

LANFIM10 - SQA Unit Code D9HH 04

Prepare and catch fish using electrofishing techniques



Overview

This standard is about preparing to and catching fish from a fishery using electrofishing techniques. It covers determining if the environmental conditions are appropriate for electrofishing. It also includes preparing electrofishing equipment for use, together with the boats, nets and equipment used to hold live fish, setting up the fishing area and the safe use of equipment to immobilise fish ready for capture. The ability to observe and report on the effectiveness of the electrofishing operation is also important.

This standard requires the setting up of electrofishing equipment including generator, electrofishing box, leads, anode and cathode.

This standard requires that fishing activity is modified because of large numbers of fish, fish transfers, changes in water conditions and the species.

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

The legislation controlling the application of this standard will vary depending on the location of the fishery within England, Wales, Northern Ireland or Scotland.

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Performance criteria

You must be able to:

- P1 obtain fish catching specification
- P2 assess prevailing conditions to determine if it is safe to electrofish
- P3 prepare and maintain equipment into a serviceable and safe operating condition, according to organisational requirements
- P4 establish fishing area to avoid fish escapes occurring
- P5 use anode to effectively immobilise fish
- P6 monitor reaction of fish to anode
- P7 control electrofishing activity to cover intended fishing area
- P8 modify fishing activities to maintain its effectiveness
- P9 observe and report on the performance of the catching operation, ensuring compliance with specification
- P10 maintain effective communication with team throughout fishing activity
- P11 implement emergency procedures in the event of an accident
- P12 clean and store equipment after use

Knowledge and understanding

You need to know and understand:

- K1 the health and safety requirements associated with electrofishing, including the personal protective equipment which is essential for electrofishing
- K2 why electrofishing is the primary monitoring tool for many fisheries
- K3 how natural features within a water body can help to define a fishing area
- K4 the importance of establishing fishing areas in advance of electrofishing
- K5 why fish are caught as part of fisheries management
- K6 the principles of electrofishing including how electrofishing can damage fish
- K7 the advantages and disadvantages of electrofishing
- K8 the environmental conditions required for holding fish
- K9 the equipment that is required to support electrofishing
- K10 how to prepare and maintain electrofishing equipment into a safe operating condition
- K11 the effective range of electrofishing including how to effectively fish different types of water body (running water and still water)
- K12 water conductivity and its importance to the setup of electrofishing equipment
- K13 the potential impact of adverse environmental conditions on electrofishing
- K14 the expected reaction of different fish species during electrofishing activities
- K15 how morphology, water temperature and fish size can impact on electrofishing activities
- K16 the importance of bio-security during electrofishing activities

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Glossary

The definitions below should help you understand the standard:

Water conditions

Visibility, water flow, depth, etc.

Holding units

Equipment used to hold live fish e.g. buckets, dustbins, tanks, etc.

Conductivity

The ability of water to conduct electricity

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