



FACT SHEET

SARDINE

Sardinops sagax

Family: Clupeidae

Other common names: Pilchard, Sardyn

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| Description | Body fusiform and slightly rounded in cross-section. Pelvic fins under the dorsal fin in the middle of the body. Belly rounded with feeble scutes, several radiating ridges on the lower part of the gill cover. Body silvery with a bluish-green sheen dorsally and with a distinctive row of black spots along the flanks. |
| Distribution | Subtropical and warm temperate waters of the Southern Hemisphere and North Pacific. The southern African stock is separated into two populations, one between Angola and Luderitz and the other between the Orange River and Maputo. The latter is further divided into western, southern and eastern sub-populations or stocks that have variable levels of mixing. |
| Habitat | A pelagic, shoaling species that inhabits shelf waters to depths of 200m. Large shoals, sometimes kilometres in extent, are often found in surface waters. |
| Feeding | Diet includes phytoplankton (dinoflagellates and diatoms) and small zooplankton such as copepods and fish eggs (principally anchovy). These are filtered from the water using well developed gill rakers although fish can also selectively feed on larger prey. Sardines themselves provide an extremely important food source for predatory fish, seabirds and marine mammals. |
| Movement | Each stock off South Africa has a different life cycle. The western stock spawns offshore between Cape Agulhas and Cape Columbine in spring to summer; eggs are transported northwards; and juveniles congregate inshore off the west coast before moving southwards. The southern stock spawns offshore between Cape Agulhas and Algoa Bay between autumn and spring; eggs are retained on the south coast; and juveniles congregate in bays. Adults of the eastern stock migrate annually northwards up the east coast during winter in what is called the “Sardine Run”, and spawn inshore there until spring; eggs and larvae are retained inshore; and juveniles move back down the coast in summer when KwaZulu-Natal waters become too warm for them to tolerate. |
| Reproduction | Length at 50% maturity occurs between 20 and 22 cm total length, at an age of 2-3 years. |

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| Age and growth | <p>Fish can reach a maximum size of 30 cm total length and have been aged up to a maximum of 8 years in South African waters. Because of their rapid growth rate and relatively short life span, they exhibit strong population responses to environmental variability, which results in large fluctuations in abundance over space and time.</p> |
| Current status | <p>The South African sardine stock crashed in the early-1960s followed by a crash in the Namibian stock in the late-1960s. Under a conservative management strategy, catches of South African sardine gradually increased in the 1990s to a peak in the early 2000s. However, successive years of low recruitment since 2005 have resulted in greatly reduced biomass and very low catches. Environmental variables such as harmful algal blooms may be hampering the recovery of the sardine population. The South Africa sardine is currently considered to be depleted although they have been evaluated as Least Concern on the IUCN Red List (2018). South African Sustainable Seafood Initiative (SASSI) List: Orange</p> |
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| Capture | <p>Sardines (and anchovies) comprise the main catch of the South African pelagic purse-seine fishery. Good sardine catches during the early 2000s (average annual catch of 232 000 tons for the period 2000-2007) declined following the population decline and the sardine directed catch was limited to <100 000 tons per annum and the annual sardine bycatch (juvenile sardine caught with anchovies) fluctuated around 20 000 tons between 2008 and 2015. However, in 2016, sardine biomass dropped below critical levels triggering a rapid reduction in the Total Allowable Catch (to 12 000 tons in 2019) to help the resource to recover. Most of the sardines landed are canned for human and pet consumption and a small proportion is packed for bait. Sardine is the most used bait by recreational anglers in South Africa and up to 600 tons are netted each year in beach-seine nets along the KwaZulu-Natal coast during the annual sardine run.</p> |
| Current recreational fishing regulations | <p>Daily bag limit: None Minimum size limit: None Closed Season: None Other regulations: Unlimited baitfish species. Marine protected areas (MPAs): Due to its pelagic and migratory nature, it is unlikely that this species benefits directly from protection within no-take MPAs. However, the offshore no-take areas on the Agulhas Bank may provide some protection to spawning adults.</p> |
| Reference | <p>Information from the ORI Fish App. www.saambr.org.za</p> |