown

Habitat and Ecology (see Appendix for additional information)

Spinner Dolphins occur both on the high seas and in inshore waters associated with islands or banks. In the ETP, they are present in very large numbers many hundreds of kilometers from the nearest land, and they favour a specific habitat type, which oceanographers call "tropical surface water" that is typified by a shallow mixed layer, a sharp thermocline, and relatively small annual variation in surface temperature (Perrin and Gilpatrick 1994). They are often found there in close association with Pantropical Spotted Dolphins (*Stenella attenuata*), Yellowfin Tuna (*Thunnus albacares*) and birds of several species. School size varies greatly, from just a few to a thousand or more dolphins, and is often larger in pelagic than inshore waters (Perrin 2018). Numerous islands or island groups host small groups of Spinner Dolphins that predictably use shallow, near-shore areas for resting during the day. These include the Hawaiian Islands (Tyne *et al.* 2015a), Maldives (Ballance and Pitman 2001), and many islands in the South Pacific including Fiji, Tahiti, and Moorea (Oremus *et al.* 2007). The dwarf form of the Spinner Dolphin in Southeast Asian waters inhabits shallow coral reef habitat (Perrin and Gilpatrick 1994, Perrin *et al.*

1999). In the north-central and western Gulf of Mexico, *Stenella longirostris* is found over intermediate bottom depths (Davis *et al.* 1998).

Most Spinner Dolphins feed predominantly at night, on small (<20 cm) mid-water fishes of many different families (including myctophids), squids, and sergestid shrimps (Perrin *et al.* 1973, Dolar *et al.* 2003). Dwarf Spinner Dolphins are exceptional, however; they feed (presumably during daylight hours) on small, reef-associated organisms (benthic reef fishes and invertebrates) (Perrin *et al.* 1999).

Systems: Marine

Use and Trade

As one of the most common cetaceans in many tropical oceanic regions, the Spinner Dolphin is also often one of the species bycaught in fishing gear. In many places, accidentally captured dolphins are eaten or used as bait in shark fisheries and in some instances this accidental taking has led to directed, targeted taking as well (Dolar *et al.* 1994, Leatherwood and Reeves 1989, Robards and Reeves 2009, Kiszka 2012). ‘Incidentally’ captured Spinner Dolphins are reportedly eaten in Madagascar (Razafindrakoto *et al.* 2004), Tanzania (Amir *et al.* 2002), India (Kumarran 2012), the Grenadines in the Caribbean (where they are also hunted), Brazil, Venezuela, Indonesia, the Philippines (Robards and Reeves 2009) and much of West Africa (Weir 2010, Alfaro-Shigueto and Van Waerebeek 2001). Dolphin meat, including Spinner Dolphin meat, is sometimes used as bait for sharks in at least Tanzania, the Philippines, and Venezuela (Amir *et al.* 2002, Dolar *et al.* 1994, Perrin and Gilpatrick 1994). They are hunted in the Solomon Islands, mainly for teeth used in a traditional economy (Oremus *et al.* 2015).

Non-consumptive uses of Spinner Dolphins include dolphin-watching tourism. Because of their gregarious nature and acrobatic behaviour, Spinner Dolphins are targeted for both boat-based and swim-with-the-dolphins tourism in many places, including Hawaii, Egypt, and French Polynesia (Gannier and Petiau 2006, Tyne *et al.* 2017, Notarbartolo *et al.* 2007). Harassment by dolphin-watching boats is emerging as a new source of disturbance to Spinner Dolphins at several localities in Oceania and Southeast Asia (Tyne *et al.* 2015b, 2017). In west Hawaii, abundance estimates from 2011 and 2012 were lower than all previous years, indicating a possible long-term impact of dolphin-centred tourism on local population size (Tyne *et al.* 2017).

Threats (see Appendix for additional information)

Over the period 1960 to 1972, it was estimated that more than 4 million dolphins were killed in the ETP yellowfin tuna purse-seine fishery (Wade *et al.* 2007). The main species killed were the Pantropical Spotted Dolphin (*Stenella attenuata*) and the Spinner Dolphin, both of which associate with tuna in that area. Fishermen use the dolphins to locate schools of tuna, and often purposely chase and encircle them in the nets; this maximizes the catch of tuna but can also result in entanglement and mortality of the dolphins (Gerrodette 2018). Mortality in the tuna fishery was estimated to have reduced the population of Eastern Spinners by 65% (Wade *et al.* 2007, Reilly *et al.* 2005). Since the Inter-American Tropical Tuna Commission (IATTC) implemented per-vessel mortality limits on the international fleet, the reported mortality of Eastern and White-bellied Spinners, combined, decreased dramatically to only a few hundred individuals (IATTC 2006). Despite this reduction in mortality, the eastern subspecies appears to be recovering slowly at best. Factors such as fishery-related stress, unobserved mortality due to calf separation and orphaning during fishing operations (Archer *et al.* 2001), mortality caused by small vessels that do not carry observers, and under-reporting of mortality have been suggested as

possible reasons for the Eastern Spinner's slow recovery (Gerrodette and Forcada 2005).

Throughout much of their range, Spinner Dolphins are taken as bycatch in purse-seine, gillnet, and trawl fisheries (Perrin *et al.* 1994, Donahue and Edwards 1996), often in high numbers. Spinner Dolphins are the most abundant dolphins in the Indian Ocean (Ballance and Pitman 1998) and are taken throughout that region in numbers that are largely unknown but may be substantial, especially as there is evidence that dolphins associate with tuna in this region (Anderson 2014). Annual bycatch levels of hundreds of Spinner Dolphins were reported in the few fisheries examined in India in the 1980s and early 1990s (Mohan 1994), and annual takes in the thousands were reported in Sri Lanka in the 1980s (Leatherwood and Reeves 1989). They were reported to be the most frequently bycaught cetaceans in the Union of the Comoros (Kiszka *et al.* 2008), and amongst the most commonly taken in Madagascar (Razafindrakoto *et al.* 2004), Mayotte, and other countries in the western Indian Ocean (Kiszka *et al.* 2008). Unknown numbers have been taken in the tuna purse-seine fishery in the eastern Atlantic (Donahue and Edwards 1996) and in small-scale gillnet fisheries in the western Atlantic (Siciliano 1994). They have been reported as bycatch in the Caribbean Sea (Vidal *et al.* 1994).

Dwarf Spinners are caught incidentally in shrimp trawls in the Gulf of Thailand (Perrin *et al.* 1999). Zerbini and Kotas (1998) reported on by-catches in Brazilian drift-net fisheries and Cockcroft (1990) on animals entangled in shark nets off KwaZulu-Natal, South Africa. There are likely to be undocumented interactions with fisheries off West Africa (Weir 2010, Jefferson *et al.* 1997).

In some areas, human use of bycaught cetaceans has led to directed hunting or deliberate gillnetting of Spinner Dolphins. For example, this has been reported in Sri Lanka (Leatherwood and Reeves 1989), the Philippines (Dolar 1994), and Indonesia (Kahn 2004). However, it is unclear whether, or how extensively, this activity continues in all of these places. Spinners may also be taken intentionally in West Africa (Van Waerebeek *et al.* 1999). Drive hunting of Spinner Dolphins takes place in Anakao, Madagascar (Cerchio *et al.* 2011) and in the Solomon Islands (Oremus *et al.* 2015).

The habit of resting in shallow coastal waters during the day leads to problems of disturbance by dolphin-watching boats and swimmers in many areas.

Conservation Actions (see Appendix for additional information)

The Spinner Dolphin is listed in Appendix II of the Convention on International Trade in Endangered Species.

The taking of Spinner Dolphins and other cetaceans affected by the ETP tuna purse-seine fishery is managed both nationally by the coastal countries and internationally by the IATTC. The IATTC has imposed annual stock mortality limits on each purse seine fleet and promulgated regulations regarding the safe release of dolphins (Gosliner 1999, Bayliff 2001).

In several locations where Spinner Dolphins are the target of dolphin tourism, including Samadai Reef in Egypt and the Hawaiian Islands, local authorities have implemented management measures to control the number of visitors and boats, and thus to limit the impacts on dolphins (Notarbartolo *et al.* 2009, Tyne *et al.* 2015b). The species is composed of several subspecies and numerous regional populations, each of which could be assessed separately for the IUCN Red List. The eastern spinner dolphin (*Stenella longirostris orientalis*) is currently listed as Vulnerable (<http://www.iucnredlist.org/details/133712/0>). The available estimates of abundance and removals suggest that some of the other populations may also fall into a Threatened category.

Credits

Assessor(s): Braulik, G. & Reeves, R.

Reviewer(s): Taylor, B.L. & Perrin, W.

**Facilitators(s) and
Compiler(s):** Lowry, L.

Bibliography

- Alfaro-Shigueto, J., Van Waerebeek, K. 2001. Drowning in the sea of silence: the bushmeat concept applied for marine fauna. Abstract, Fourth Biennial Zoos and Aquariums. *Committing to Conservation Conference, Cocoa Beach, Florida 28 November - 2 December 2001*.
- Amir, O.A., Berggren, P., Jiddawi, N.S. 2002. The incidental catch of dolphins in gillnet fisheries in Zanzibar, Tanzania. Western Indian Ocean. *Journal of Marine Science* 1: 155-162.
- Anderson, R.C. 2014. Cetaceans and Tuna Fisheries in the Western and Central Indian Ocean. NLF Technical Report 2, International Pole and Line Foundation, London. 133p.
- Andrews, K.R., Karczmarski, L., Au, W.W.L., Rickards, S., Vanderlip, C.A., Bowen, B.W., Grau, E.G., and Toonen, R.J. 2010. Rolling stones and stable homes: Social structure, habitat diversity and population genetics of the Hawaiian spinner dolphin. *Molecular Ecology* 19: 732-748.
- Archer, F., Gerrodette, T., Dizon, A., Abella, K. and Southern, S. 2001. Unobserved kill of nursing dolphin calves in a tuna purse-seine fishery. *Marine Mammal Science* 17(3): 540-554.
- Ballance, L.T., Anderson, R.C., Pitman, R.L., Stafford, K., Shaan, A., Waheed, Z. and Brownell Jr, R.L. 2001. Cetacean sightings around the Republic of the Maldives, April 2001. *Journal of Cetacean Research and Management* 3(2): 213-218.
- Ballance, L. T. and Pitman, R. L. 1998. Cetaceans of the western tropical Indian Ocean: distribution, relative abundance, and comparisons with cetacean communities of two other tropical ecosystems. *Marine Mammal Science* 14: 429-459.
- Bayliff, W. H. 2001. Organization, functions, and achievements of the Inter-American Tropical Tuna Commission. Inter-American Tropical Tuna Commission.
- Braulik, G.T., Kasuga, M., Wittich, A., Kiszka, J.J., MacCaulay, J., Gillespie, D., Gordon, J., Said, S.S. and Hammond, P.S. 2018. Cetacean rapid assessment: An approach to fill knowledge gaps and target conservation across large data deficient areas. *Aquatic Conservation: Marine and Freshwater Ecosystems* 28(1): 216-230.
- Cadenat J. 1959. Rapport sur les petits Cétacés Ouest-Africains. Résultats des recherches entreprises sur ces animaux jusqu'au mois de mars 1959. *Bulletin de l'Institut Français d'Afrique Noire* 21A: 1367-1409.
- Carretta, J.V., Forney, K.A., Oleson, E.M., Weller, D.W., Lang, A.R., Baker, J., Muto, M.M., Hanson B., Orr, A.J., Huber, H., Lowry, M.S., Barlow, J., Moore, J.E., Lynch, D., Carswell, L. and Brownell, R.L. Jr. 2017. U.S. Pacific Marine Mammal Stock Assessments: 2016. National Oceanic and Atmospheric Administration Technical Memorandum NMFS-SWFSC-577.
- Cerchio, S., Gruden, P., Andrianarivelo, N., and Strindberg, S. 2011. Assessment of cetacean diversity, distribution, and population status on the West Coast of Madagascar and Mozambique Channel. Final Report to the Kate Sanderson Bequest to the International Union for Conservation of Nature, Species Survival Commission, Gland, Switzerland.
- Cockcroft, V. G. 1990. Dolphin catches in the Natal shark nets, 1980-1988. *South African Journal of Wildlife Research* 20: 44-51.
- Costa, M. 2015. Abundance and distribution of delphinids in the Red Sea (Egypt). PhD Thesis, University of St. Andrews, UK.
- Davis, R. W., Fargion, G. S., May, N., Leming, T. D., Baumgartner, M., Evans, W. E., Hansen, L. J. and Mullin, K. 1998. Physical habitat of cetaceans along the continental slope in the north-central and

- western Gulf of Mexico. *Marine Mammal Science* 14(3): 490-507.
- Dolar, M. L. L. 1994. Incidental takes of small cetaceans in fisheries in Palawan, Central Visayas and northern Mindanao in the Philippines. *Reports of the International Whaling Commission Special Issue* 15: 355-363.
- Dolar, M. L. L., Leatherwood, S., Wood, C. J., Alava, M. N. R., Hill, C. L. and Arangones, L. V. 1994. Directed fisheries for cetaceans in the Philippines. *Reports of the International Whaling Commission* 44: 439-449.
- Dolar, M. L. L., Perrin, W. F., Taylor, B. L., Kooyman, G. L. and Alava, M. N. R. 2006. Abundance and distributional ecology of cetaceans in the central Philippines. *Journal of Cetacean Research and Management* 8(1): 93-112.
- Dolar, M. L. L., Perrin, W. F., Yaptinchay, A. A. S. P., Jaaman, S. A. B. H. J., Santos, M. D., Alava, M. N. and Suliansa, M. S. B. 1997. Preliminary investigation of marine mammal distribution, abundance, and interactions with humans in the southern Sulu Sea. *Asian Marine Biology* 14: 61-81.
- Dolar, M. L. L., Walker, W. A., Kooyman, G. L. and Perrin, W. F. 2003. Comparative feeding ecology of spinner dolphins (*Stenella longirostris*) and Fraser's dolphins (*Lagenodelphis hosei*) in the Sulu Sea. *Marine Mammal Science* 19(1): 1-19.
- Donahue, M. A. and Edwards, E. F. 1996. An annotated bibliography of available literature regarding cetacean interactions with tuna purse seine fisheries outside of the eastern tropical Pacific. *Southwest Fisheries Science Center Administrative Report* 96-20: 46 pp.
- Gannier, A. and Petiau, E. 2011. Environmental Variables Affecting the Residence of Spinner Dolphins (*Stenella longirostris*) in a Bay of Tahiti (French Polynesia). *Aquatic Mammals* 32(2): 202-211.
- Gerrodette, T. 2018. The tuna-dolphin issue. In: B. Würsig, J.G.M. Thewissen and K.M. Kovacs (eds), *Encyclopedia of Marine Mammals Third Edition*, pp. 128-130. Academic Press, San Diego, CA.
- Gerrodette, T. and Forcada, J. 2005. Non-recovery of two spotted and spinner dolphin populations in the eastern tropical Pacific Ocean. *Marine Ecology Progress Series* 291: 1-21.
- Gerrodette, T., Watters, G. and Forcada, J. 2005. Preliminary estimates of 2003 dolphin abundance in the eastern tropical Pacific. SWFSC.
- Gore, M.A., Kiani, M.S., Ahmad, E., Hussain, B., Ormond, R.F., Siddiqui, J., Waqas, U., Culloch, R. 2012. Occurrence of whales and dolphins in Pakistan with reference to fishers' knowledge and impacts. *Journal of Cetacean Research and Management* 12: 235-247.
- Gosliner, M.L. 1999. The tuna-dolphin controversy. In: J.R. Twiss, Jr. and R.R. Reeves (eds), *Conservation and Management of Marine Mammals*, pp. 120-155. Smithsonian Institution Press, Washington, D.C.
- Inter-American Tropical Tuna Commission. 2006. 2004 Annual Report.: 96.
- IUCN. 2018. The IUCN Red List of Threatened Species. Version 2018-2. Available at: www.iucnredlist.org. (Accessed: 15 November 2018).
- Jefferson, T. A., Curry, B. E., Leatherwood, S., Powell, J. A. 1997. Dolphins and porpoises of West Africa: a review of records (Cetacea: Delphinidae, Phocoenidae). *Mammalia* 61: 87-108.
- Kahn, B. 2004. Indonesia Oceanic Cetacean Program activity report: October-December 2003. Apex Environmental report to The Nature Conservancy SE Asia Center for Marine Protected Areas.
- Kiszka, J., 2012. Bycatch assessment of vulnerable megafauna in coastal artisanal fisheries in the

