Oyster spat collection update Caraquet Bay Last updated: July 19th, 2023

Eyed larvae were observed for the first time in sample.
This is an indication that oyster larvae are ready to settle.
It is recommended to deploy the collectors in the Caraquet Bay.

Oyster sampling for gonad observation began on June 13, 2023.

The biggest oyster larvae observed was **307.6** microns.

The average water temperature at the time samples were taken was **23.3°C**.

**Presence of biofouling: barnacles larvae setting stage

Monitoring of oyster larvae in plankton

Sampling date	Average Size of the larvae observed (in microns)	Size range of larvae (in microns)	Presence of eyed larvae
July 19th, 2023	**205.0**	**126.1 – 307.6**	**Yes**
July 17th, 2023	165.3	128.1 – 260.8	No
July 14th, 2023	136.0	92.7 – 189.3	No
July 10th, 2023	95.7	78.0 – 116.7	No
July 7th, 2023	79.3	68.0 – 96.7	No

Notice: When oyster larvae measure more than **300 microns** and have a distinctive black dot ("eyed" larvae), the collectors must be set in the water. Producers must therefore be prepared for this stage, which can occur two to three weeks after the oysters' spawn.

Gonad observation

Sampling date	Station	Gonadal development percentage	Spawning percentage
July 10th, 2023	1	25.5%	55.5%
July 10th, 2023	2	20.5%	64.0%
July 10th, 2023	3	25.0%	68.5%
July 7th, 2023	1	53.0%	17.0%
July 7th, 2023	2	41.0%	24.5%
July 7th, 2023	3	45.0%	39.5%
July 4th, 2023	1	72.5%	
July 4th, 2023	2	59.5%	
July 4th, 2023	3	74.0%	
June 29th, 2023	1	29.5%	
June 29th, 2023	2	36.0%	
June 29th, 2023	3	64.0%	
June 27th, 2023	1	23.0%	
June 27th, 2023	2	22.0%	
June 27th, 2023	3	57.5%	
June 22nd, 2023	1	9.5%	
June 22nd, 2023	2	7.5%	
June 22nd, 2023	3	28.5%	
June 13th, 2023	1	8.0%	
June 13th, 2023	2	9.5%	
June 13th, 2023	3	26.55	

Monitoring of water temperature and salinity

Sampling date	Temperature (°C)	Salinity (ppt)
July 19th, 2023	**23.3**	**28.3**
July 17th, 2023	24.0	22.0
July 14th, 2023	21.3	16.9
July 10th, 2023	24.3	19.7
July 7th, 2023	22.0	24.5
July 4th, 2023	21.2	23.2
June 27th, 2023	20.2	23.1
June 27th, 2023	18.5	18.5
June 22nd, 2023	15.3	22.6
June 13th, 2023	15.3	N/A

Monitoring of other larvae in plankton (biofouling)

Sampling date	Presence of mussels		Presence of barnacles	
	Pre-setting stage	Setting stage	Pre-setting stage	Setting stage
July 19th, 2023	**Yes**	**No**	**Yes**	**Yes**
July 17th, 2023	Yes	No	Yes	Yes
July 14th, 2023	Yes	No	Yes	Yes
July 10th, 2023	Yes	Yes	Yes	Yes
July 7th, 2023	Yes	Yes	Yes	Yes
July 4th, 2023	Yes	No	Yes	Yes
June 29th, 2023	No	No	Yes	Yes
June 27th, 2023	No	No	Yes	No
June 22nd, 2023	No	No	Yes	No

Pre-setting stage: larvae are not ready to set yet.
Setting stage: larvae are ready to set.

Information

For more information on oyster spat collection in Caraquet Bay, contact either of the following personnel of the Department's team:

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