Overview

This standard is about collecting and analysing data from dead fish. It covers the ability to analyse dead fish in order to produce fisheries data, which supports the management of fisheries.

This standard requires that you carry out work safely in line with relevant legal health and safety requirements and that you work to maintain bio-security and minimise environmental disturbance at all times.

The relevant legislation controlling the application of this standard will vary depending on the location of the fishery – in England, Wales, Northern Ireland or Scotland.
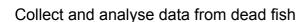
Collect and analyse data from dead fish

Performance criteria

You must be able to:

1. carry out all the activities required to safely collect and analyse data from dead fish in line with relevant health and safety requirements
2. prepare, use and maintain appropriate tools and equipment for the collection and analysis of data from dead fish
3. select and use appropriate personal protective equipment (PPE) for the work required
4. maintain traceability and control of samples from dead fish
5. prepare samples from dead fish for analysis, in accordance with the requirements of your organisation and fishery industry standard protocols
6. analyse samples from dead fish in accordance with the requirements of your organisation and fishery industry standard protocols
7. dispose of waste in accordance with relevant legal and organisational procedures
8. sterilise, where appropriate, and store equipment for collecting and analysing data from dead fish after use, in accordance with requirements
9. maintain levels of hygiene and bio-security when collecting and analysing data from dead fish
10. accurately record and present data from dead fish using organisational systems, highlighting any unexpected findings
11. complete error checks on data collected from dead fish

Knowledge and understanding

You need to know and understand:

1. the health and safety requirements associated with collecting and analysing data from dead fish
2. the importance of using the correct personal protective equipment (PPE)
3. how to collect and prepare samples from dead fish for analysis
4. how to use fishery industry standard protocols to age fish as well as analysing back calculations of growth patterns (scales and using bones)
5. how to extract materials from dead fish to age fish
6. fish anatomy and physiology
7. common fish abnormalities and their causes
8. common fish parasites (internal and external)
9. how to identify and classify the stomach contents of dead fish
10. how to analyse data from dead fish
11. data presentation techniques (length/frequency histograms) used when analysing data from dead fish
12. statistical techniques used to analyse data from dead fish
13. different techniques for presenting data from dead fish
14. the importance of checking data for errors, to remove mistakes and confirm the accuracy of the data to be analysed and/or presented
15. how to access additional advice and support
16. the importance of hygiene and bio-security and its role in minimising risks to the fishery

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Glossary

Methods of analysis:

1. stomach content analysis
2. internal parasite loading
3. external parasite loading
4. sex and maturation
5. internal gross pathology
6. external gross pathology

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