

Under Dock Oyster Culture Permit Test

After carefully reviewing the UDOC Manual, answer the following 20 questions by circling the letter beside the correct answer and signing on the signature line at the end of the test. Mail the completed test to:

**N.C. Division of Marine Fisheries
Habitat & Enhancement Section - UDOC
PO Box 769
Morehead City, N.C. 28557**

1. What must a UDOC applicant own to qualify for the permit?
 - a. A properly licensed vessel
 - b. Waterfront property with residence
 - c. A dock in approved shellfish harvest waters
 - d. All of the above

2. How would a UDOC applicant determine the harvest status of the waters where their dock is located?
 - a. Use a water quality test kit
 - b. Contact the Shellfish Sanitation Section - N.C. Division of Marine Fisheries
 - c. Contact the N.C. Division of Water Resources
 - d. Contact the N.C. Marine Patrol

3. Which is true?
 - a. Oysters live approximately 5 - 10 years
 - b. Oysters live until the water freezes
 - c. Oysters live until they reach maturity
 - d. Oysters live until they reach 8 inches in length

4. Which is false?
 - a. In N.C., oysters spawn when water temperatures reach approximately 68° F
 - b. Oysters filter 13 – 50 gallons of water per day
 - c. Optimal oyster salinity is 15 – 18 ppt
 - d. Oysters mate for life

5. What is the primary limiting environmental factor for the survival and growth of oysters in N.C. estuarine waters?
 - a. Salinity
 - b. Water Depth
 - c. Hypoxia/Anoxia
 - d. Water Temperature

6. What is the maximum size or total amount of oyster culture containers allowed by the permit?
 - a. 90 cubic feet
 - b. The length and width of the dock
 - c. 160 containers @ 1 gallon each
 - d. 90 square feet with a maximum depth of 6 inches

7. What licenses or permits does a UDOC permit holder need to legally sell oysters under the authority of the UDOC permit?
 - a. Commercial fishing license with shellfish endorsement
 - b. A saltwater fishing license
 - c. A shellfish harvest license
 - d. None - the sale of oysters is not allowed

8. What is the duration of the UDOC permit?
 - a. The lifetime of the permittee
 - b. As long as the dock is safe and serviceable
 - c. 1 year from time of issuance
 - d. 3 years or the time required to grow harvest-sized oysters

9. What information is required on the signs marking the UDOC permit area?
 - a. Permittee's name, permit number, statement that the containers are for oyster culture and are private property
 - b. Permittee's name, permit number, phone number and mailing address
 - c. Permittee's name, permit number, and Shellfish Harvest License number
 - d. Permittee's name, address, and "posted private property"

10. What is required to legally import oysters from outside the state of North Carolina?
 - a. A bill of sale from the oyster seed supplier
 - b. A permit from N.C. Division of Marine Fisheries with a disease free certification
 - c. A letter from the seller stating that it is a certified oyster hatchery
 - d. Use of seed originating from out of state sources is not authorized under the UDOC permit

11. What is the main reason for closures to shellfish harvest in conditional areas?
 - a. Oil spills
 - b. Rainfall
 - c. Wastewater treatment plant failure
 - d. High water temperatures

12. What is the best way to prevent illness due to shellfish consumption?
- Cook shellfish before eating them
 - Keep birds away from your dock
 - Scrub the outside of your oysters regularly
 - Clean up pet waste
13. How often can the classification status of your area can change?
- Daily
 - Weekly
 - Monthly
 - After rain events
14. Oysters spawn when:
- Water temperatures reach 68°F (20°C)
 - In the winter
 - Once every five years
 - They are three years' old
15. Oysters feed naturally by:
- Using a burrowing proboscis to search sand and mud for particles
 - Passing water over gills and separating food from bacteria and pollutants
 - Filter feeding food over gills including bacteria and pollutants
 - Climbing marsh grasses to comb for particles
16. Optimal water temperatures for oyster growth, reproduction, and survival is:
- 15-20°C
 - 21-29°C
 - 15-45°C
 - 45°F
17. Which is true?
- When working with oysters in hot sun, it is best to limit it to 45 minutes
 - A UDOC holder can only grow Eastern oysters (*Crassostrea virginica*) and Pacific oysters (*Crassostrea gigas*)
 - To renew a permit, applicant must document disposition of oysters in cages, mortalities, and condition of consumer after eating oysters
 - Shellfish is more likely to be exposed to runoff bacteria at low tides

18. Intertidal oysters prefer:

- a. Tidal amplitude of greater than 12 inches
- b. High energy shoreline
- c. Occasional anaerobic conditions
- d. TSS in excess of 25mg/l

19. Which is true?

- a. Dermo is a disease that can kill both oysters and the consumer
- b. Contracting dermo reduces the growth rate of the oyster
- c. Dermo is a form of Vibrio bacteria
- d. All of the above

20. Which is true?

- a. Vibrio bacteria are common in marine and estuarine environments
- b. Vibrio bacteria will stop growing after harvest
- c. Immediate refrigeration kills the Vibrio bacteria in the harvested oysters
- d. While Vibrio bacteria can make you very sick, it cannot kill you

Print Name: _____

Signature: _____

Date: _____