

Protocol for the Import of Live Eastern Oysters (*Crassostrea virginica*) Into Louisiana Waters



LDWF Office of Fisheries - Oyster Program
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Introduction

The Louisiana Department of Wildlife and Fisheries (LDWF) recognizes an increase in interest to import the eastern oyster (*Crassostrea virginica*) into Louisiana for the purpose of developing genetic diversity and/or for developing polyploidy broodstock to enhance wild native populations and to improve cage culture production (on-bottom and off-bottom). However, as per Louisiana Revised Statutes (R.S.) §56:15 and §56:20, no person may release or place molluscan shellfish, larval stages, or spat into the waters of Louisiana (whether public or private) without LDWF Secretarial or designee approval except when transferred to permitted Alternative Oyster Culture facilities as outlined in LAC 76:VII.535. Oyster importation guidelines have been established to monitor all oyster imports into Louisiana for the purposes of protecting against the introduction of *Haplosporidium nelsoni* (MSX) and *Bonamia exitiosa*; to lessen potential impacts of *Perkinsus marinus* (dermo); and to protect against the introduction of parasites and invasive species that are associated with oysters. This document outlines the LDWF oyster importation process from filing an application, to the transport of oysters into the State, and through any applicable quarantining procedures.

Oyster Import Application

Any oyster importation must be approved by the LDWF prior to any importation. Those wishing to import oysters may submit an Oyster Importation Application to the LDWF for consideration. There is no fee to apply and applications can be submitted electronically. Although LDWF strives to issue a decision within 10 business days from the date of receipt of all required documentation, applicants should be aware that processing may take longer and that application submittal does NOT guarantee approval. Applications are evaluated on a case-by-case basis. Applicants will be notified in writing of the department's decision.

LDWF is a collaborating partner in the Regional Shellfish Seed Biosecurity Program (RSSBP). If the sole oyster source is a RSSBP certified facility, the applicant need only indicate that on their application. More information about RSSBP can be found at <https://rssbp.org>.

Oysters from non-RSSBP certified facilities must include a health certificate with their application. See “Disease Testing” section for details.

ONLY *C. virginica* from Northern Gulf of Mexico (GOM) stocks will be considered for import into Louisiana. Oysters may be imported as adult, spat, seed, larvae, or genetic material (eggs and sperm). Oyster importation applications for oysters to be placed in Calcasieu Lake, will not be approved unless the oysters to be imported can be shown to have been spawned from Calcasieu Lake genetic broodstock.

The Oyster Importation Application form can be found on the LDWF website:

https://www.wlf.louisiana.gov/assets/Fishing/Commercial_Fishing/Files/Commercial-Oyster/LDWF-Oyster-Importation-Application_2022-5.12.22.pdf

Applicants are required to supply the following on their application:

- a. Name
- b. Professional/company affiliation
- c. Mailing address
- d. Phone number
- e. Email address
- d. Life-stage and total number of oysters to be imported with each event
- e. Final location (water body or physical address) of proposed culture/placement of imported oysters
- f. Name and address of the oyster source(s)
 - i. Multiple sources may be listed on a single import application, but each source must meet health evaluation requirements. (See disease testing)
 - ii. Facilities cannot be added to a permit once it is issued. If additional facilities are needed, a new application must be submitted for those facilities.
- g. Detailed justification of need for import (i.e., how it is advantageous to the state of Louisiana).

- h. For Florida/Texas imports (larger than R6) --Explanation of 30-day quarantining measures and supplemental bio-security measures, if any, that will be taken to minimize the risk of the introduction of parasites, and invasive species into Louisiana waters. (See Quarantine Measures section for details). Details must meet or exceed minimum guidelines.
- i. Louisiana Domesticated Aquatic Organisms Permit Number (if applicable).

