Black Grouper (Mycteroperca bonaci) 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>4</sub>	ER-1, ER-2	offshore	WCA			18-28				
larvae <sub>4</sub>	ER-1, ER-2	offshore	WCA			10-150				
post-larvae <sub>4</sub>	ER-1, ER-2	offshore	WCA			10-150				
early juveniles <sub>5</sub> , 11, 12, 13, 17, 18	ER-1, ER-2	estuarine, nearshore	SAV	year- round	31	*1-10*	crustaceans, fish			
late juveniles <sub>1</sub> , <sub>2</sub> , 5, 11, 13, 16, 17, 18	ER-1, ER-2	estuarine, nearshore, offshore	reefs, hard bottom, mangrove	year- round		*1*-19	crustaceans, fish			
adults <sub>1</sub> , <sub>2</sub> , <sub>3</sub> , <sub>5</sub> , <sub>6</sub> , <sub>7</sub> , <sub>9</sub> , <sub>10</sub> , <sub>11</sub> , <sub>13</sub> , <sub>21</sub>	ER-1, ER-2	nearshore, offshore	reefs, hard bottom		16-28	10-150	fish	sharks, larger groupers	overfishing; $M = 0.136$	rapid first 3-4 yrs; L <sub>inf</sub> = 1334 mm TL, k = 0.1432/yr, t <sub>0</sub> = - 0.9028/yr; max. age = 33 yrs
spawning adults <sub>5</sub> , <sub>6</sub> , <sub>8</sub> , 10, 14, 15, 19, 20, 21	ER-1, ER-2	offshore	reefs, hard bottom, *shelf edge/slope*	Feb-Mar	*24- 27*	18-28			spawning aggregations vulnerable to overfishing	*females range from 570-1235 mm, males from 860- 1320 mm; females change sex between 855-1250 mm*

Notes: Information in asterisks comes from studies conducted outside GMFMC jurisdiction Not considered EFH, but late juveniles have been document on artificial reefs<sub>18</sub>

Bold and italicized font indicates proxy data