



Assessor's Guidelines for the SVQ in Aquaculture at levels 2 and 3

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About this guide

This guide provides some practical examples of how to assess your candidates for the **SVQ in Aquaculture at levels 2 and 3**. You may be able to think of other ways of assessing your candidates and recording your decisions about their competence.

Using assessments based on these examples does not guarantee successful verification — it is still your responsibility to ensure that internal quality assurance procedures are followed.

Introduction

This introduction provides a brief overview of SVQs and how they are assessed in the workplace. If you are already familiar with the concept of SVQs, you may wish to go to the next section.

About SVQs

Scottish Vocational Qualifications (SVQs) are work-based qualifications which set the level of occupational competence for each sector of the economy. The qualifications have been designed by standards-setting bodies — in most cases these bodies are also National Training Organisations (NTOs) — made up of experienced practitioners who represent employers, professional bodies, trade unions, education and voluntary organisations.

Each standards-setting body is responsible for developing national standards which define *what* employees (or potential employees) must be able to do, *how well*, and *in what circumstances*, to show that they are competent in their work.

Each SVQ which a standards-setting body develops has to fit into a broad framework which allows qualifications in the UK and throughout Europe to be compared. SVQs are specified at five levels which reflect the various technical and supervisory skills knowledge and experience, which employees should have as they progress in their industry.

Explanation of levels

- Level 1** Defines competent performance in a range of activities which are largely routine and predictable.
- Level 2** Specifies that competent performance must be shown in a broader range of work activities which are less routine and predictable. The employee will have more autonomy and responsibility, and may have to work as part of a team.
- Level 3** Specifies that competent performance must involve the employee in carrying out a broad range of varied work activities, most of which are complex and non-routine. There is considerable autonomy and responsibility, including the possibility of controlling or guiding others.
- Level 4** Specifies competence as complex technical or professional work activities which require a substantial degree of personal autonomy or responsibility. Managing staff and other resources is often involved.
- Level 5** Specifies competent performance as involving the employee in carrying out a significant range of activities in a wide variety of situations which are often unpredictable. Substantial responsibility and autonomy is involved in the work, which requires decision-making in the allocation of resources and the work of others. This will require complex skills such as analysis, design and evaluation.

How are standards defined in SVQs?

All SVQs consists of standards which can be broken down into various parts.

Units define the broad functions carried out in the sector, and are made up of a number of *Elements*. These Elements describe the activities which employees have to perform, and will require candidates to demonstrate certain skills or knowledge and understanding.

The quality of performance in what people must be able to do — how well they have to perform — is described by *Performance Criteria*. These may also be called *statements of competence* or *what candidates should do*.

The section on *knowledge and understanding* says what candidates must know and understand, and how this knowledge applies to their jobs.

You may also come across standards containing statements on *scope*. These statements could, for example, list the equipment that candidates are expected to be familiar with and use in their occupational area.

Increasingly, you may see changes to this format as standards become more user-friendly and are written in plain English. For example, there may be some standards containing *range statements* or *evidence requirements*, but over time these should disappear. You may, however, find that information on the context, nature and amount of evidence which is required to prove competence (which used to be given in range statements and evidence requirements) is now defined in the *assessment guidance* for the qualification. Assessment guidance is drawn up by the awarding body and is packaged along with the standards to form the SVQ.

Who is involved in SVQs?

The candidate who needs training and qualifications should be at the heart of SVQ delivery. Suitably qualified assessors are required to assess the candidate, and internal verifiers are needed to ensure the consistency in the standards applied by assessors. Instructors, mentors, supervisors, and college lecturers may all be involved in helping to develop the candidate's competence and prepare them for assessment.

Lantra, the body responsible for the Aquaculture standards, has in place external quality control systems to ensure all centres delivering the SVQs are doing so to the required standards.

External verification

An assessment centre which is new to aquaculture training will be visited by an external verifier on at least three occasions during its first year of delivering the NVQ/SVQs in Aquaculture. The external verifier is an individual appointed by SQA to ensure that standards are being applied uniformly and consistently across all centres offering the SVQ.

These vetting visits will check all assessment and internal verification systems thoroughly and provide the necessary support and guidance to ensure Lantra's assessment strategy criteria are satisfied.

For existing centres, the external verifiers will visit at least twice per year. If the centre is having difficulties, support will be offered and the frequency of visits will be increased. The support a centre will be offered will partly depend on its 'risk rating'. Centres where commercial pressures exist to complete SVQs in a prescribed time-frame, and/or where relationships between candidates and assessors or internal verifiers cast doubt on impartiality, will have higher risk ratings.

External verifiers should see at least 20% of candidates or candidates' work at each centre. Where a centre's risk rating is low, the sample size may be reduced — at the external verifier's discretion.

A fish farming company wishing to establish itself as an independent centre for delivering workplace assessment for the SVQs in Aquaculture would need to comply with the assessment and internal verification criteria below.

Assessment and internal verification

The candidate is the person who wants to achieve the SVQ (eg an employee) and the assessor is the person who assesses the candidates and decides if they are competent (the assessor could be a supervisor).

Internal verification must be evident and adequate.

The internal verifier is an individual nominated by the centre (eg a company) who ensures that assessors apply the standards uniformly and consistently (the internal verifier could be the supervisor's line manager).

