



**Establishment and Operation of a Regional System of
Fisheries *Refugia* in the South China Sea and Gulf of Thailand**

REPORT

**COLLECTION OF FISH EGGS AND LARVAE IN BOLINAO BAY,
PANGASINAN, FROM JANUARY TO DECEMBER 2018**

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1. Objective

To process and analyze the fish eggs and larvae samples collected in Bplinao bay every quarter for 2018.

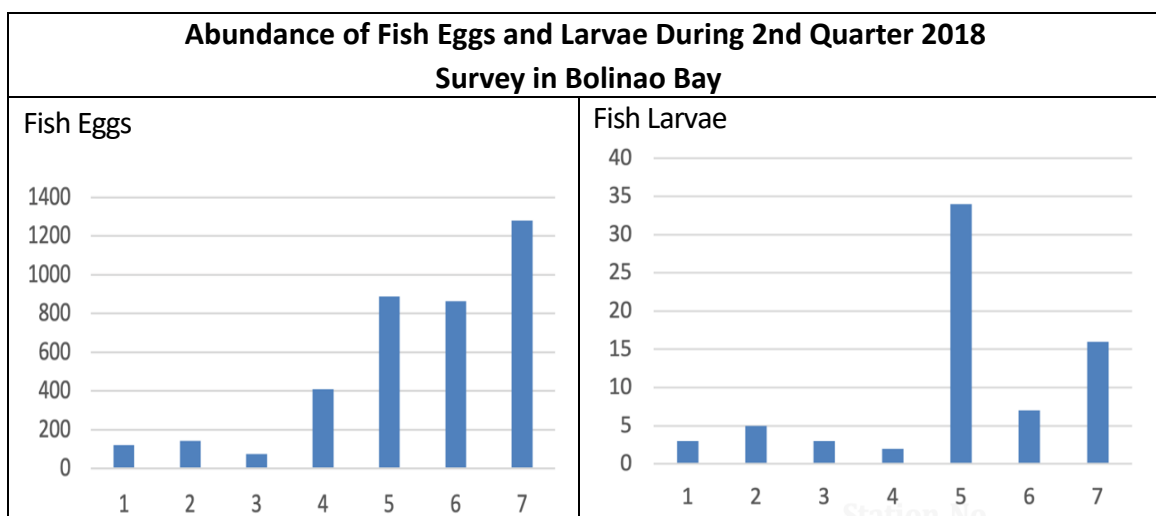
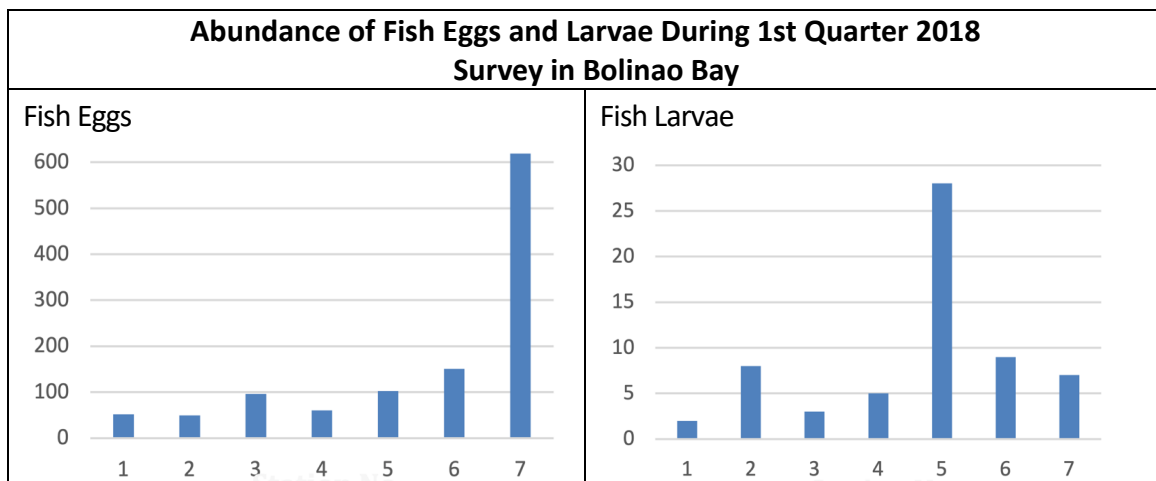
2. Methodology

