

LANAqu27 SQA Unit Code HC14 04

Control fish/shellfish hatchery operations



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.

LANAqu27 SQA Unit Code HC14 04

Control fish/shellfish hatchery operations

Performance criteria

You must be able to:

- P1 ensure all work is carried out safely in accordance with relevant legal requirements and site procedures
- P2 control fish/shellfish hatchery operations to meet **planned production**
- P3 organise the **resources** required to complete planned production
- P4 monitor fish/shellfish health and development against planned production
- P5 monitor and maintain environmental conditions in the hatchery
- P6 maintain required development through the effective implementation of hatchery regimes
- P7 modify **production activities** to take account of factors that disrupt fish/shellfish production
- P8 maintain required stocking densities within holding units through the effective implementation of grading regimes
- P9 ensure the health and welfare of **hatchery stock** is maintained at all times
- P10 ensure effective hygiene and bio-security is maintained at all times
- P11 ensure site procedures for effluent discharge and waste disposal are followed at all times
- P12 ensure appropriate levels of hygiene and bio-security are maintained
- P13 maintain records of hatchery activities to meet legal requirements in accordance with site procedures

LANAqu27 SQA Unit Code HC14 04

Control fish/shellfish hatchery operations

Knowledge and understanding

You need to know and understand:

- K1 relevant legal requirements and site procedures for health and safety associated with fish hatcheries
- K2 production activities and their effective implementation
- K3 the importance of achieving planned production
- K4 environmental conditions required by hatchery stock and how these are monitored and maintained
- K5 common health problems associated with hatchery production
- K6 methods of monitoring production within hatcheries
- K7 the importance of implementing hatchery regimes at the correct time, matched to the needs of the hatchery stock
- K8 relevant industry codes of practice and their application in the control of hatcheries
- K9 factors that can disrupt production and their corrective actions
- K10 the development of hatchery stock, linking life stages to “**degree days**”
- K11 legal controls controlling the discharge from fish hatcheries
- K12 optimum stocking levels for available holding facilities
- K13 fish/shellfish health and welfare requirements associated with hatchery stock
- K14 how environmental conditions can be manipulated to support production
- K15 the importance of hygiene and bio-security within the hatchery environment
- K16 hatchery emergency procedures to deal with any identified **emergencies** affecting the aquatic environment
- K17 the legal requirements and site procedures for maintaining records of hatchery activities

LANAqu27 SQA Unit Code HC14 04

Control fish/shellfish hatchery operations

Glossary

hatchery stock – eggs, juveniles

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

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

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

planned production – anticipated production based on historical data and testing

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.

LANAqu27 SQA Unit Code HC14 04

Control fish/shellfish hatchery operations

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