



National Unit Specification: general information

UNIT Fish Capture and Handling (SCQF level 5)

CODE F6AN 11

SUMMARY

This Unit allows candidates to develop some of the basic knowledge and skills in relation to the range of equipment and techniques used in the capture and handling of freshwater fish. Candidates will also have an opportunity to learn about a range of British freshwater species.

The Unit is suitable for candidates who want to develop or further develop their skills in freshwater fisheries management.

OUTCOMES

- 1 Identify freshwater fish and their main features and describe their functions.
- 2 Describe freshwater fish capture and removal equipment.
- 3 Carry out freshwater fish capture and removal operations.

RECOMMENDED ENTRY

While entry is at the discretion of the centre it would be beneficial if candidates had some previous experience and knowledge of working with fish at a basic level.

CREDIT VALUE

1 credit at SCQF level 5 (6 SCQF credit points at SCQF level 5*).

**SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

Administrative Information

Superclass: SJ

Publication date: May 2009

Source: Scottish Qualifications Authority

Version: 01

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National Unit Specification: general information (cont)

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CORE SKILLS

There is no automatic certification of Core Skills in this Unit.

The Unit provides opportunities for candidates to develop aspects of the following Core Skills:

- ◆ *Communication* (SCQF level 5)
- ◆ *Working with Others* (SCQF level 5)
- ◆ *Problem Solving* (SCQF level 5)

These opportunities are highlighted in the Support Notes of this Unit Specification.

National Unit Specification: statement of standards

UNIT Fish Capture and Handling (SCQF level 5)

Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit Specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

OUTCOME 1

Identify freshwater fish and their main features and describe their functions.

Performance Criteria

- (a) Identify correctly given species of British freshwater fish.
- (b) Identify correctly the external anatomical structures of a given species of fish.
- (c) Describe correctly the functions of the external anatomical structures of a given species of fish.
- (d) Identify correctly the internal anatomical structures of a given species of fish.
- (e) Describe correctly the functions of the internal anatomical structures of a given species of fish.

OUTCOME 2

Describe freshwater fish capture and removal equipment.

Performance Criteria

- (a) Identify correctly commonly used fish capture equipment.
- (b) Describe correctly the operation of fish capture and removal equipment.
- (c) Identify correctly the advantages and disadvantages of fish capture and removal equipment.

OUTCOME 3

Carry out freshwater fish capture and removal operations

Performance Criteria

- (a) Prepare fish capture equipment according to recognised procedures for the technique
- (b) Operate fish capture equipment according to recognised procedures for the technique
- (c) Handle and store captured fish according to recognised procedures causing minimal stress to the fish
- (d) Measure captured fish according to recognised procedures causing minimal stress to the fish
- (e) Record relevant information from the completed fish operations
- (f) Demonstrate safe working practices at all times.

National Unit Specification: statement of standards

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EVIDENCE REQUIREMENTS FOR THIS UNIT

Written and/or oral evidence is required for Outcomes 1 and 2 and Performance evidence supplemented with an assessor observation checklist is required for Outcome 3 to demonstrate that candidates have met the requirements for all Outcomes and Performance Criteria. Evidence will be gathered at appropriate points throughout the Unit.

To achieve Outcome 1, the candidate must:

- ◆ Identify eight species of British freshwater fish by common name
- ◆ For a given species of fish:
 - identify four external features from, for example, fins, operculum, lateral line, nares, gills
 - identify four internal features from, heart, spleen, liver, gall bladder, stomach, intestine, swim bladder, kidney
 - Describe the function of three external features from, for example, fins, operculum, lateral line, nares, gills
 - Describe the function of three internal features from, heart, spleen, liver, gall bladder, stomach, intestine, swim bladder, kidney

The assessment will be carried out under closed-book conditions

To achieve Outcome 2, the candidate must:

- ◆ identify two types of fish capture equipment from, seine net, gill net, trammel net, portable trap, electro-fishing equipment, rod and line
- ◆ describe the operation of two types of fish capture equipment from, seine net, gill net, trammel net, portable trap, electro-fishing equipment, rod and line
- ◆ identify the advantages and disadvantages of two types of capture equipment from, seine net, gill net, trammel net, portable trap, electro-fishing equipment, rod and line

The assessment will be carried out under open-book conditions

To achieve Outcome 3 the candidate must:

- ◆ prepare two types of fish capture equipment from, seine net, gill net, trammel net, portable trap, electro-fishing, rod and line
- ◆ operate two types of fish capture equipment from, seine net, gill net, trammel net, portable trap, electro-fishing, rod and line
- ◆ handle and store fish on three occasions
- ◆ measure captured fish on three occasions
- ◆ demonstrate safe working practices during all practical activities
- ◆ record information from three separate fish capture operations

National Unit Specification: support notes

UNIT Fish Capture and Handling (SCQF level 5)

This part of the Unit Specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT

This is an Optional Unit in the NPA Rural Skills at SCQF level 5 but can also be taken as a stand alone Unit.