- ◆ All candidate portfolios should be internally verified.
- ◆ At least one third of evidence in each portfolio should be sampled. Sampling should take place during the development of a candidate's portfolio and not only at the point of signing off.
- ◆ Internal verifiers should observe assessors conducting assessments at least once every six months. The reliability, validity and authenticity of evidence must be checked during these observations.
- ◆ Internal verifiers should produce a verification plan. This plan should demonstrate verification activity and will be made available to the external verifier.

Assessors and verifiers in centres will be asked by SQA to prove they have the appropriate occupational competence to assess and verify the SVQ. This occupational competence is defined by Lantra.

Assessors and verifiers are also expected to obtain an appropriate qualification in assessment and verification — this can be the 'A and V Units' (the national

standards for assessment and verification) or an alternative qualification which SQA recognises.

The steps involved in assessing a candidate for an SVQ

In deciding whether a candidate should get an SVQ, you will go through these stages:

- ◆ planning for assessment
- ◆ generating and collecting evidence of the candidate's competence in the Units
- ◆ judging the evidence of the candidate's ability and making an assessment decision based on the evidence
- ◆ recording the assessment decision and the candidate's achievement

1 The SVQ in Aquaculture

The SVQs in Aquaculture have been developed by Lantra and are intended for people employed in the aquaculture industry.

These people may be working as fish farm husbandrymen or fish farm site supervisors at a hatchery or on-growing site, producing finfish or shellfish. They will require skills and knowledge in the monitoring and control of the rearing environment, fish feeding, health and husbandry.

The SVQs are designed to be assessed in the workplace, or in conditions of the workplace. Examples of the settings or centres in which the SVQs are likely to be delivered include: commercial fish on-growing or hatchery sites, colleges, and other specialist fish husbandry training facilities. Partnerships between colleges and employers can provide an ideal combination of college-based knowledge development with practical skills training in a real work context.

The SVQs are available through a number of different routes, depending upon the species the candidate is working with. The routes are as follows:

Level 2

- ◆ Aquaculture (Cod)
- ◆ Aquaculture (Cyprinid)
- ◆ Aquaculture (Halibut)
- ◆ Aquaculture (Salmon Fresh Water)
- ◆ Aquaculture (Salmon Sea)
- ◆ Aquaculture (Shellfish)
- ◆ Aquaculture (Trout)

Level 3

- ◆ Aquaculture (Fin Fish)
- ◆ Aquaculture (Shellfish)

The SVQ Aquaculture (Trout) Level 2 has been used as an example in this document.

Structure of the SVQs

This section lists the Units which form the SVQ in Aquaculture levels 2 and 3.

Aquaculture (Cyprinid) level 2

SQA Ref NTO Ref

Mandatory Units

F0TW 04	Aqc 1	Prepare and Stock Fish Holding Units (Cyprinid)
F0RJ 04	Aqc 2	Grade Live Fish (Cyprinid)
F0S4 04	Aqc 7	Maintain Aquaculture Facilities (Cyprinid)
F0SL 04	CU52	Maintain the Aquatic Production Environment (Cyprinid)
DD56 04	A	Ensure Your Own Actions Reduce the Risks to Health and Safety
F0RC 04	Aqc 4	Feed Fin Fish (Cyprinid)

Optional Units — 2 required

F0SP 04	CU9	Transport and Maintain Supplies of Physical Resources within the Work Area (Cyprinid)
F0T7 04	CU13	Prepare and Operate Small Craft (Cyprinid)
F0R0 04	CU21	Construct New Structures and Surfaces (Cyprinid)
F0SB 04	CU27	Maintain Equipment and Machines (Cyprinid)
F0TP 04	CU53	Treat Health Problems in Fish (Cyprinid)
F0V7 04	CU54	Produce Eyed Fish Eggs (Cyprinid)
F0VC 04	CU55	Produce Juvenile Fish (Cyprinid)
D2RF 04	PR10	Lift, Transfer and Position Loads
F0T6 04	CU56	Transport Live Fish (Cyprinid)
F0RT 04	Aqc 3	Harvest Fish for Human Consumption (Cyprinid)

Aquaculture (Cod) level 2

SQA Ref NTO Ref

F0TS 04	Aqc 1	Prepare and Stock Fish Holding Units (Cod)
F0RH 04	Aqc 2	Grade Live Fish (Cod)
F0S3 04	Aqc 7	Maintain Aquaculture Facilities (Cod)
F0SK 04	CU52	Maintain the Aquatic Production Environment (Cod)
DD56 04	A	Ensure Your Own Actions Reduce the Risks to Health and Safety
F0RB 04	Aqc 4	Feed Fin Fish (Cod)

Optional Units — 2 required

F0VK 04	CU9	Transport and Maintain Supplies of Physical Resources within the Work Area (Cod)
F0T5 04	CU13	Prepare and Operate Small Craft (Cod)
F0PY 04	CU21	Construct New Structures and Surfaces (Cod)
F0SA 04	CU27	Maintain Equipment and Machines (Cod)
F0TK 04	CU53	Treat Health Problems in Fish (Cod)
F0V5 04	CU54	Produce Eyed Fish Eggs (Cod)
F0VB 04	CU55	Produce Juvenile Fish (Cod)
D2RF 04	PR10	Lift, Transfer and Position Loads
F0T4 04	CU56	Transport Live Fish (Cod)
F0RS 04	Aqc 3	Harvest Fish for Human Consumption (Cod)
D6EW 04	121	Take Personal Emergency Action on Board Ship

