Species: Red Drum Sciaenops ocellatus

Life stage	Eco-region	Habitat Zone	Habitat Type	Season	Temp (°C)	Depth (m)	Prey	Predators	Mortality	Growth
eggs ₅ , 6, 7, 10, 14, 16, 17, 18, 19, 20	ER-1, ER-2, ER-3, ER-4, ER-5		WCA	summer, fall	20-30	20-30			high early in spawning	
larvae ₅ , ₇ , ₁₀ , ₁₇ , ₁₈ , ₁₉ , ₂₀	ER-1, ER-2, ER-3, ER-4, ER-5	estuarine	SAV, soft bottom, WCA	late summer, fall	18.3-31		copepods	larger piscivorous fish	Higher at 20- 24°C than 25- 30°C	0.5 mm/day. Faster at 25- 30°C. 3-6 mm at 2 weeks. peak settlement from 6-8 mm TL
postlarvae ₁₇ ,	ER-1, ER-2, ER-3, ER-4, ER-5	estuarine	SAV, emergent marsh, soft bottom, sand/shell	late summer, fall	18.3-31.0		copepods	larger piscivorous fish		Increased with increasing salinity (up to 30 ppt)
early juveniles ₃ , ₅ , ₇ , 9, 16, 17, 18, 19, 20, 21, 22, 25	ER-1, ER-2, ER-3, ER-4, ER-5	estuarine, nearshore	SAV, soft bottom, emergent marsh	Sep-Dec	> 5-32.2	0-3	copepods, mysids, amphipods, shrimp, polychaetes, insects, fish, isopods, bivalves, decapod crabs	larger piscivorous fish	rapid decline in water temp. can cause mortality	higher in backwater than seagrass beds. 15-20 mm/month
late juveniles ₁ , 3, 4, 5, 7, 11, 12, 15, 16, 17, 18, 19, 21	ER-1, ER-2, ER-3, ER-4, ER-5	estuarine, nearshore	SAV, soft bottom, hard bottom, sand/shell	fall	> 5-30	0-5	mysids, amphipods, shrimp, polychaetes, insects, crabs, fish	amberjack, sharks, larger piscivorous fish	changes in environment, disease, parasites, rapid decline in water temp.	15-20 mm/month

adults ₄ , ₇ , ₉ , ₁₂ , ₁₅ , ₁₆ , ₁₇ , ₂₀ , ₂₃ , ₂₆ , ₂₇	ER-1, ER-2, ER-3, ER-4, ER-5	estuarine, nearshore, offshore	SAV, emergent marsh, soft bottom, hard bottom, sand/shell, WCA		2-33	1-70	crabs, shrimp, fish	sharks	M (age- constant) = 0.07-0.13	$L_{inf} = 881 \text{ mm}$ $FL, k = 0.32, t_0$ $= -1.29, \text{ max.}$ $age = 42 \text{ yrs}$
spawning adults ₁ , ₂ , ₃ , ₇ , ₉ , ₁₀ , ₁₄ , ₁₅ , ₁₆ , ₁₇ , ₂₀	ER-1, ER-2, ER-3, ER-4, ER-5	offshore	SAV, soft bottom, hard bottom, sand/shell	mid Aug - Oct	20-30	40-70		sharks		L ₅₀ (male) = 529 mm FL, L ₅₀ (female) = 825- 900 mm FL

Notes: eggs: salinity = $10-40 \text{ ppt}_5, 7, 16, 17, 18$

larvae, post-larvae: salinity = 8-36.4 ppt $_5$, $_7$, $_{17}$, $_{18}$, $_{19}$

early juveniles: salinity = 0-45; primarily 20-40 ppt₇, ₁₈, ₁₉

 $DO > 0.6 \text{ ppm}_{17}$

late juveniles: salinity = 0-45; primarily 20-40 ppt₇, $_{18, 19}$

 $DO = 5.2-8.4 \text{ ppm}_{18}$

adults: salinity = 0-45 ppt; primarily 20-40 ppt₇, $_{17}$ spawning adults: mean batch fecundity = 1.54 million ova₂₄

salinity = 25-34 ppt₇, $_{16}$, $_{17}$

Bold and italicized font indicates proxy data