environmenta	able of King Mackerel, ( <u>Scomberomorus cavalla</u> ) life history for the Gulf of Mexico. Associations and interactions with al and habitat variables are listed with citations.											
							Trophic relationships		Habitat Associations and Interactions			
Life Stage	Season	Location	Temp(°C)	Salinity(ppt)	Oxygen	Depth(m)	Food	Predators	Habitat Selection	Growth	Mortality	Production
Egg	Spring and Summer	Offshore	Hatch in 18- 21h at 27C			Pelagic; over depths of 35-180m						
Citations	4,9,18	17,18	17			17,18						
Larvae	May through October	Middle and outer continental shelf area of abundance north-central and north- western Gulf of Mexico	20-31C	27-37ppt		35-180m; may descend to mid-depths during day	Larval fish, especially carangids, clupeids and engraulids	Source of food for young pelagic fishes such as tunas and dolphin		Enhanced growth in northcentral and northwestern Gulf associated with Mississippi River plume	Vulnerable to predation and starvation	Area of Abundance in northcentral and northwestern Gulf has been associated with the Mississippi River plume
Citations	4,9.18	4,13,18	9,18	9,18		9,18	11	12		8,13	14	13
Early Juveniles	May through October, peaking in July and October	Inshore to middle shelf; area of abundance north- central and northwestern Gulf of Mexico				Often taken by shrimp trawlers in < 9m.	Predominately fish; some squid	Larger pelagic fishes	Inshore waters	Enhanced growth in northcentral and northwestern Gulf associated with Mississippi River plume	Bycatch in shrimp fishery; vulnerable to sport fishery	Area of abundance in northcentral and northwestern Gulf has been associated with the Mississippi River plume
Citations	13	13				5	11,20	12	5	8,13	5	13
Late Juveniles		Inshore and inner shelf; area of abundance off of Louisiana and Mississippi					Predominately fish, especially engraulids and clupeids; also squid	Larger pelagic fishes	While not estuarine- dependent, prey upon estuarine- dependent fishes		Bycatch in shrimp fishery; vulnerable to recreational fishery before reaching maturity	Area of abundance linked to nutrient-rich Mississippi River plume area
Citations		13					20	12	20		1,5,16	13Kimg Mackerel, ( <u>Scomberomorus</u> <u>cavalla</u> ) cont.
							Trophic relationships		Habitat Assocations and Interactions			
Life Stage	Season	Location	Temp(°C)	Salinity(ppt)	Oxvaen	Depth(m)	Food	Predators	Habitat Selection	Growth	Mortality	Production

Adults	Migrate to northern Gulf in spring; return to south Florida in eastern gulf, and to Mexico in western gulf in fall	Coastal and offshore, center of abundance in Florida waters	>20 C; temperature considered the main trigger for seasonal migration	Generally oceanic, 32- 36ppt	To edge of continental shelf (200 m); most commonly found in < 80 m	Fishes, especially clupeids and carangids; also squid and shrimp	Larger fish, such as sharks and tunas; also bottlenose dolphin	Coastal pelagic. Seldom enters estuaries, but feeds upon estuarine- dependent species. Caught from small boats, charter boats, piers, bridges and from the surf	Highest rate of growth occurs in eastern Gulf	Vulnerable to fishing mortality due to school formations. Impacted by the harvest of bait fish prey	Migratory habit enables the utilization of season abundances of bait fishes. Influenced by availablity of estuarine-dependent prey species
Citations	19,22	17,23	16,15	12	15,16	1,6,16,21	12	2,15,16,21	7	3,15,16	15,16
Spawning Adults	May to October	Outer continental shelf; northwestern and northeastern Gulf of Mexico considered important spawning areas	>20 C	Oceanic	35-180 m						
Citations	1,10,18	16,18	16,18	12	5,18						

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