Aquaculture (Halibut) level 2

SQA Ref NTO Ref

F0TX 04	Aqc 1	Prepare and Stock Fish Holding Units (Halibut)
F0RL 04	Aqc 2	Grade Live Fish (Halibut)
F0S5 04	Aqc 7	Maintain Aquaculture Facilities (Halibut)
F0SM 04	CU52	Maintain the Aquatic Production Environment (Halibut)
DD56 04	A	Ensure Your Own Actions Reduce the Risks to Health and Safety
F0RD 04	Aqc 4	Feed Fin Fish (Halibut)

Optional Units — 2 required

FOSV 04	CU9	Transport and Maintain Supplies of Physical Resources within the Work Area (Halibut)
F0TB 04	CU13	Prepare and Operate Small Craft (Halibut)
F0R1 04	CU21	Construct New Structures and Surfaces (Halibut)
F0SC 04	CU27	Maintain Equipment and Machines (Halibut)
F0TV 04	CU53	Treat Health Problems in Fish (Halibut)
F0V8 04	CU54	Produce Eyed Fish Eggs (Halibut)
F0VD 04	CU55	Produce Juvenile Fish (Halibut)
D2RF 04	PR10	Lift, Transfer and Position Loads
F0T8 04	CU56	Transport Live Fish (Halibut)
F0RV 04	Aqc 3	Harvest Fish for Human Consumption (Halibut)
D6EW 04	121	Take Personal Emergency Action on Board Ship

Aquaculture (Salmon-Fresh Water) level 2

SQA Ref	NTO Ref	
F0V0 04	Aqc 1	Prepare and Stock Fish Holding Units (Salmon-Fresh Water)
F0RM 04	Aqc 2	Grade Live Fish (Salmon-Fresh Water)
F0S6 04	Aqc 7	Maintain Aquaculture Facilities (Salmon-Fresh Water)
F0SN 04	CU52	Maintain the Aquatic Production Environment (Salmon-Fresh Water)
DD56 04	A	Ensure Your Own Actions Reduce the Risks to Health and Safety
F0RE 04	Aqc 4	Feed Fin Fish (Salmon-Fresh Water)

Optional Units – 2 required

F0SX 04	CU9	Transport and Maintain Supplies of Physical Resources within the Work Area (Salmon-Fresh Water)
F0TD 04	CU13	Prepare and Operate Small Craft (Salmon-Fresh Water)
F0R2 04	CU21	Construct New Structures and Surfaces (Salmon-Fresh Water)
F0SD 04	CU27	Maintain Equipment and Machines (Salmon-Fresh Water)
F0TY 04	CU53	Treat Health Problems in Fish (Salmon-Fresh Water)
F0V9 04	CU54	Produce Eyed Fish Eggs (Salmon-Fresh Water)
F0VF 04	CU55	Produce Juvenile Fish (Salmon-Fresh Water)
F0TA 04	CU56	Transport Live Fish (Salmon-Fresh Water)
D2RF 04	PR10	Lift, Transfer and Position Loads

Aquaculture (Salmon-Sea) level 2

SQA Ref	NTO Ref	
F0V3 04	Aqc 1	Prepare and Stock Fish Holding Units (Salmon-Sea)
F0RN 04	Aqc 2	Grade Live Fish (Salmon-Sea)
F0S7 04	Aqc 7	Maintain Aquaculture Facilities (Salmon-Sea)
F0ST 04	CU52	Maintain the Aquatic Production Environment (Salmon-Sea)
DD56 04	A	Ensure Your Own Actions Reduce the Risks to Health and Safety
F0RF 04	Aqc 4	Feed Fin Fish (Salmon-Sea)

Optional Units — 2 required

F0T0 04	CU9	Transport and Maintain Supplies of Physical Resources within the Work Area (Salmon-Sea)
F0TH 04	CU13	Prepare and Operate Small Craft (Salmon-Sea)
F0R3 04	CU21	Construct New Structures and Surfaces (Salmon-Sea)
F0SF 04	CU27	Maintain Equipment and Machines (Salmon-Sea)
F0V1 04	CU53	Treat Health Problems in Fish (Salmon-Sea)
F0RW 04	Aqc 3	Harvest Fish for Human Consumption (Halibut)
D6EW 04	121	Take Personal Emergency Action on Board Ship
F0TC 04	CU56	Transport Live Fish (Salmon-Sea)
D2RF 04	PR10	Lift, Transfer and Position Loads

Aquaculture (Shellfish) level 2

SQA Ref	NTO Ref	
F0V4 04	Aqc 1	Prepare and Stock Fish Holding Units (Shellfish)
F0RP 04	Aqc 2	Grade Live Fish (Shellfish)
F0S8 04	Aqc 7	Maintain Aquaculture Facilities (Shellfish)
F0SW 04	CU52	Maintain the Aquatic Production Environment (Shellfish)
DD56 04	A	Ensure Your Own Actions Reduce the Risks to Health and Safety
F0TF 04	CU56	Transport Live Fish (Shellfish)

Optional Units — 2 required

F0T2 04	CU9	Transport and Maintain Supplies of Physical Resources within the Work Area (Shellfish)
F0TJ 04	CU13	Prepare and Operate Small Craft (Shellfish)
F0R4 04	CU21	Construct New Structures and Surfaces (Shellfish)
F0SG 04	CU27	Maintain Equipment and Machines (Shellfish)
F0PX 04	Aqc5	Conduct Shellfish Depuration Operations (Shellfish)
D6EW 04	121	Take Personal Emergency Action on Board Ship
F0PW 04	Aqc6	Collect Wild Shellfish Spat
D2RF 04	PR10	Lift, Transfer and Position Loads