LDWF will notify the applicant in writing, as to whether or not the permit has been granted. In the event that the permit has been denied, LDWF shall include written reasons for that determination. Approved applications will receive a Special Permit for Importation and Release of Oysters via email and mail along with instructions on how to notify LDWF ahead of each import event. Permits are valid for one calendar year from the date of issuance, and the expiration date will be clearly stated within the body of the permit. All permits will include:

- a. An expiration date.
- b. A listing of approved out of state source facility(s) for oysters.
- c. A listing of approved release locations and/or approved quarantine facility location.
- d. A listing of approved oyster life stages specific to source and import request.
- d. A statement that the permit, a copy of the original application, and any applicable health certificate(s) must accompany the oysters during importation. Copies of all required documentation are provided with the permit when issued.
- e. Additional instructions relative to each importation event covered within permit.
 - i. For all importation events, the permittee must provide sufficient notice prior to importation into Louisiana. LDWF requires no more than five and no less than two business days prior to the arrival of the oysters in Louisiana territory. Notices can be submitted by email or phone to the LDWF per instructions provided. Acknowledgement of receipt of notice will be provided in writing.
 - ii. II. For importation events subject to the Molluscan Shellfish Aquaculture Permit, the permittee must additionally obtain, in writing, approval from the LDWF Fisheries Permit Manager, which must be requested no less than two business days before the expected date of shipment from previously approved source.

Disease Testing

At this time, only hatcheries that are located within the Northern GOM and work exclusively with *C. virginica* from the GOM will be permitted to have their oyster products imported in Louisiana. LDWF is also a collaborating partner in the RSSBP. Importations from hatcheries certified by RSSBP are not subject to health certificate requirements. Regional Shellfish Seed Biosecurity Program information can be found at <https://rssbp.org>.

The purpose of the RSSBP is to facilitate the process for permitting interstate commerce of bio secure bivalve shellfish seed and larvae (smaller than 1 inch in size) being sold directly out of hatchery facilities. The Program is voluntary and applicants will be able to have product shipped into partner states via a streamlined permitting process from hatcheries that are compliant under this program. If the applicant is purchasing from a hatchery that is not enrolled in RSSBP, the source hatchery must provide a health certificate as stated elsewhere in this document. LDWF maintains a list of participating RSSBP hatcheries that is available upon request.

Oyster health evaluations are required for all non-RSSBP oyster source facilities importations and are required for all other larger seed or adult brood stock oysters regardless of source. Evaluations must use standard methods such as histopathology, Ray's fluid thioglycollate method (RFTM) and molecular diagnostics by an approved pathologist; and the resulting health certificate must clearly state that the oysters are free of disease, parasites, and invasive species. The certificate must include, at a minimum:

- a. A dated pathology report indicating that at least the following organisms were tested for and that the results met the allowable detection limits.
 - MSX (*Haplosporidium nelsoni*)-No detection
 - Bonamiosis (*Bonamia exitiosa*)-No detection
 - Dermo (*Perkinsus marinus*)- <10% prevalence
- b. A description of the testing methods used
- c. Testing facility lab name and address
- d. Certification case number
- e. Certification date

Oyster Health Certificates are valid for 60 days from the date of testing. A list of known oyster testing facilities is available from LDWF upon request, but the LDWF Oyster Program does not certify testing

facilities. Health certificates provided by hatcheries will be evaluated based on the information provided within certificate.

Quarantine Measures

Brown mussels (*Perna perna*) and green mussels (*Perna viridis*) are found in the warmer, southern waters of the GOM. Both are nonindigenous to the GOM and are classified as “invasive.” If introduced into waters in the northern GOM, with its favorable and similar estuary conditions, both species have the potential to alter the dynamics of native ecosystems and compete with other benthic marine species for resources.

Given that oysters imported from open waters or hatcheries that do not use filtration have an increased risk to introduce *P. perna* and *P. viridis* into Louisiana estuaries, and given that Florida and Texas waters are more removed from the estuary waters shared by Alabama, Mississippi and Louisiana, all broodstock and adult oysters (larger than R6) imported from Texas and (West Coast) Florida must undergo a 30-day quarantine period.

