

# Hatchery Spawning by Thermal Shock of the American Oyster *Crassostrea virginica*

Will evaluate comprehension of spawning techniques for the American oyster *Crassostrea virginica* in MASGP09-026.

Total Questions » 16

- Q.1) What is a method hatchery managers use to select broodstock for spawning?
- A.  Shell color
  - B.  How an oyster sounds when dropped on concrete
  - C.  Valuable characteristics including tolerance to poor water quality and growth rate
  - D.  Taste
- Q.2) Before a selected oyster can be spawned, what must a hatchery manager do?
- A.  clean them
  - B.  shake them
  - C.  sing to them
  - D.  roll them in sand
- Q.3) Once placed into spawning units, how does a hatchery manager know the oysters are alive and doing well?
- A.  oyster turn over
  - B.  oyster grow
  - C.  oyster open and filter water
  - D.  oyster change colors
- Q.4) How does a hatchery manager make the selected broodstock spawn?
- A.  add cold water
  - B.  add heater water
  - C.  turn water flow on
  - D.  turn water flow off
- Q.5) What else does a hatchery manager do to help induce broodstock to spawn?
- A.  shake spawning container
  - B.  play music
  - C.  add dead oyster sperm
  - D.  add unfertilized eggs
  - E.  add fertilized eggs

- Q.6)** When does a hatchery manager know if a selected broodstock is a male or female?
- A.  shell size
  - B.  shell color
  - C.  when spawning begins
  - D.  shell weight
- Q.7)** When eggs are released by females, hatchery managers collect them and add sea water with sperm. Why do they add sea water?
- A.  eggs need to hydrate
  - B.  protects the egg
  - C.  lower egg temperature
  - D.  makes it easier to pour eggs out
- Q.8)** Hatchery managers will mix sperm from several males when spawning oysters
- A.  True
  - B.  False
- Q.9)** How does a hatchery manager determine if an oyster egg has been fertilized?
- A.  egg changes shape
  - B.  nucleus of egg disappears
  - C.  egg begins to spin
  - D.  egg changes color
- Q.10)** How long after fertilization before the blastula stage is reached?
- A.  1 minute
  - B.  1 hour
  - C.  4 hours
  - D.  4 days
- Q.11)** How does a hatchery manager know how many larvae are produced in a spawn?
- A.  count each individual
  - B.  count by volumetric estimation
  - C.  guess
  - D.  look it up in book
  - E.  it is not important so they do not try

**Q.12)** After how many hours post fertilization does a "D hinged veliger" form?

- A.  1 hour
- B.  12 hours
- C.  24 hours
- D.  36 hours
- E.  48 hours

**Q.13)** What does an "eyed larvae" indicate to the hatchery manager?

- A.  larvae is dead
- B.  larvae is hungry
- C.  larvae is almost ready to set
- D.  larvae is a male
- E.  larvae is a female

**Q.14)** What does a pediveliger tell the hatchery manager?

- A.  larvae is a male
- B.  larvae is a female
- C.  larvae is ready to set
- D.  larvae is sick

**Q.15)** How many days after spawning before larvae are ready to set?

- A.  7 days
- B.  14 days
- C.  21 days
- D.  28 days

**Q.16)** What do oyster larvae prefer to set on?

- A.  mud
- B.  oyster shell
- C.  grass
- D.  hard substrate
- E.  micro-cultch