Aquaculture (Trout) level 2

SQA Ref	NTO Ref	
F0V6 04	Aqc 1	Prepare and Stock Fish Holding Units (Trout)
F0RR 04	Aqc 2	Grade Live Fish (Trout)
F0S9 04	Aqc 7	Maintain Aquaculture Facilities (Trout)
F0SY 04	CU52	Maintain the Aquatic Production Environment (Trout)
DD56 04	A	Ensure Your Own Actions Reduce the Risks to Health and Safety
F0RG 04	Aqc 4	Feed Fin Fish (Trout)

Optional Units — 2 required

F0T3 04	CU9	Transport and Maintain Supplies of Physical Resources within the Work Area (Trout)
F0TN 04	CU13	Prepare and Operate Small Craft (Trout)
F0R5 04	CU21	Construct New Structures and Surfaces (Trout)
F0SJ 04	CU27	Maintain Equipment and Machines (Trout)
F0V2 04	CU53	Treat Health Problems in Fish (Trout)
F0VA 04	CU54	Produce Eyed Fish Eggs (Trout)
F0VG 04	CU55	Produce Juvenile Fish (Trout)
F0TG 04	CU56	Transport Live Fish (Trout)
D2RF 04	PR10	Lift, Transfer and Position Loads
F0RX 04	Aqc 3	Harvest Fish for Human Consumption (Trout)

Aquaculture (Fin Fish) level 3

SQA Ref	NTO Ref	
F0VH 04	Aqc 9	Regulate the Aquatic Production Environment (Fin Fish)
F0S0 04	Aqc10	Implement the Production of Farmed Fish for Sale or Transfer (Fin Fish)
D9CG 04	CU3	Promote, Monitor and Maintain Health, Safety and Security
F0RY 04	Aqc8	Implement Fin Fish Regimes

Optional Units — 2 required

F0R9 04	Aqc13	Control the Implementation of Health Programmes and Fish Treatments (Fin Fish)
F0T9 04	CU13	Prepare and Operate Small Craft (Fin Fish)
F0TT 04	CU53	Treat Health Problems in Fish (Fin Fish)
F0R6 04	Aqc14	Control Fish Hatchery Production (Fin Fish)
D6EW 04	121	Take Personal Emergency Action on Board Ship
DR75 04	B6	Provide Leadership in Your Area of Responsibility
DR3Y 04	D6	Allocate and Monitor the Progress and Quality of Work in Your Area of Responsibility

Aquaculture (Shellfish) level 3

SQA Ref	NTO Ref	
F0VJ 04	Aqc 9	Regulate the Aquatic Production Environment (Fin Fish)
F0S1 04	Aqc10	Implement the Production of Farmed Fish for Sale or Transfer (Fin Fish)
D9CG 04	CU3	Promote, Monitor and Maintain Health, Safety and Security

Optional Units — 3 required

F0T1 04	Aqc11	Organise Shellfish Spat Collection
F0TJ 04	CU13	Prepare and Operate Small Craft (Shellfish)
F0R8 04	Aqc12	Control Shellfish Depuration Operations
F0R7 04	Aqc14	Control Fish Hatchery Production (Shellfish)
F0PX 04	Aqc5	Conduct Shellfish Depuration Operations
D6EW 04	121	Take Personal Emergency Action on Board Ship
DR75 04	B6	Provide Leadership in Your Area of Responsibility
DR3Y 04	D6	Allocate and Monitor the Progress and Quality of Work in Your Area of Responsibility

An assessment strategy for the SVQ

As part of its review of the SVQ(s) in Aquaculture levels 2 and 3, the standards-setting body Lantra has developed an assessment strategy which defines a range of requirements:

- ◆ the occupational expertise of assessors and verifiers
- ◆ a definition of simulation
- ◆ definition of the workplace
- ◆ information on a model of independent assessment or external quality control

The relevant extracts from this assessment strategy are given on SQA's website (www.sqa.org.uk). Both SQA and our centres must comply with these requirements.

Why would people be interested in the SVQ?

People will take SVQs for a variety of reasons: to get promotion, to prove their job competence, or for personal development. There will be other reasons too. One of the first things to do is to find out why your candidates want to do the SVQ, and to advise them of the appropriateness of the qualification. If anyone is acting as a coach or mentor to your candidates, they might help you to do this.

How do candidates begin?

Choosing the SVQ

You should make sure that candidates get guidance before starting out on an SVQ — they need advice to ensure that their existing job remit, skills, experience, and their plans for progression, are matched to the SVQ selected. It does not have to be you as the assessor, who carries out the matching process, but whoever has responsibility for this should ensure that the assessment opportunities available to the candidate are also considered.

An example

John had worked as a general fish farm worker for three years but did not possess any formal qualifications. He wanted to do a qualification which would give him national recognition for the skills he already had. As he had a lot of experience in both feeding and caring for fish, in both the trout hatchery and on the earth pond on-growing site, the fish farm owner advised him to consider a level 2 SVQ in Aquaculture with a view to progressing rapidly to level 3.

