

Species Profile / Life History Characteristics

Name (S T E)	Sinna kalai Velai nandu Blue swimming crab	
Species	<i>Portunus pelagicus complex</i> <i>P. reticulatus</i> (Lai et al 2010)	
Family	Portunidea	
Life History Characteristics		
Age (Amax)	48 months	Dineshababu et., al. 2008
Age at first maturity (Am)	6 months	Dineshababu et., al. 2008
Length (Lmax)	F = 205 mm	Gulf of Mannar fishery 2019
Asymptotic Length (Linf)	M/F = 190 mm F = 187 mm	Sukumaran & Neelakantan 1996 Prince et al 2022
Weight (Wmax)	M = 573 g F = 452 g	Gulf of Mannar Fishery? 2017? Gulf of Mannar Fishery? 2017?
Asymptotic Weight (Winf)	550 g	Sukumaran & Neelakantan 1996
Mortality / Growth Ratio (M/K)	F= 1.37	Prince et al 2022
Minimum Length Maturity	F = 33 mm	Kamrani et., al. 2010
Av. Length 1 st Maturity (Lm)	F =	
Av. Length 50% Maturity (Lm50)	F = 104 mm	Prince et al 2022
Av. Length 95% ^t Maturity (Lm95)	F = 121 mm	Prince et al 2022
Reproduction		
Sexual Dimorphism (YES NO)	YES. M = blue, wider bodied, larger claws, heavier; F = brown, deeper bodied, smaller claws, lighter	
Reproductive Strategy (Broadcast spawner/planktonic; brooder/planktonic; brooder/demersal; egg laying planktonic)	Brooder/planktonic/serial spawner. Females mate with males after moulting, then migrate to deeper waters to spawn several batches of eggs (> 100,000 per batch) (Anand & Soundarapandian 2011)	
Ecology		
Mobility (Mobile Sedentary Sessile)	Highly mobile: BSC are active swimmers occupying the lower part of a shallow (< 10 m) water column, except during the spawning season when females move to the surface to spawn.	
Habitat Constraints (YES NO)	NO: BSC are common over sandy / muddy substrate up to a depth of 10 m (REFERENCE).	
Trophic Level	3.0	Zuchira, Unpub
Prey Constraints (YES NO)	NO: BSC eat small shrimps and other crabs (including other BSC), finfish, cuttlefish, shellfish, squid and worms, as well as seaweed and dead and decaying matter (Menon, 1952).	
Predator Threats (YES NO)	NO: A variety of pelagic and benthic fish species including jacks and bream are known to prey on BSC populations (Zuchira, Unpub.).	
Resilience to fishing (High Moderate Low)		
High: BSC are characterized by predominantly high productivity / low risk attributes including average age at maturity (< 5 yrs), average maximum age (< 10 yrs.), a high ratio of mortality to growth (M/K = 1.37), fecundity (> 20,000 eggs per year) / diet, predation, habitat dependency and mobility. These attributes combined, ensure that populations of BSC are likely to be highly resilient to fishing mortality; able to recover quickly from being overfished / subject to overfishing, if appropriate management measures are enforced.		

References

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