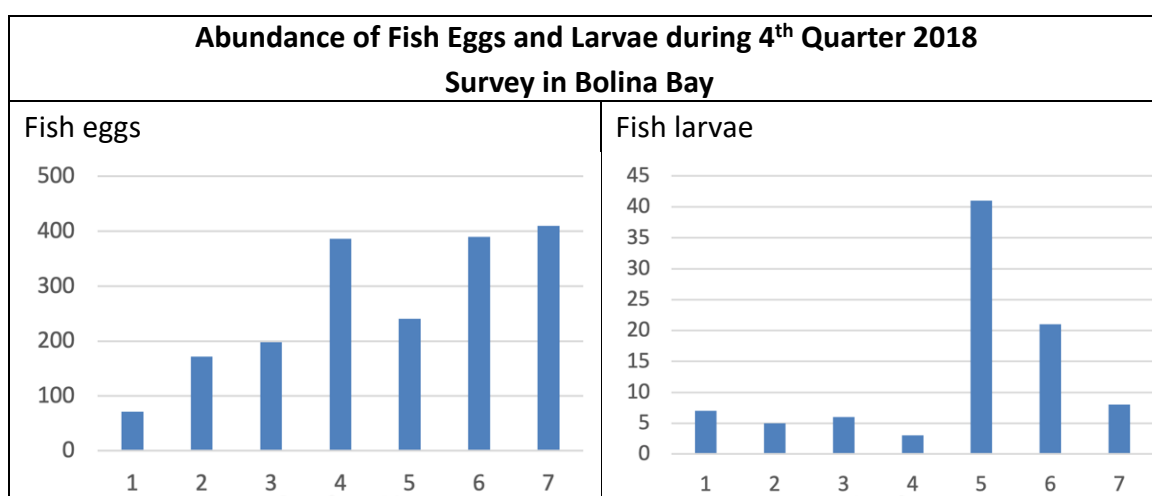
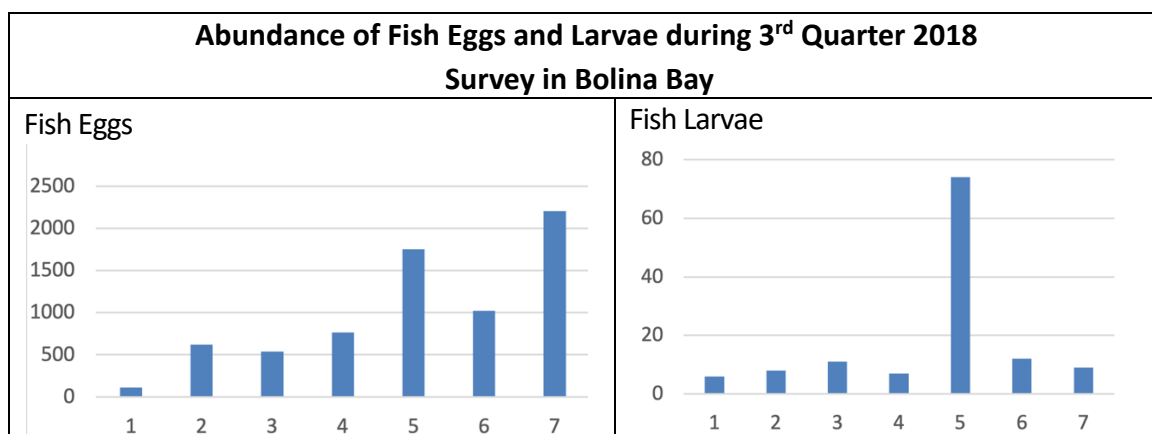
Quarterly monitoring of fish eggs and larvae in Bolinao bay was conducted in 2018. The samples were collected by horizontal towing of a bongo net for 10 minutes with a 0.5m diameter, 1.5 meters length, 350µm mesh size, and a flowmeter centrally attached to the center of the net.

3. Results

Planktonic fish eggs in the coastal water of Bolinao bay consistently amasses in station 7 during four surveys in different seasons of 2018. A high abundance of planktonic fish eggs was observed in stations 5, 6, and 7, and a low concentration of fish eggs was recorded in stations 1, 2, 3, and 4, respectively.

The peak concentration of fish larvae in Bolinao bay was observed in station 5 during the four sampling period of 2018 regardless of climatic conditions. Among the dominant fish, larval families were Siganidae, Carangidae, Achanturidae, Clupeidae, and Leignatidae.





Distributions of Fish Larvae by quarterly and families in Bolinao Bay 2018.

Bolinao Bay, Pangasinan	Q1-2018	Q2-2018	Q3-2018	Q4-2018
Family Larvae				
<i>Acanthuridae</i>	3	11	8	11
<i>Apogonidae</i>		1		
<i>Belonidae</i>		7	3	2
<i>Caesionidae</i>	4		1	6
<i>Carangidae</i>	13	6	11	12
<i>Clupeidae</i>	9			1
<i>Engraulidae</i>	2		1	2
<i>Ephippidae</i>				
<i>Exocoetidae</i>			1	
<i>Haemullidae</i>	1	2	1	
<i>Hemiramphidae</i>		1	1	1
<i>Istiophoridae</i>	1	1		1
<i>Labridae</i>		2	1	1
<i>Leiognathidae</i>		4	3	3

<i>Lethrinidae</i>	1	3		2
<i>Lutjanidae</i>	4	3	1	1
<i>Monacanthidae</i>		1		
<i>Mugilidae</i>		1		1
<i>Mullidae</i>	2		1	
<i>Myctopidae</i>			1	
<i>Nemipteridae</i>	1	1	2	1
<i>Paralepididae</i>			1	
<i>Scaridae</i>	1	7	2	2
<i>Scathopahgidae</i>			7	8
<i>Scombridae</i>	2	1		
<i>Serranidae</i>	4		4	3
<i>Siganidae</i>	8	12	13	25
<i>Sparidae</i>			1	
<i>Syngnathidae</i>		1		1
<i>Trichiuridae</i>	2		3	2
<i>Unidentified</i>		3	7	4

Annex 1

Processing fish larvae samples collected in Bolinao Bay, Pangasinan, during four sampling periods in the year 2018.