When the fish farm owner matched John's job remit and existing skills and experience with the SVQ, it emerged that John should be able to generate sufficient evidence to meet the requirements of four of the SVQ Units:

- ◆ Prepare and Stock Fish in Holding Units
- ◆ Grade Live Fish
- ◆ Feed Fin Fish
- ◆ Maintain Aquaculture Facilities

The owner arranged for an assessor from the largest trout farming company in the region to provide John with guidance on how to collect evidence and construct a portfolio to achieve these Units.

John also had some experience in relation to three further Units, though some planning would be required to provide him with the opportunity to demonstrate competence in these areas. These Units were:

- ◆ *Transport Live Fish*
- ◆ *Treat Health Problems in Fish*
- ◆ *Ensure Your Own Actions Reduce Risks to Health and Safety*

The owner arranged for the assessor to accompany John on a fish delivery to observe and assess him for the first of these Units. A simulated fish parasite treatment was set up for the assessment of the second Unit, and plans were made to assess the third Unit through a combination of observation, questioning and assessment of work products.

John had no experience of the areas covered by the final Unit, which was:

◆ *Maintain the Aquatic Production Environment*

Since John's job remit would not cover this area of the SVQ, the owner arranged for him to attend a local specialist college with a longstanding reputation in educating and training aquaculturalists. Here he would receive practical skills training and develop the knowledge required to underpin his fish husbandry skills.

All these arrangements were agreed by everyone involved and then written up in an assessment plan for John.

2 Preparing to assess the SVQ

This section offers practical advice on how to begin to go about assessing your candidates for the SVQ in Aquaculture levels 2 and 3. This advice is offered as examples of good practice — you may develop your own approaches to assessing your candidates which also work well.

Your role and your candidate's role

Assessing the SVQ will involve several stages. Both you and the candidate should be clear on your roles in the assessment process before you begin.

Your role

- ◆ ensure candidates understand what is to be assessed and how it is to be assessed
- ◆ ensure the conditions and resources required for assessment are available
- ◆ help candidates to identify and gather evidence
- ◆ observe and record candidates carrying out the activities described in the standards — records should say what has been observed, how it was carried out, and what it demonstrates
- ◆ assess products of the candidate's own work
- ◆ question candidates and record results
- ◆ help candidates to present evidence
- ◆ authenticate the evidence candidates provide
- ◆ judge evidence and make assessment decisions
- ◆ identify gaps or shortfalls in candidates' competence
- ◆ provide feedback to candidates throughout the assessment process
- ◆ record achievement

Candidates' role

- ◆ prepare for assessment — become familiar with the standards, what is to be assessed and how it is to be assessed
- ◆ help to identify sources of evidence and how these could be assessed
- ◆ carry out activities, and/or produce products of own work, and/or answer questions
- ◆ gather and present evidence
- ◆ receive and act on feedback from the assessor

Planning

In planning for assessment, you will find it helpful to meet with your candidate and plan what is to be assessed, in what way, and when and where the assessment is to take place. This discussion can be confirmed in the form of an agreed assessment plan between you and your candidate.

You should treat assessment plans as working documents — they can be updated and changed as you review progress with your candidate.

As you are planning assessment, don't forget to make the most of opportunities to *integrate* assessment. This means planning to assess an activity which draws on the contents of different Units or Elements. It can be a practical and cost-effective way of assessing your candidate's competence.

If you are a new assessor working towards your 'D-Units' (the national standards in assessment and verification) you will need copies of completed assessment plans as part of your evidence.

To help you plan for assessment, we have produced an assessment plan for the SVQ in Aquaculture levels 2 and 3 and which covers Unit(s) CU53.2 *Treat fish* and Aqc4.1 *Feed fish*. You will notice that we have included spaces to enter dates when the assessment plan has been reviewed. Any gaps identified during these reviews should be discussed with your candidates and noted for action in the assessment plan.

Assessment plan (example 1)

Units: CU53 Treat Health Problems in Fish Aqc4 Feed Fin Fish					
Elements: CU53.2 Treat Fish Aqc4.1 Feed Fish					
Activities	PCs	Method of assessment/Sources of evidence	Date of assessment	Evidence already available	Links to other Units (PCs and range)
Administer antibiotics systemically through feeding fish stock a diet treated with an appropriate dose of antibiotics.	CU53.2 PC 1,2,3,8	Observation of treatment of feed and feeding of fish stock	2.3.2002	None	Aqc4.1 Feed fish PC 1,2,3,4,5,8
Questioning for knowledge and understanding not apparent from performance to be identified from 2 nd review	Question the reason for only half the normal ration being fed to the fish being treated				

Assessor's signature: *Martyn Haines*

1 review due: *20.4.2002*

Candidate's signature: *John Salmon*

2 review due: *20.5.2002*

Date of agreement: 1.3.2002

Date of completion:

Selecting methods of assessment

The methods of assessment you use should be valid, reliable and practicable:

- ◆ by *valid* we mean that the assessment method should be appropriate to the standards
- ◆ by *reliable* we mean that the assessment method should ensure consistent results when used with different candidates, different assessors and on different occasions
- ◆ by *practicable* we mean that the method ensures that the assessment makes best use of available resources, equipment and time

Before you assess a candidate, you must make sure that the methods of assessment you have chosen to use, along with any assessment materials (such as questions and sample answers) have been agreed within your centre through its system of internal quality assurance. This system is often called *internal verification* — its purpose is to help to ensure that assessment methods are valid, reliable and practicable.

