

Blue Crab Shedding

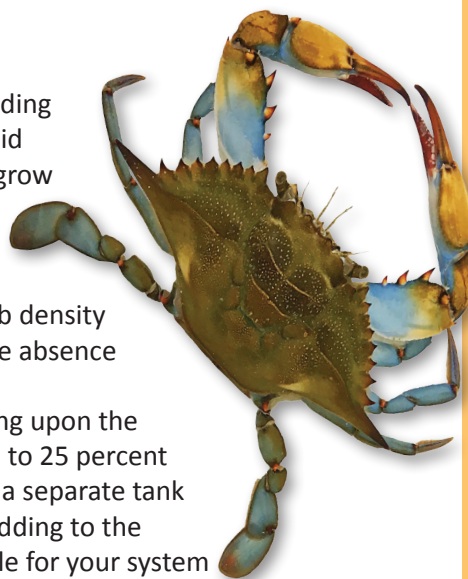
System Maintenance

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Once nitrifying bacteria are established in recirculating shedding systems, crabs should be added gradually into the system to avoid shocking the system. The bacterial populations will continue to grow with the addition of crabs. Stocking densities in one 3-foot by 8-foot shedding tray can range between 50 to 300 crabs, depending on the health of your nitrifying bacteria.

Once the stocking density of crab has been reached, the crab density must be maintained to prevent bacteria from crashing due to the absence of crab waste.

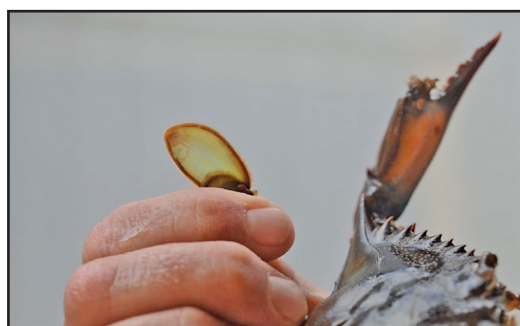
Water quality should be monitored daily or weekly depending upon the parameter tested. If water parameters are outside the range, up to 25 percent of the system's water should be replaced. Storing extra water in a separate tank allows the water to be treated and adjusted for salinity before adding to the system, making water exchanges easier. The largest sump feasible for your system can also improve water quality.



Water Quality Parameter	Testing Frequency	Safe Range
Ammonia	Daily	Below 1.0 mg/l
Nitrate	Daily	Below 500 mg/l
Nitrite	Daily	0 to 0.5 mg/l
Temperature	Weekly	75 -80 °F
pH	Weekly	7.0 - 8.0
Alkalinity	Weekly	Over 100 mg/l
Dissolved Oxygen	Weekly	Greater than 5.0 mg/l
Salinity (see box, page 2)	Weekly	Up to 30 ppt
Chlorine	At Water Change	0

Additional testing can be performed if there is an increase in observed mortalities, abnormal crab behavior or if the color and/or smell of the system water changes.

To reduce mortality in systems due to cannibalism, crabs should be routinely graded and sorted by molting stage daily. White line crabs are still feeding and will cannibalize pink and red liners if not separated. Red lined crabs must be checked once a day for the appearance of cracks.



Example of a red lined crab.

For water changes, salinity should be kept within 5 ppt of the current system to keep bacteria happy. Many systems in Louisiana operate below 5 ppt.

The units mg/l and ppt are common in water quality.

- mg/l = milligrams per liter
- ppt = parts per thousand

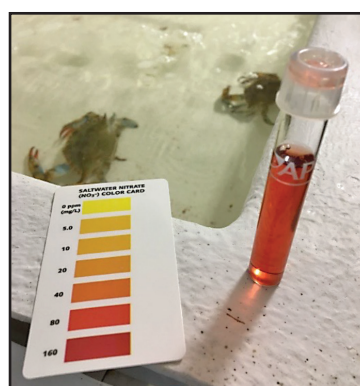
Cracked crabs should be checked every three to four hours to catch soft shelled crabs. Often, the cracked crab beginning to split their shell should be set apart to make it easier to locate and remove once it has molted. It is recommended to only hold red liners to increase shedding success. White liners might be too weak to successfully molt if held to long in the system.

Crab legs and miscellaneous parts should be removed from the trays to help maintain system performance and water quality.



Remove shedded parts from trays.

Molt Stage	Days from Shedding
White Liners	6 to 14 days
Pink Liners	4 to 6 days
Red Liners	1 to 4 days
Cracked Red Liner	Less than 1 day



Water quality test for nitrate.



A refractometer is used to measure salinity.



<http://www.laseagrant.org/outreach/projects/soft-shell-crab/>

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Funding: This work was funded by National Sea Grant College Program (NOAA) Award NA18OAR4170355