The context of this Unit is the use of a range of fish capture equipment and techniques which are commonly employed in the freshwater fisheries management industry. The Unit should provide the information and practical skills to capture, handle, measure and record details of freshwater fish species.

It is important that the practical aspects of the learning takes place involving fish capture and handling in either a work setting or simulated work setting. Partnerships with Land-based colleges, training providers or employers are likely to provide the most appropriate settings.

It is important that the deployment of appropriate learning environments is preceded by a valid risk assessment, particularly identifying any protective personal equipment which the candidate may require.

For Outcome 1 the emphasis is on British freshwater sport fish species, covering those most likely to be encountered in the locality. Species from different families of fish, for example Salmonidae, Cyprinidae, Esocidae and Percidae should ideally be covered.

The anatomy and physiology within the Outcome should develop the candidate's awareness of fish welfare and the importance for careful handling at all stages of capture operations.

For Outcome 2 emphasis should be placed on capture equipment and techniques commonly used in fishery management operations in the locality. Techniques associated with different water types should, however, be covered, such as electro-fishing for running waters and seine netting for still waters. Consideration should also be given to the environmental impact of the different techniques and their direct effects on fish welfare.

Constant emphasis should be placed on the health and safety implications of the use of the equipment and where Codes of Practice exist they must be closely followed.

For Outcome 3 the emphasis should be on the safe use of equipment. Most capture techniques involve a number of different tasks at different stages of the operation and all candidates should have the opportunity to take part in the full range.

Fish welfare should be emphasised at all stages, particularly during storage and handling. It is not intended that candidates become involved with the use of anaesthetics during fish measurement procedures.

National Unit Specification: support notes (cont)

UNIT Fish Capture and Handling

GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

Candidates should be given the opportunity to identify and investigate the anatomy of fish which are of interest to them or form part of their local freshwater fisheries.

The candidate should be familiar with the identification of species from different families of British freshwater sport fish, for example Salmonidae, Cyprinidae, Percidae and Esocidae.

Ideally fish identification should be carried out using live fish during capture operations, but this could be reinforced by the use of colour photographs or line drawings.

Basic laboratory fish dissection sessions could also be used to reinforce the information on fish anatomy.

A range of freshwater fish capture techniques should be covered such as seine netting, gill netting, portable fish traps, electro fishing and the use of rod and line. Visits to or talks from local fishery management organisations (Salmon Trusts and District Salmon Fishery Boards, local angling clubs) should be used to enforce the subject matter and provide local interest.

The health and safety implications associated with the use of the capture techniques should be emphasised at all stages.

The candidate should have the opportunity to use a range of fish capture equipment in a variety of freshwater fishery environments (both still and running water) to highlight the effectiveness of different techniques in different situations.

The field identification and measurement of fish should ideally be carried out using several different species including those of particular local fishery interest to the candidates.

The importance of minimising stress to the fish being handled should be emphasised at all stages.

OPPORTUNITIES FOR CORE SKILL DEVELOPMENT

This Unit offers opportunities for the development of Core Skills in the areas of *Communication* and *Working with Others* during fish capture practical sessions.

Candidates will also have the opportunity to solve problems during practical tasks.

National Unit Specification: support notes (cont)

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GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

Outcome 1 Performance Criteria (a) could be assessed by a closed-book test requiring the candidate to correctly identify 8 species of British freshwater sport fish by common name. This could be done using specimens or high quality coloured photographs or drawings.

Outcome 1 Performance Criterion (b)–(e) could be assessed using a closed-book restricted response test requiring the candidate to correctly identify four external and four internal anatomical structures of a given fish and describe the function of three external and three internal structures.

Outcome 2 could be assessed by a student case study into two contrasting types of fish capture equipment, examining their design, use and advantages and disadvantages. The case study could also cover the impact of the capture technique on the fish.

The case study could be carried out following the delivery of LO3.

Outcome 3 could be assessed by a series of practical exercises and recorded using a checklist relating to the tasks. The checklist should incorporate current recognised practices including the necessary safety awareness when carrying out the practical tasks.

Opportunities for the use of e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

DISABLED CANDIDATES AND/OR THOSE WITH ADDITIONAL SUPPORT NEEDS

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements