

## Study on Diversity and Abundance of Cetaceans off Mirissa, Southern Coast of Sri Lanka

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Sri Lanka is rich with marine cetaceans (whales, dolphins and porpoises) and mainly whale watching industry has immensely developed in Mirissa, Southern coast of Sri Lanka. But up to date surveys on cetacean populations in Southern marine water is in unsatisfactory level. Hence, a shipboard survey to identify their diversity and abundance was conducted in Southern marine water off Mirissa for 48 days during August - December 2018. 5 baleen whales (suborder *Mysticeti*) and 8 toothed whales (suborder *Odontoceti*) were recorded during the survey period (13 total species). Blue whale (*Balaenoptera musculus*) was the most common type of baleen whale with 443 sightings in 80°10' - 80°46' E, 05°55' - 05°17' N and 1 - 3 range was their pod size. In addition to that, 60, 4 and 3 sightings of Bryde's Whales (*Balaenoptera edeni*), Fin whales (*Balaenoptera physalus*) and Ormura Whales (*Balaenoptera omurai*) were recorded respectively. Spinner Dolphin (*Stenella longirostris*) was the highest abundant toothed whale type with 2765 sightings. In addition to that, 571 of Bottlenose Dolphin (*Tursiops truncatus*), 125 of Stripped Dolphin (*Stenella coeruleoalba*), 75 of False Killer Whale (*Pseudorca crassidens*), 54 of Rissos Dolphin, (*Grampus griseus*), 30 of Pilot whale (*Globicephala macrorhynchus*), 7 of Killer Whale (*Orcinus orca*), 6 of Sperm whale (*Physeter macrocephalus*) and 3 of Humpback Whale (*Megaptera novaeangliae*) were sighted. As per whale watcher's data, Humpback Whales were recorded in Southern coast after 2015. Since the whale watching industry in Southern coast is mainly rely on Blue whale population, they are highly vulnerable group from whale watching, shipping and fishing activities. Results provide important information on the conservation status of cetaceans. Therefore, a powerful management measure is highly needed for the conservation of cetacean populations and the sustainability of whale watching industry.

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