Quarantining is not required for larvae (R6 and smaller). However, applicants wishing to import larvae (R6 and smaller) from Texas and (West Coast) Florida can only import from those state hatcheries that are in compliance with the Regional Shellfish Seed Biosecurity Program (RSSBP) to ensure facilities are free and clear of *P. perna* and *P. viridis* contamination.

Quarantine criteria are:

1. The quarantine system shall be an approved system designed in such a way that all molluscan shellfish life stages cannot escape. All of the system must be based on land.
2. Enclosed re-circulating system must be decontaminated with a 10% chlorine solution immediately prior to each quarantine event.
3. Rinse oysters with clean freshwater upon delivery and/or arrival to quarantine site.
4. Scrub oysters using a wire brush dipped into a 10% chlorine solution.
5. Rinse oysters with clean freshwater following scrub.
6. Additionally dip oysters into a 10% bleach solution following scrub and rinse.
7. Rinse oysters again with clean freshwater prior to placement in the quarantine system.
8. All rinse water and all water removed and/or discharged from the system must be decontaminated in a 10% chlorine solution before being disposed.
9. Oysters must be held at a temperature of 45°F or less for at least three (3) continuous days (72 hours) during quarantine.

10. Oysters must be held at salinities of 10 ppt. or less for the entirety of quarantine.
11. Minimum quarantine duration is 30 days.
12. The re-circulating system must also be thoroughly decontaminated with a 10% chlorine solution following each quarantine event.
13. Importers needing to quarantine animals must submit their quarantine plan to LDWF with each import application. Plan must outline the steps to be taken to meet minimum or equivalent quarantine criteria stated in this protocol.
14. It shall be the responsibility of the permittee to immediately notify the LDWF of any molluscan shellfish or any life stage that leave the facility for any reason other than those specifically identified and allowed for under their current permit, including, but not limited to, accidental releases due to weather related events, vandalism, and theft.
15. The Permittee must agree to collect and provide an adequate number of molluscan shellfish to the Department or a Department-approved contractor upon request for identification and analysis at the permittee's expense.
16. The Permittee must allow an inspection of quarantine site--property and circulating system--by department personnel or a department approved contractor upon request.

Summarized Steps for the Importation of Oysters

1. An Oyster Importation Application is completed and submitted to LDWF as per instructions on the application.
 - a. If the seed or larvae are coming from a certified RSSBP facility and the facility is certified for the size class being imported, no additional testing information is needed.
 - b. If the oysters are coming from a non-RSSBP facility, and/or if the oysters are adult brood stock, a health certificate from the source must be submitted before importation is allowed. The applicant may choose to submit such a certificate at the time of application. However, the applicant should consider that Oyster Health Certificates are valid for 60 days from the date of testing and that the application review process may take up to three weeks to complete.
 - c. It is the responsibility of the applicant to ensure receipt of the application by LDWF. See application for contact information.
2. Following receipt of the application, LDWF will strive to issue a decision within 10 business days from the date of receipt of all required documentation.

3. Applicants will be notified in writing of the department's decision.
4. If a permit is granted, it will be sent to the applicant electronically and through mail along with any additional information LDWF deems necessary.
 - a. An expiration date will appear on issued permits, but generally, permits are valid for one-year from the date of issuance.
5. If applicable, the permit holder will provide LDWF with a valid Health Certificate for each batch of oysters before each importation event covered under the permit.
6. Applicant shall notify LDWF no more than five and no less than two business days prior to the arrival of oysters in Louisiana territory.
 - a. Instructions on how to submit notices will be provided at the time of permit issuance.
 - b. Minimal required information to be included in each notice:
 - i. Applicants name
 - ii. Source of oysters
 - iii. Oyster life stage (e.g. larvae, set spat, seed)
 - iv. Amount of oysters to be imported (e.g., sacks, individuals)
 - v. Estimated timeframe of transport, estimated release date, and location of approved release
 - c. Notices will be forwarded to LDWF Enforcement agents by LDWF staff.
7. The permit holder will ensure that copies of the permit, health certificate(s) (if applicable), original application, and the department provided importation protocol accompany the oysters during each importation event covered under the permit.
8. Import permits are not transferable from person to person or property to property.