There are both benefits and challenges when you are assessing SVQs in the workplace, or in conditions in the workplace. When you select methods of assessment, you should try to offer the candidate the benefits of workplace assessment and minimise any potential difficulties.

The benefits might be:

- ◆ continuity and regularity of fish stock observations
- ◆ experience gained over time of a range of environmental conditions and the effect of changes on stock behaviour
- ◆ a wide range of stock size classes available, ensuring a wider experience
- ◆ ready access to a mentor on-site, experienced in fish husbandry and site operations
- ◆ exposure to ‘state of the art’ technology
- ◆ opportunity to demonstrate the ability to transfer the skills developed to new situations on farm

The challenges might be:

- ◆ difficulty in planning and accessing assessment during seasonally busy periods on farm
- ◆ the difficulty in gaining the breadth of experience required to complete the SVQ
- ◆ difficulty in getting accurate judgements of competence by trained assessors and verification from trained verifiers

An example

You might agree with a candidate working on a trout farm, who has to demonstrate how to treat fish suffering from a disease, that this will be carried out by **observation** when a batch of fish are undergoing a treatment regime. If you are an assessor who is working alongside the candidate, you should be well placed to observe the candidate's performance, perhaps using a prepared checklist, and to question the candidate about the situation afterwards.

Methods of assessment

Assessment can involve a range of assessment methods. For SVQs, some of the most commonly used methods are observation, product evaluation, and questioning.

Observation

Observation by an assessor is considered the most valid and reliable method of assessment. It can be organised in a variety of ways:

- ◆ working alongside the candidate
- ◆ arranging to visit when naturally-occurring activities are carried out by the candidate
- ◆ arranging for activities to take place

Observation by the assessor can often be supplemented by other assessment methods, such as questioning. For example, it may be appropriate to ask oral questions of candidates as they carry out naturally-occurring activities. For example:

- ◆ Observation of egg-stripping activity, supplemented by questions about the reasons for not applying excess physical pressure to the fish when stripping the eggs.
- ◆ Observation of a fish size grade, supplemented by questions on the physical signs of stress in crowded fish stocks.

Product evaluation

As candidates work towards achieving the SVQ, they will produce evidence in the form of products of their work. The nature of this evidence can vary widely depending on what the candidate's job entails, but examples of product evidence include:

- ◆ Graded fish stock, sampled to determine whether they meet the precise grade specification.
- ◆ Actual fish numbers, ascertained following a harvest or fish movement, and reconciled with the fish population number in the stock records, established by the candidate to determine the accuracy of their sample weighing and stock calculations.

Questioning

Candidates must show that they can meet the knowledge specifications for the SVQs. For these SVQs, knowledge and understanding is specified for each Element. Much of the knowledge and understanding will be apparent from what candidates do or produce as part of their work. However, this will not always be the case, and questioning can be a useful way of confirming what candidates know and understand.

Questions can be asked in a variety of forms, such as oral questions, short answer written questions, and multiple choice.

You should be careful that the method of questioning does not go beyond the competence required for the SVQ and become a barrier to fair assessment. For example, some candidates will feel more comfortable with oral questions than written.

Examples

Unit Aqc4 Feed Fin Fish

During fish feeding, the candidate could be asked why ensuring a good 'spread' of feed was important in a densely stocked holding unit.

Answer: To ensure all of the individuals in the population get the same feeding opportunity and the feed supply is not dominated by the most dominant and aggressive feeders.

Unit Aqc2

During a fish grade, a candidate could be asked how they could tell from observations of the fish stock behaviour that the fish were too crowded, and that this was causing unacceptable levels of stress.

Answer: The fish would become listless, crowd the surface or inlet to the water supply, and start hyperventilating and gasping.

Other methods of assessment

These methods, like questioning, are often used for authentication. See section 3 for more about authenticating candidates' evidence.

Personal statements

As an assessor, you may find it helpful to ask a candidate to give an account of why they did an activity in a certain way or how they produced a product of their work. This is often referred to as a *personal statement*. You should take care to ensure that by asking candidates to produce such statements, you are not asking them to demonstrate competence beyond what is required by the standards. You should also be selective in the use of personal statements, and make sure they have not been produced as a substitute to a more valid, reliable and practical method of assessment.

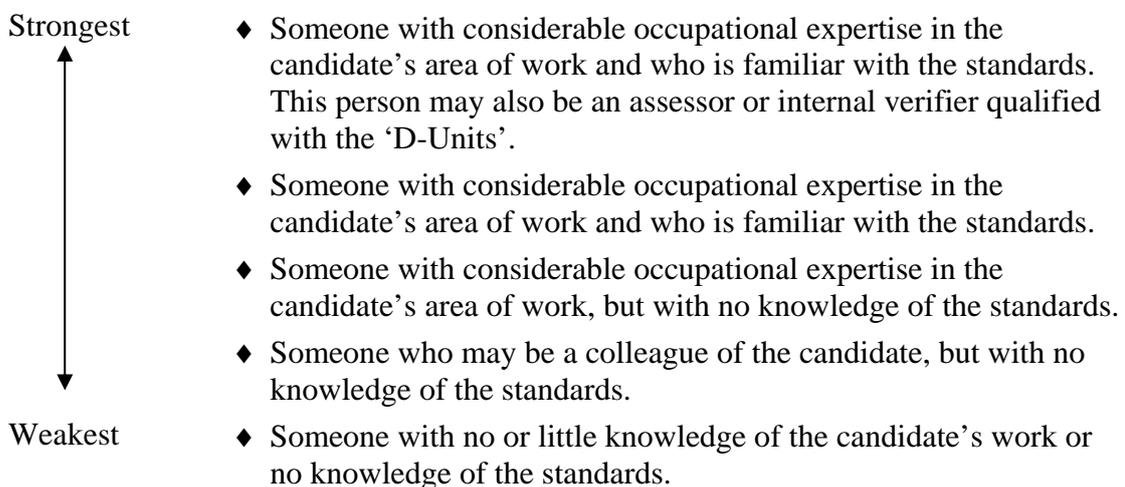
Personal statements could be used in a number of situations relating to regular routine husbandry operations. For example, a candidate could describe and record the appetite of the farm's fish stocks, with reference to observations of feeding behaviour and environmental conditions. Reasons for variable appetite between stocks could be explained in the context of each stock's recent history, and this could be used to demonstrate the candidate's fish stock awareness.

