

Variability in the trophic role of coral reef fish larvae in the oceanic plankton

Joel K. Llopiz*, Robert K. Cowen

Division of Marine Biology and Fisheries, Rosenstiel School of Marine and Atmospheric Science, University of Miami,
4600 Rickenbacker Causeway, Miami, Florida 33149, USA

Email: jllopiz@rsmas.miami.edu

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Table A1. Numerical percentages (%N) and percent frequencies of occurrence (%FO) of all prey types of 13 taxa of coral reef fish larvae collected in the Straits of Florida. (–): values of 0%; crust.: crustacean

Prey category	Serranidae												Lutjanidae				Mullidae	
	Serraninae				Epinephelinae				Lutjaninae				Etelinae					
	<i>Serranus</i>	%N	%FO	<i>Centropristes</i>	%N	%FO	(Wint./Spr.)	%N	%FO	(Sum./Fall)	%N	%FO	%N	%FO	%N	%FO	%N	%FO
Radiolarian	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Foraminiferan	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Tintinnid lorica	–	–	–	–	0.3	4.9	–	–	–	–	–	–	–	–	–	0.1	2.0	
Bivalve larva	–	–	0.4	3.8	0.7	4.9	0.3	5.3	0.1	1.2	–	–	–	–	–	–	–	
Thecosomata: <i>Limacina</i>	0.3	1.0	0.8	7.7	7.7	41.5	3.3	15.8	0.3	2.4	–	–	–	–	0.3	3.3		
Thecosomata: Cavolinidae	–	–	0.4	3.8	0.8	14.6	–	–	0.3	1.2	–	–	–	–	–	–	–	
Gastropod: unknown dextral	–	–	0.4	3.8	0.4	4.9	0.9	10.5	–	–	–	–	–	–	–	–	–	
Polychaete trocophore	–	–	–	–	–	–	–	–	0.4	2.4	–	–	–	–	–	–	–	
Cladocera: <i>Evdne</i>	–	–	–	–	–	–	5.7	63.2	0.7	3.6	–	–	–	–	0.4	3.9		
Copepoda																		
Nauplius	5.9	24.5	10.7	50.0	17.3	78.0	9.6	63.2	22.9	75.9	18.0	75.0	29.1	85.5				
Calanoid	83.7	98.0	32.8	76.9	41.8	90.2	37.2	73.7	3.6	20.5	27.5	85.0	32.0	69.1				
Harpacticoid	–	–	2.9	15.4	0.8	14.6	–	–	0.4	3.6	0.4	5.0	–	–				
<i>Oithona</i>	1.4	5.9	1.6	11.5	5.3	51.2	–	–	2.1	16.9	5.3	25.0	4.9	35.5				
<i>Oncaea</i>	1.1	5.9	17.2	61.5	4.0	41.5	0.6	10.5	0.7	4.8	0.4	5.0	0.8	16.4				
<i>Corycaeus</i>	0.1	1.0	3.3	23.1	1.1	19.5	–	–	0.4	3.6	–	–	2.1	17.8				
<i>Farranula</i>	3.8	21.6	12.3	57.7	3.1	43.9	33.6	89.5	5.9	19.3	9.8	45.0	5.7	29.6				
Unknown/remains	0.3	2.0	3.7	23.1	3.0	24.4	0.6	10.5	0.7	4.8	3.7	35.0	1.7	11.2				
Ostracoda	0.3	1.0	9.4	38.5	–	–	–	–	–	–	0.4	5.0	–	–				
Euphausiid calyptope	0.1	1.0	–	–	0.1	2.4	0.6	10.5	–	–	–	–	–	–				
Chaetognatha	–	–	–	–	–	–	–	–	0.7	4.8	0.8	5.0	0.2	4.6				
Appendicularia	–	–	–	–	–	–	–	–	44.4	80.7	14.8	65.0	11.8	60.5				
Egg (small)	–	–	–	–	0.1	2.4	0.9	5.3	1.2	8.4	0.4	5.0	0.4	7.2				
Fish egg	–	–	–	–	–	–	–	–	–	–	–	–	–	1.2	3.9			
Unknown crust. remains	3.0	13.7	3.7	23.1	12.4	70.7	6.6	57.9	7.8	33.7	16.0	70.0	8.1	66.4				
Unknown item/soft remains	–	–	0.4	3.8	1.1	14.6	–	–	7.6	41.0	2.5	30.0	1.0	18.4				