southwest Indian Ocean. *Final Report to South West Indian Ocean Fisheries Project (SWIOFP)*.

Kiszka, J., Muir, C., Poonian, C., Cox, T. M., Amir, O. A., Bourjea, J., Razafindrakoto, Y., Wambiji, N. and Bristol, N. 2008. Marine mammal bycatch in the Southwest Indian Ocean: review and need for a comprehensive status assessment. *Western Indian Ocean Journal of Marine Science* 7(2): 119-136.

Kumarran, R.P. 2012. Cetaceans and cetacean research in India. *Journal of Cetacean Research and Management* 12: 159-172.

Leatherwood, S. and Reeves, R.R. 1989. Marine mammal research and conservation in Sri Lanka 1985-1986. UNEP Marine Mammal Technical Report. United Nations Environment Programme, Nairobi, Kenya.

Leduc, R. G., Perrin, W. F. and Dizon, A. E. 1999. Phylogenetic relationships among the delphinid cetaceans based on full cytochrome b sequences. *Marine Mammal Science* 15: 619-648.

Mohan, L.R.S. 1994. Review of gillnet fisheries and cetacean bycatches in the northeastern Indian Ocean. In: W. F. Perrin, G. P. Donovan and J. Barlow (eds), *Gillnets and Cetaceans: incorporating the proceedings of the symposium and workshop on the mortality of cetaceans in passive fishing nets and traps*, pp. 329-343. International Whaling Commission, Cambridge, UK.

Notarbartolo-di-Sciara, G., Hanafy, M., Fouda, M., Afifi, A., and Costa, M. 2009. Spinner dolphin (*Stenella longirostris*) resting habitat in Samadai Reef (Egypt, Red Sea) protected through tourism management. *Journal of the Marine Biological Association of the United Kingdom* 89(1): 211-216.

Notarbartolo di Sciara, G., Kerem, D., Smeenk, C., Rudolph, P., Cesario, A., Costa, M., Elasar, M., Feingold, D., Fumagalli, M., Goffman, O., Hadar, N., Mebrathu, Y.T. and Scheinin, A. 2017. Cetaceans of the Red Sea. Convention on Migratory Species Technical Series 33. Convention on Migratory Species, Bonn.