For candidates working towards the level 3 qualification, the personal statement is a particularly useful means of evidence gathering. Candidates will be working in a supervisory capacity and can be expected to keep records as a routine part of their farm duties. Many of these records, particularly feeding regimes, fish movements, and production plans, could be recorded and authenticated by the farm owner or senior manager as evidence of competence for supervisory Units.

Witness testimony

For practical reasons, you may not be able to observe all the activities carried out by your candidates, but might feel that other people may be able to provide a statement on what your candidates have been doing or producing as part of their work. Statements of this kind are often called *witness testimony*, and are often used to support other evidence produced by candidates. If witness testimony is used, you should, ideally, identify witnesses and opportunities for using their testimony as part of assessment planning.

You should bear in mind that the weight of the evidence will vary, depending on the knowledge and expertise of the person providing the witness testimony. You will have to take these factors into account as you make your judgement.



Witness testimony is unlikely to be sufficient in itself for a decision about the candidate's competence, and would normally be supplemented by questioning candidates.

The activities which witness testimony lends itself to are those which are repeated frequently and as a team exercise, allowing ample opportunity for observation by the team leader or experienced colleagues. For example, fish movement and handling is a regular activity over the year on a farm. The testimony of other team

members would reveal the candidate's awareness of stress in fish stocks during handling exercises, and their ability to reduce stress to tolerable levels.

Simulation

Simulation is any structured assessment exercise involving a specific task which reproduces real-life situations.

On some occasions, it may not be practical to assess a candidate in real work. Examples might be where the standards require candidates to carry out emergency or contingency procedures, or where client confidentiality is an issue, or where a candidate's job role does not cover all aspects of the qualification.

Lantra has defined what it regards as simulation, and has specified in the standards when simulation is and is not acceptable. The standards also state when candidates must demonstrate competence in the workplace.

For more details on simulation and what constitutes performance in the workplace, look at the assessment strategy in SQA's website (www.sqa.org.uk).

A number of activities can be realistically simulated, allowing the candidate an opportunity to demonstrate their competence. For example, Unit Aqc4.2 *Collect Information on Fish Growth*, a fish growth assessment could be simulated to demonstrate the candidate's accuracy in recording data and performing routine stock calculations.

CU53.2 *Treat Fish* could also be simulated. The addition of antibiotic to fish feed could be simulated to demonstrate the process of measurement, calculation, and the addition of the correct dose of antibiotic to the feed.

Other sources of evidence

Other sources of evidence may come from previous experience or learning, case studies, or assignments.

SQA's *Guides to assessment and quality assurance* have more advice on methods of assessment and how to ensure that your assessment is valid, reliable and practicable.

3 Generating evidence

The methods of assessment you use should generate sufficient evidence to demonstrate the candidate's competence.

We described earlier the circumstances in which you might choose to use different methods of assessment. Starting on the next page, this section gives you examples of forms which you can use to record and present evidence of:

- ◆ observation (by the assessor)
- ◆ questions and candidate responses
- ◆ personal statement (produced by the candidate)
- ◆ witness testimony

There are blank forms which you can copy and use in assessment, in Appendix 1.

The nature of evidence gathered will vary according to the level of qualification sought. For the level 2 SVQ, observation of performance, and witness testimony, will often be the main methods of evidence-gathering because candidates are judged on their ability to conduct hands-on tasks. For the level 3 SVQ, product evidence and personal statements, authenticated by a senior manager or farm owner will also be a significant source of evidence because candidates are responsible for planning routine operations, and much of this evidence will be in the form of documents. In some cases, documents produced as a part of the supervisor's normal work activity could complement a personal statement and be submitted as supporting evidence.

Methods of assessment

On the next few pages, there are examples of the sorts of document you can use to record candidates' evidence and your assessment decisions.

Observation

For observation, note that the form asks you to record the skills and activities observed. This helps you to make a judgement on how the activity was carried out and what it demonstrates.

Observation record

Unit/Element(s): CU53.2

Candidate: John Salmon

Date of observation: 1.3.2002

Evidence index number: 1

Skills/activities observed:	PCs covered:
The candidate was observed treating 300 kg of 20 g trout stock by administering antibiotics in the feed. The calculation of the dose, addition of antibiotic to the feed and administering the feed to the fish was observed.	CU53.2 PC 1,2,3 and 8

Knowledge and understanding apparent from this observation:
A knowledge of dose rates, the method of adding antibiotics to feed and hand feeding technique was apparent.

