Lane Snapper (Lutjanus synagris) life history for the Gulf of Mexico. Associations and interactions with environmental and habitat variables are listed with citations as footnotes.

Life stage	Eco-region	Habitat Zone	Habitat Type	Season	Temp (°C)	Depth (m)	Prey	Predators	Mortality	Growth
eggs[3, 9]	ER-1, ER-2, ER-3, ER-4, ER-5	offshore	WCA	Mar-Sep, peak: Jul-Aug		***4-132***				
larvae[2, 10, 11]	ER-1, ER-2, ER-3, ER-4, ER-5	*estuarine, nearshore, offshore*	*WCA*	*Jun-Aug*	28 (in lab); *28.4-30.4*	*0-50*	plankton and rotifers (in lab)		death by day 10 at 25°C in lab; * Z = -0.429± 0.053(SE), subject to size-selective mortality*	*SL-age curve = 0.032, K = 0.047 ± 0.008 (SE; W. Straits of FL), K = 0.042 ± 0.008 (SE; E. Straits of FL), PLD = 25.6 d*
postlarvae[10, 11]	ER-1, ER-2, ER-3, ER-4, ER-5	*estuarine, nearshore, offshore*	*WCA*, SAV	*Jun-Aug*	*28.4-30.4*	*0-50*			death by day 10 at 25°C in lab; * Z = -0.429± 0.053(SE), subject to size-selective mortality*	*SL-age curve = 0.032, K = 0.047 ± 0.008 (SE; W. Straits of FL), K = 0.042 ± 0.008 (SE; E. Straits of FL), PLD = 25.6 d*

early juveniles[5, 8, 11, 13, 14]	ER-1, ER-2, ER-3, ER-4, ER-5	estuarine, nearshore, offshore	SAV, sand/shell, reefs, soft bottom, banks/shoals, *mangrove*	late summer-early fall	28-29.5	0-24	copepods, grass shrimp, small inverts		*subject to growth-selective mortality*, daily Z = 0.097-0.165	settle Jul-Aug, min. settle length = 15.1 mm SL, min. settle age = 25 d, growth rate = 0.9-1.3 mm/d
late juveniles[5, 8, 11, 13, 14]	ER-1, ER-2, ER-3, ER-4, ER-5	estuarine, nearshore, offshore	SAV, reefs, sand/shell, soft bottom, banks/shoals, *mangrove*	late summer-early fall	28-29.5	0-24	copepods, grass shrimp, small inverts		*subject to growth-selective mortality*, daily Z = 0.097-0.165	growth rate = 0.9-1.3 mm/d
adults[1, 6, 9, 15]	ER-1, ER-2, ER-3, ER-4, ER-5	nearshore, offshore	reef, sand/shell, banks/shoals, hard bottom		16-29	4-132	fish, crustaceans, annelids, mollusks, algae		Z = 0.38-0.58; M = 0.11-0.24	max. length = 673 mm TL. Males grow faster, and larger at age than females; L_{inf} = 449 mm FL, k = 0.17, t_0 = -2.59, max. age = 19 yrs

spawning adults[5, 7, 11, 13]	ER-1, ER-2, ER-3, ER-4, ER-5	offshore	*reef, shelf edge/slope*	May-Aug		*30-70m*				*50% maturity = 230 mm (females), 242 mm (males); 100% maturity > 350 mm TL (females), > 377 mm TL (males)*

Notes: Information in asterisks comes from studies conducted outside GMFMC jurisdiction

Bold and italicized font indicates proxy data

Juveniles: salinity = 30-35.5 ppt[13]
can be found at lower salinities < 15 ppt[4]
DO = 4.4-5.7 mg/L[13]

Adults: occupy artificial reef habitat
always found at high (> 30 ppt) salinities[4]

Spawning adults: *fecundity < 104,749 oocytes/female (255 mm TL) and 568,400 oocytes/female (560 mm TL)[12]*