
Fish Culture Technical Bulletin

Best Management Practices

WALLEYE EGG INVENTORY METHODS ¹

When eggs have “eyed-up” (two tiny black specks appear in the egg), they should be inventoried to determine egg volume.

Equipment required: Egg basket or tray
Siphon hose
2 Graduated cylinders (10-25 millilitre (ml) and 50-100 ml) 2
litre (L) Graduated volumetric measure
Petri dish
Dissecting scope (optional)
Record forms

Procedure:

1. Fill the 2 L graduated volumetric measure to the top line with the walleye eggs using gentle, circular agitation to settle the eggs. There should be enough water in the measuring cylinder to keep the eggs moist and fluid but not floating.
2. Record the volume and empty the eggs into an egg basket or tray.
3. Repeat Steps 1 and 2 until the total volume of the collection of eggs has been measured.
4. Siphon out at least 50 ml of walleye eggs from the egg basket or tray into the 50-100 ml graduated cylinder.
5. Pour eggs from the 50-100 ml cylinder into the 10 ml cylinder and settle the eggs using a gentle circular agitation, until the eggs reach the 10 ml level. There should be enough water in the measuring cylinder to keep the eggs moist and fluid but not floating.
6. Pour the eggs into a petri dish and count.
7. Record the number of eggs and repeat Steps 4 to 6 a minimum of five times.
8. Calculate the average number of eggs in 10 ml.
9. Using the average number of eggs in 10 ml and the total volume of the eggs, calculate the estimated number of eggs in the collection.

¹ Adapted from: Walleye Culture Manual. OMNR, 1986. Peter D. Richard and Julian Hynes.

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