Table A1. (continued)

Prey category	Pomacentridae				Labridae				Scaridae				Acanthuridae	
	<i>Chromis</i>		<i>Stegastes</i>		<i>Halichoeres</i>		<i>Thalassoma</i>		<i>Xyrichtys</i>		<i>Spurisoma</i>		%N	%FO
	%N	%FO	%N	%FO	%N	%FO	%N	%FO	%N	%FO	%N	%FO	%N	%FO
Radiolarian	—	—	—	—	2.1	8.5	0.8	4.0	0.6	1.5	—	—	0.1	0.7
Foraminiferan	—	—	0.2	1.9	—	—	—	—	—	—	—	—	0.1	0.7
Tintinnid lorica	—	—	—	—	—	—	—	—	—	—	—	—	0.9	6.3
Bivalve larva	—	—	0.2	1.9	—	—	—	—	—	—	—	—	1.5	9.2
Thecosomata: <i>Limacina</i>	0.6	2.8	2.8	13.5	0.9	5.6	0.3	2.0	0.8	3.1	—	—	31.9	61.3
Thecosomata: Cavolinidae	—	—	0.2	1.9	0.4	2.8	0.2	0.5	0.2	0.8	—	—	0.9	6.3
Gastropod: unknown dextral	—	—	—	—	0.2	1.4	—	—	—	—	—	—	0.8	7.0
Polychaete trophophore	—	—	—	—	—	—	0.2	1.5	—	—	—	—	2.1	13.4
Cladocera: <i>Evdene</i>	—	—	—	—	—	—	—	—	—	—	—	—	0.1	0.7
Copepoda														
Nauplius	12.0	33.3	5.3	26.9	10.6	47.9	1.9	10.1	5.0	15.3	25.0	28.6	18.9	49.3
Calanoid	43.5	83.3	20.5	50.0	23.1	64.8	1.9	8.6	2.1	7.6	12.5	14.3	2.7	15.5
Harpacticoid	1.8	8.3	1.9	15.4	8.9	28.2	31.2	73.2	28.9	60.3	—	—	—	—
<i>Oithona</i>	6.9	25.0	13.9	53.8	1.1	5.6	0.2	1.0	0.4	1.5	12.5	14.3	0.4	3.5
<i>Oncaeaa</i>	3.9	30.6	22.0	67.3	10.7	50.7	19.2	53.5	30.2	55.0	—	—	2.8	21.1
<i>Corycaeus</i>	1.5	13.9	4.0	25.0	3.0	14.1	4.6	19.7	7.6	19.8	—	—	0.1	0.7
<i>Farranula</i>	18.9	61.1	16.9	73.1	12.0	32.4	35.0	77.8	15.9	39.7	37.5	42.9	0.3	1.4
Unknown/remains	5.4	27.8	5.3	32.7	9.1	36.6	1.5	6.1	0.6	2.3	—	—	0.5	4.2
Ostracoda	—	—	0.4	3.8	0.5	2.8	1.2	6.6	3.3	9.2	—	—	0.1	0.7
Euphausiid calyptope	—	—	—	—	—	—	—	—	0.4	1.5	—	—	—	—
Chaetognatha	—	—	—	—	—	—	—	—	—	—	—	—	0.2	2.1
Appendicularia	—	—	—	—	4.5	29.6	—	—	—	—	—	—	16.6	52.1
Egg (small)	—	—	—	—	0.7	5.6	0.2	1.5	0.4	1.5	—	—	1.6	9.9
Fish egg	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unknown crust. remains	5.1	27.8	4.7	23.1	9.1	45.1	1.2	6.6	1.9	6.9	—	—	5.9	24.6
Unknown item/soft remains	0.3	2.8	1.7	15.0	4.8	26.8	0.9	4.5	2.3	5.3	12.5	14.3	11.5	59.2

