LOUISIANA Fisheries Forward fast facts
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Remote Setting Oysters: Constructing Your System

REMOTE SETTING OYSTER LARVAE MAY SEEM LIKE a task for experts, but the set-up is relatively simple and can be done by most anyone. The basic equipment for a setting system includes a tank, air lines, a blower, a cover, and a seawater pump and filter.

TANK

The tank can be of any shape; you can make it yourself from plywood and fiberglass, cement or order a ready-made plastic one. The tank volume depends on the amount of seed you want to produce from each batch. Learn more about how to calculate how many larvae are needed for your tank size on the oyster page of the LFF website.

- Avoid metal. If using cement, make sure sides are smooth. Regardless of material, the tank's interior should be a light color, as larvae like to set on a dark surface.
- Tank should have a 2-inch drain on the bottom for easier draining and cleaning.
- If you construct your own tank, thoroughly soak it to leach out toxic chemicals. Completely fill the tank with water and soak for at least two days. Drain, and repeat twice more.
- Use a tank cover (like tightly fitted tarp) to keep rainwater out and keep interior darkened.

AIR LINES & BLOWER

Air is bubbled through the tank using an aquaculture-specific blower to help keep the larvae evenly distributed. PVC pipes with small holes (1/32 inch to 1/8 inch) drilled about every foot, laid evenly across the tank's bottom, work well. Connect the blower's outlet to the tank's air line.

- Make sure the blower is positioned higher than the water level in the tank so that the pump will not fill with water when power is off.

Find a detailed manual on how to remote set oysters: **https://bit.ly/remote-setting-manual**

WATER PUMP & FILTER

You will need a seawater pump to get water into your system, and a filter to catch sediment. A simple swimming pool pump with plastic impeller and intake basket to catch debris is fine.

- Locate the pump near the water to eliminate impeller cavitation (crunching/grinding noise).
- Keep the pump's intake off the bottom and away from boat wheel wash in shallow water.
- Add a screen to the end of the intake pipe to keep debris out.
- Filter bags should be rated for 50 microns.

BASIC ESTIMATES FOR CONSTRUCTING 1 ~3,000-GALLON TANK

Tank*
Wood constructed 10' x 10' x 4' tank $775
Includes plywood, treated 2x4s and 2x6s, preservative, fiberglass materials, white epoxy paint
or
Prefabricated polyethylene tank (~3,000 gallon)$1,875
Air Lines: 1/2" PVC pipe & fittings $20
Filter: (4) 50 micron-rated bags & 2 support discs $80
Water Pump**: 1-1/2" PVC plumbing***,
bag support discs, strainer basket & pump ...$1,500
Tank Cover (plastic tarp) $20
Blower $290
General Hardware $30
Optional:
Microscope (1-100x & 1-30x pocket scopes) .. $120
Hand tally counter $12

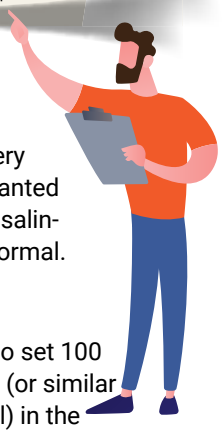
TOTALS range from:
$2,715 for basic wooden construction to
$3,947 for poly tank and optional equipment

*Heaters and tank insulation not included
**Can be used with additional tanks
***Plumbing costs depend on how far the tank and/or pump is from the water

Your tank is now prepared to receive properly prepared cultch, and then larvae.

CULTCH MATERIAL

The amount of cultch material required should fit tank design and return expectations. Rule of thumb for tank size: 2,000 gallons for every 100 bushels (or 153 sacks) of spat-on-shell to be set; in this case, whole, aged oyster shell. The 3,000 gallon tank described below could hold 150 bushels (or 230 sacks) of cultch.



It is typical in the Gulf of Mexico to harvest 1-2 bushels of oysters for every bushel of spat-on-shell planted when conditions such as salinity and temperature are normal.

LARVAE

Purchase enough larvae to set 100 per individual oyster shell (or similar amount of cultch material) in the setting tank. The tank described above (~3,000 gallons) requires 10.5 million eyed larvae ($2,625-4,200 [2020 LDWF MCV Oyster Hatchery prices]).

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