

Area Size

6,359 km²

Qualifying Species and Criteria

Southern right whale – *Eubalaena australis* Criteria B2, C1

Marine Mammal Diversity

Sousa plumbea, Tursiops truncatus

Summary

The Cape Coastal Waters IMMA serves as one of the world's three most important calving and nursery grounds for southern right whales (Eubalaena australis). Decades of aerial surveys reveal that the species is present between June and November each year, and that densities of cow-calf pairs are highest in the nearshore waters between Cape Agulhas and the eastern extent of St. Sebastian Bay, while unaccompanied adults are most common between Walker Bay and False Bay. Most mother-calf pairs are encountered within about 1 km from the shore, with an apparent preference for sheltered, shallow, waters of sedimentary substrate that are protected from open-ocean swell and seasonal winds. Numbers of cow-calf pairs dropped markedly between 2015 and 2017 but appeared to increase again to expected levels in 2018.

Cape Coastal Waters IMMA

Description

Southern right whales (*Eubalaena australis*, Fig. 1) migrate to the nearshore waters along the South African Cape coast (18°30'E to 25°00'E) between June and December each year to give birth and nurse their young (Best 2000). The area is one of three identified major calving and nursery grounds of the species in the Southern Hemisphere, along with Peninsula Valdez, Argentina and the coast of southern West Australia extending to the western part of South Australia (IWC 2001). Patenaude et al. (2007) reported significant overall differentiation among four calving grounds (the above three and the New Zealand sub-Antarctic) at both haplotype and nucleotype levels, attributing these differences to severe historic whaling pressure.

Criterion B: Distribution and Abundance Sub-Criterion B2: Aggregations

Annual aggregations of cow-calf pairs and unaccompanied adult southern right whales occur in the extreme nearshore waters of the southern Cape coast of South Africa between June and November each year. Aerial surveys (mid-October) have been conducted along this coast (Muizenberg to Natures Valley or Woody Cape) annually since 1969 with surveys since 1979 aimed at photo-identification of encountered cow–calf pairs (1969 – 1987: fixed-wing surveys; 1979 onwards – helicopter surveys) and the population has been estimated to be increasing at a rate of about 7% a year since 1969 (Best, 1990a; Best et al., 2001). However, densities of unaccompanied adults have declined markedly since 2009 (to approximately 10% of pre-2009 levels), and while densities of cow-calf pairs declined markedly in the 2015 to 2017 period (Findlay et al., 2017, Vermeulen et al., 2018), these increased to expected levels in 2018 (Vermeulen et al., 2019). No movements have been recorded between the South African and the Argentine calving grounds, but movements have been recorded through photo-identification between South Africa and the Tristan da Cunha/ Gough Island complex (Best et al., 1993) and between the South



Figure 1: Breaching southern right whale (*Eubalaena australis).* Photo: Vic Cockcroft

African Cape coast and Namibian waters (Roux et al., 2015). The South African population (along with animals on Namibian and Mozambique grounds) was almost extirpated due to (predominantly open-boat) whaling pressure between about 1778 and 1940 (Best and Ross 1986; Richards and Du Pasquier, 1989).

Criterion C: Key Life Cycle Activities Sub-Criterion C1: Reproductive Areas

The IMMA is one of three identified major calving and nursery grounds of right whales in the Southern Hemisphere, along with Peninsula Valdez, Argentina and the southern West Australia/western South Australia coasts (IWC 2001). Although mating, calving, and nursing behaviours have been suggested for these migrations, the recent paucity of unaccompanied adult animal sightings on the coast in 2017 and the high cow-calf numbers in 2018 suggests mating may be occurring elsewhere. Births generally occur between mid-June and mid-October, with a peak in August (Best 1994). Within the distribution, right whales appear to preferentially occupy certain coastal areas, with a general westward movement along the coast as the breeding season progresses. Right whale cows show a high degree of philopatry (to the coast of their birth) and a lesser degree of fidelity to a particular nursery area on the coast (Elwen and Best, 2004). Highest densities of cow-calf pairs are recorded between Cape Agulhas and the Duivenhoks River Mouth (Struisbaai, De Hoop, St Sebastian Bay), while unaccompanied adult densities peak in Walker and False Bays to the west of the

survey area (Best 2000). Recently densities of right whales in the eastern extent of the IMMA (Plettenberg Bay to Algoa Bay) have declined. Most cow and calf pairs are encountered within about 0.9 km from the coast (Best 1990), with unaccompanied adults found slightly further offshore, but within 3 km from the coast (Fig. 2). Elwen and Best (2004) suggests this distributional preference is for sheltered, shallow, low-relief waters of sedimentary substrate that are protected from open-ocean swell and seasonal winds.

Supporting Information

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Figure 2: A southern right whale (*Eubalaena australis*) surfaces near the shore within the Cape Coastal Waters IMMA. Photo: Vic Cockcroft

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