

Red Snapper (*Lutjanus campechanus*) 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 <sub>1, 2, 6, 17, 27</sub>	ER-1, ER-2, ER-3, ER-4, ER-5	offshore	WCA	Apr-Oct		18-126				50% hatch in 20-27 hrs
larvae <sub>5, 13, 20</sub>	ER-1, ER-2, ER-3, ER-4, ER-5	offshore	WCA	Jul-Nov	17.3-29.7	18-126	alga, rotifers (in lab)			PLD = 28 d
postlarvae <sub>5, 17, 20</sub>	ER-1, ER-2, ER-3, ER-4, ER-5	offshore	WCA	Jul-Nov	17.3-29.7	18-126				settle at 16-19 mm TL; PLD = 28d
early juveniles <sub>2, 5, 8, 16, 20, 21, 24</sub>	ER-1, ER-2, ER-3, ER-4, ER-5	nearshore, offshore	reefs, hard bottom, banks/shoals, soft bottom, sand/shell	Jul-Nov	17.3-29.7	17-183	zooplankton, shrimp, chaetognaths, squid, copepods		shrimp trawl bycatch; $M$ (age 0) = 2.0/yr	0.817-1.01 mm/d
late juveniles <sub>2, 3, 8, 10, 12, 16, 17, 20, 21, 24, 26</sub>	ER-1, ER-2, ER-3, ER-4, ER-5	nearshore, offshore	reefs, hard bottom, banks/shoals, soft bottom, sand/shell	year-round	20-28	18-55	fish, squid, crabs, shrimp		shrimp trawl bycatch; $M$ (age 1) = 1.2/yr	0.817-1.01 mm/d
adults <sub>2, 3, 4, 7, 9, 10, 11, 12, 14, 15, 17, 18, 24</sub>	ER-1, ER-2, ER-3, ER-4, ER-5	nearshore, offshore	reefs, hard bottom, banks/shoals	year-round	14-30	7-146	fish, shrimp, squid, octopus, crabs	sharks	enter fishery at age 2; $M$ = 0.094/yr	$L_{inf}$ = 856.4 mm TL, $K$ = 0.19, $t_0$ = -0.39, max. age = 48 yrs
spawning adults <sub>1, 2, 6, 19, 25</sub>	ER-1, ER-2, ER-3, ER-4, ER-5	offshore	sand/shell, banks/shoals	Apr-Oct	16-29	18-126				50% mature (female) at age 3-5, 400-450 mm TL;  100% mature

										(female) at age 8, 700 mm TL
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Notes:

larvae and post-larvae: 32.8-37.5 ppt<sub>5</sub>

juveniles:

salinity = 30-35ppt<sub>21</sub>

DO > 0.4

mg/L<sub>22</sub>

adults:

33-37 ppt<sub>10</sub>

spawning

adults:

batch fecundity = 27-142 egg/g fish weight<sub>24</sub>

***Bold and italicized font indicates proxy data***

red snapper use artificial reefs as juveniles and adults<sub>17</sub>