Oremus, M., Leqata, J., and Baker, C.S. 2015. Resumption of traditional drive hunting of dolphins in the Solomon Islands. *Royal Society Open Science*: doi:10.1098/rsos.140524.

Oremus, M., Poole, M., Steel, D., and Baker, C. 2007. Isolation and interchange among insular spinner dolphin communities in the South Pacific revealed by individual identification and genetic diversity. *Marine Ecology Progress Series* 336: 275-289.

Perrin, W. F. 1990. Subspecies of *Stenella longirostris* (Mammalia: Cetacea: Delphinidae). *Proceedings of the Biological Society of Washington* 103: 453-463.

Perrin, W. F. 2018. Spinner dolphin *Stenella longirostris*. In: B. Wursig, J.G.M. Thewissen and K.M. Kovacs (eds), *Encyclopedia of Marine Mammals Third Edition*, pp. 925-928. Academic Press.

Perrin, W. F. and Gilpatrick, J. W. 1994. Spinner dolphin *Stenella longirostris* (Gray, 1828). In: S. H. Ridgway and R. Harrison (eds), *Handbook of marine mammals, Volume 5: The first book of dolphins*, pp. 99-128. Academic Press.

Perrin, W. F., Dolar, M. L. L. and Robineau, D. 1999. Spinner dolphins (*Stenella longirostris*) of the western Pacific and southeast Asia: pelagic and shallow-water forms. *Marine Mammal Science* 15(4): 1029-1053.

Perrin, W.F., Rosel, P. and Cipriano, F. 2013. How to contend with paraphyly in the taxonomy of the delphinine cetaceans? *Marine Mammal Science* 29: 567-588.

Perrin, W. F., Warner, R. R., Fiscus, C. H. and Holts, D. B. 1973. Stomach contents of porpoise, *Stenella* spp., and yellowfin tuna, *Thunnus albacares*, in mixed-species aggregations. *Fishery Bulletin* 71: 1077-1092.

Razafindrakoto, Y., Andrianarivelo, N. and Rosenbaum, H. C. 2004. Sightings, catches, and other records of Indo-Pacific humpback dolphins in the coastal waters of Madagascar. *Aquatic Mammals* 30(1): 103-110.

Reilly, S. B., Donaghue, M. A., Gerrodette, T., Wade, P., Balance, L., Fiedler, P., Dizon, A., Perryman, W., Archer, F. A. and Edwards, E. F. 2005. Report of the scientific research program under the International Dolphin Conservation Program Act. NOAA Technical Memorandum.

Rice, D.W. 1998. *Marine Mammals of the World: Systematics and Distribution*. Society for Marine Mammalogy, Special Publication Number 4, Lawrence, Kansas.

Robards, M.D. and Reeves R.R. 2011. The global extent and character of marine mammal consumption by humans: 1970–2009. *Biological Conservation* 144: 2770–2786.

Siciliano, S. 1994. Review of small cetaceans and fishery interactions in coastal waters of Brazil. *Reports of the International Whaling Commission Special Issue* 15: 241-250.

Tyne, J.A., Johnston, D.W., Christiansen, F., Bejder, L. 2017. Temporally and spatially partitioned behaviours of spinner dolphins: implications for resilience to human disturbance. *Royal Society Open Science* 4: 160626.

Tyne, J.A., Johnston, D.W., Rankin, R., Loneragan, N.R., and Bejder, L. 2015b. The importance of spinner dolphin (*Stenella longirostris*) resting habitat: Implications for management. *Journal of Applied Ecology* 52: 621-630.

Tyne, J.A., Pollock, K.H., Johnston, D.W., and Bejder, L. 2015a. Abundance and survival rates of the Hawai'i Island associated spinner dolphin (*Stenella longirostris*) stock. *PLoS One* 9(1): 1-10.