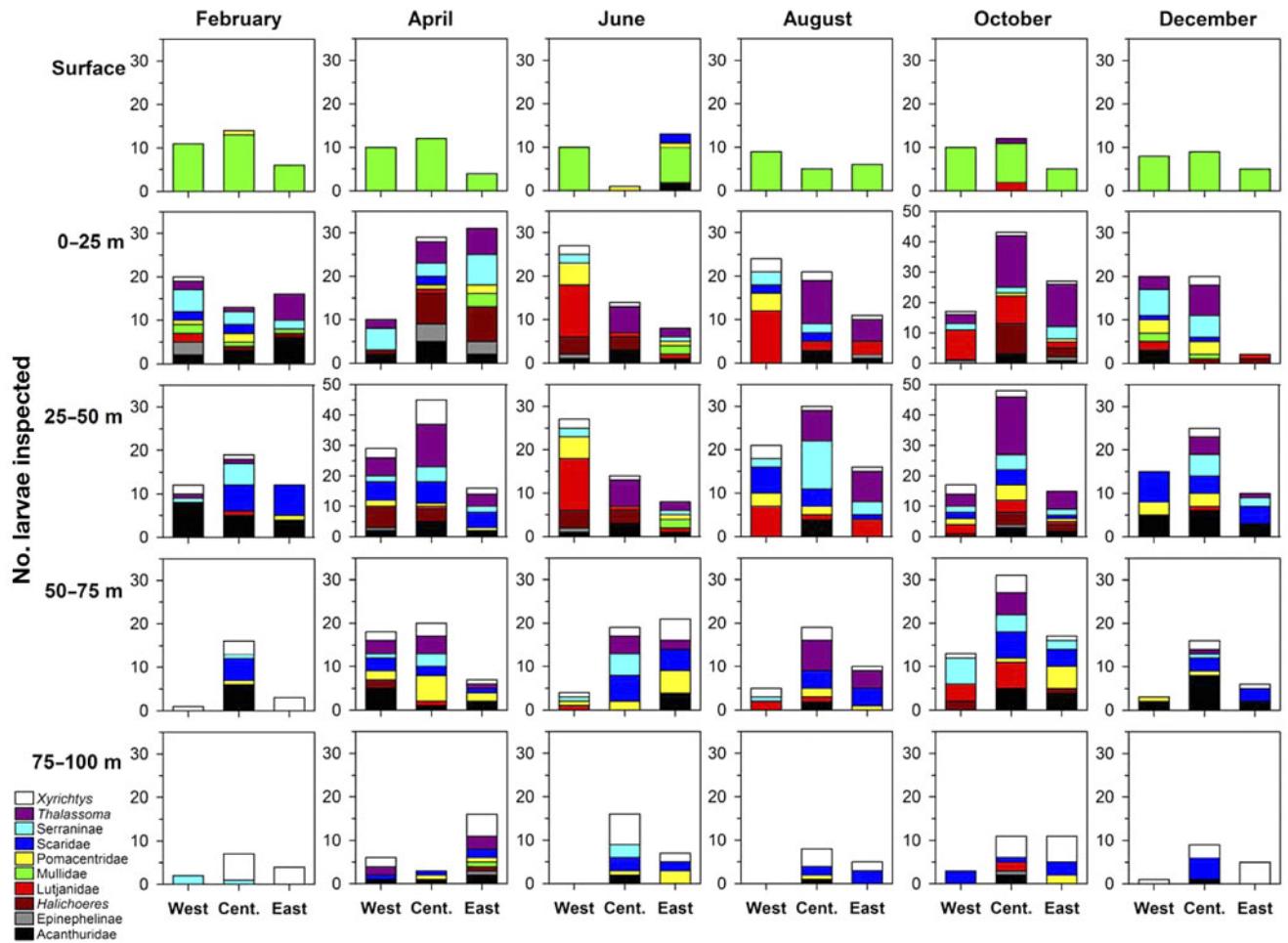


Fig. A1. Vertical, horizontal and temporal distributions of coral reef fish larvae inspected for diet analyses from the Straits of Florida. Larvae were sampled in 25 m subsurface depth bins with a multiple opening closing net and environmental sensing system (MOCNESS) and at the surface with a neuston net along a transect of 17 stations that were grouped into western, central (Cent.) and eastern regions (see 'Materials and methods')