

Overview

This standard is about controlling fish/shellfish hatchery operations to effectively support the development of hatchery stock.

It requires that work is completed in accordance with the site standard operating procedures.

This standard is for those who control operations in a fish/shellfish hatchery.

Control fish/shellfish hatchery operations

Performance criteria

You must be able to:

1. ensure all work is carried out safely in accordance with relevant legal requirements and site procedures
2. control fish/shellfish hatchery operations to meet planned production
3. organise the **resources** required to complete planned production
4. monitor fish/shellfish health and development against **planned production**
5. monitor and maintain environmental conditions in the hatchery
6. maintain required development through the effective implementation of hatchery regimes
7. modify **production activities** to take account of factors that disrupt fish/shellfish production
8. maintain required stocking densities within holding units through the effective implementation of grading regimes
9. ensure the health and welfare of **hatchery stock** is maintained at all times
10. ensure effective hygiene and bio-security is maintained at all times
11. ensure site procedures for effluent discharge and waste disposal are followed at all times
12. ensure appropriate levels of hygiene and bio-security are maintained
13. maintain records of hatchery activities to meet legal requirements in accordance with site procedures

Knowledge and understanding

You need to know and understand:

1. relevant legal requirements and site procedures for health and safety associated with fish hatcheries
2. production activities and their effective implementation
3. the importance of achieving planned production
4. environmental conditions required by hatchery stock and how these are monitored and maintained
5. common health problems associated with hatchery production
6. methods of monitoring production within hatcheries
7. the importance of implementing hatchery regimes at the correct time, matched to the needs of the hatchery stock
8. relevant industry codes of practice and their application in the control of hatcheries
9. factors that can disrupt production and their corrective actions
10. the development of hatchery stock, linking life stages to "**degree days**"
11. legal controls controlling the discharge from fish hatcheries
12. optimum stocking levels for available holding facilities
13. fish/shellfish health and welfare requirements associated with hatchery stock
14. how environmental conditions can be manipulated to support production
15. the importance of hygiene and bio-security within the hatchery environment
16. hatchery emergency procedures to deal with any identified **emergencies** affecting the aquatic environment
17. the legal requirements and site procedures for maintaining records of hatchery activities

Glossary

degree days – method of calculating the rate of fish growth by multiplying the number of days by the average water temperature in degrees Celsius for that time period. e.g. 5 days with water temperatures of 10 degrees = 50 degree days. Different species of fish have different "degree day" requirements to reach the required stage of growth.

emergencies – malfunction of equipment, variations in water supply, variations in water quality, problems with fish health

hatchery stock – eggs, juveniles

planned production – anticipated production based on historical data and testing

production activities – feeding, hygiene, removing mortalities, health treatments

resources – people, equipment, water supply, feed, energy

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Developed by	Lantra
Version Number	2
Date Approved	August 2015
Indicative Review Date	August 2020
Validity	Current
Status	Original
Originating Organisation	Lantra
Original URN	LANAQu27
Relevant Occupations	Fish Farming
Suite	Aquaculture
Keywords	fish; hatchery