Van Waerebeek, K., Gallagher, M., Baldwin, R., Papastavrou, V. and Al-Lawati-Samira, M. 1999. Morphology and distribution of the spinner dolphin, *Stenella longirostris*, rough-toothed dolphin, *Steno bredanensis*, and melon-headed whale, *Peponocephala electra*, from waters off the Sultanate of Oman. *Journal of Cetacean Research and Management* 1(2): 167-177.

Vidal, O., Van Waerebeek, K. and Findley, L.T. 1994. Cetaceans and gillnet fisheries in Mexico, Central America and the wider Caribbean: a preliminary review. *Report of the International Whaling Commission (Special Issue)* 15: 221–233.

Wade, P.R., Watters, G.M., Gerrodette, T. and Reilly, S.B. 2007. Depletion of spotted and spinner dolphins in the eastern tropical Pacific: modeling hypotheses for their lack of recovery. *Marine Ecology Progress Series* 343: 1-14.

Waring, G.T., Josephson, E., Maze-Foley, K. and Rosel, P.E. 2013. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments–2012. NOAA Technical Memorandum NMFS-NE-223. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Northeast Fisheries Science Center.

Webster, I., Cockcroft, V., and Cadinouche, A. 2015. Spinner dolphins *Stenella longirostris* off south-west Mauritius: abundance and residency. *African Journal of Marine Science* 37(1): 115-124.

Weir, C.R. 2010. A review of cetacean occurrence in West African waters from the Gulf of Guinea to Angola. *Mammal Review* 40(1): 2–39.

Zerbini, A. N. and Kotas, J. E. 1998. A note on cetacean bycatch in pelagic driftnetting off southern Brazil. *Reports of the International Whaling Commission* 48: 519-524.

Citation

Braulik, G. & Reeves, R. 2018. *Stenella longirostris*. The IUCN Red List of Threatened Species 2018: e.T20733A50375784. <http://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T20733A50375784.en>

Disclaimer

To make use of this information, please check the [Terms of Use](#).

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 Importance?
9. Marine Neritic -> 9.1. Marine Neritic - Pelagic	Resident	Suitable	Yes
10. Marine Oceanic -> 10.1. Marine Oceanic - Epipelagic (0-200m)	Resident	Suitable	Yes
10. Marine Oceanic -> 10.2. Marine Oceanic - Mesopelagic (200-1000m)	Resident	Suitable	Yes
10. Marine Oceanic -> 10.3. Marine Oceanic - Bathypelagic (1000-4000m)	Resident	Suitable	Yes

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) [harvest]	Ongoing	-	Unknown	-
	Stresses:	2. Species Stresses -> 2.1. Species mortality		
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.3. Unintentional effects: (subsistence/small scale) [harvest]	Ongoing	-	Unknown	-
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.4. Unintentional effects: (large scale) [harvest]	Ongoing	-	Unknown	-
	Stresses:	2. Species Stresses -> 2.1. Species mortality		
6. Human intrusions & disturbance -> 6.1. Recreational activities	Ongoing	-	Causing/could cause fluctuations	-
	Stresses:	2. Species Stresses -> 2.2. Species disturbance		

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 -> 1.1. Taxonomy

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

1. Research -> 1.5. Threats

2. Conservation Planning -> 2.3. Harvest & Trade Management Plan
--

3. Monitoring -> 3.1. Population trends

3. Monitoring -> 3.2. Harvest level trends
--

Additional Data Fields

Population

Population severely fragmented: No

The IUCN Red List Partnership



The IUCN Red List of Threatened Species™ is produced and managed by the [IUCN Global Species Programme](#), the [IUCN Species Survival Commission \(SSC\)](#) and [The IUCN Red List Partnership](#).

The IUCN Red List Partners are: [Arizona State University](#); [BirdLife International](#); [Botanic Gardens Conservation International](#); [Conservation International](#); [NatureServe](#); [Royal Botanic Gardens, Kew](#); [Sapienza University of Rome](#); [Texas A&M University](#); and [Zoological Society of London](#).