Other Units/Elements to which this evidence may contribute:
Aqc4.1 Feed fish

Assessor's comments and feedback to candidate:
The antibiotic dose was calculated accurately, mixed evenly with the appropriate quantity of feed ensuring even application. The feed was fed to the fish at an appropriate rate taking account of their state of health, to ensure all of the antibiotic was ingested.

I can confirm the candidate's performance was satisfactory.

Assessor's signature: *Martyn Haines* Date: 1.3.2002

Candidate's signature: *John Salmon* Date: 1.3.2002

Questions and responses

This form can be used to record any questions you might ask the candidate to establish what they know and understand. You should note the candidate's responses on this form too.

Note that there is a space near the top of the form for you to record when, where, how and why you asked the questions.

Where you want to give the candidate written questions, this form could also be used.

Record of questions and candidate's answers

Unit: Aqc2 Grade Live Fish	Element(s): Aqc2.1
Evidence index number: 2	
<p>Circumstances of assessment: During a fish grade, following initial fish capture and crowding, prior to starting the grade.</p>	
<p>List of questions and candidate's responses:</p> <p>Q: What are the signs of stress in a stock of fish that have been crowded prior to grading.</p> <p>A: Fish get listless, swim to the surface, gasp and hyperventilate, ie rapid movement of the operculum, (gill cover) is observed.</p> <p>Q: What can be done to reduce stress to fish when populations are crowded.</p> <p>A: More space can be provided, ie reduce the density of the crowded stocks. Also, water flow or aeration of the water can be used to ensure additional oxygen is brought to the stocks when they are crowded prior to handling.</p>	
Assessor's signature:	<i>Martyn Haines</i> Date: 2.3.2002
Candidate's signature:	<i>John Salmon</i> Date: 2.3.2002

Candidate's personal statement

If used, a personal statement should always be completed by the candidate. The statement should record what they did, how and why they chose to carry out an activity or produce work in a certain way. Where other people may have been present during an activity and they may be able to provide witness testimony, the candidate should record how the statement links to other evidence in the column provided.

Personal statement

Date	Evidence index number	Details of statement	Links to other evidence (enter numbers)	Unit, Elements, PCs covered
20.3.02	3	<p>Week starting 13.3.2002</p> <p>Most fish were feeding well through the week in good conditions; water temperature 16 c., high water clarity and light winds.</p> <p>Two of the farm stocks were not feeding well on 14.3.2002.</p> <p>Cage 9 would not come to the feed as they were doing the day before. I think this was because herons had been mobbing the cage, as I observed one landing on the walkways on my way back to dock.</p> <p>Cage 3 was feeding better than the previous day but was still very slow. This was six days after antibiotic treatment. Mortalities stabilised at six to 10 per day by 16.3.2002 and the appetite of the stock noticeably improved from then on during the week.</p> <p>The records of feed fed and appetite were reported to the site supervisor each day.</p>	N/A	Aqc4.1 Feed fish PC 4,5 and 8

Signed (candidate): *John Salmon*

Date: 21.3.2002

Witness testimony

Remember that witness testimony must be capable of being authenticated — even if the testimony itself is being used to authenticate a candidate's claim to competence.

To make sure the witness testimony is genuine, you must ensure that you have a record of who is acting as a witness, their relationship to the candidate (eg supervisor, client) address, telephone number and the date. There are spaces for this information in the form.

Witness testimony

SVQ title and level:	Aquaculture Level 2
Candidate:	John Salmon
Evidence index no:	4
Index no of other evidence which this testimony relates to (if any):	N/A
Element(s):	Aqc2.2
Date of evidence:	24.3.2002
Name of witness:	Tim Trout
Designation/relationship to candidate:	Supervisor
Details of testimony: I have observed John netting, handling and moving stock of a range of sizes from fingerling to harvest fish during six to eight operations, over the previous two months. John has demonstrated a great sensitivity to the fish and awareness of fish stress. At all times he has taken appropriate remedial action when working with fish without having to be directed. On two occasions he raised the water flow rates to alleviate stress and on a third occasion in difficult warm water conditions, he took the additional precaution of aerating the holding tank.	
I can confirm the candidate's evidence is authentic and accurate.	
Signed by witness:	<i>Tim Trout</i>
Date:	<i>24. 8. 2002</i>

Please tick the appropriate box:

Witness:

- Holds A1 or D32/D33 qualifications
- Is familiar with the SVQ standards to which the candidate is working

Filling the gaps

It may be that your candidate has provided evidence for most of the Unit (or SVQ), but there are some gaps. For example, you may find in assessing the candidate that certain situations have not arisen during assessment, such as handling contingencies. Often such contingencies relate to dealing with health and safety issues or unexpected problems with workflow like delays in receiving information from another part of the organisation.

In this SVQ, such gaps are likely to occur in generating evidence for 004 *Harvesting Fish for Human Consumption* if candidates are working on a restocking trout farm

You may be able to overcome these by:

- ◆ Simulation, staging a small scale harvest on the farm, killing and preparing fish for storage, supplemented by appropriate questioning to demonstrate the candidate could perform the same operation on a commercial scale.
- ◆ Organising experience on a neighbouring table trout farm where harvests, fish slaughter and preparation for storage are regular operations.

Guidance and support to candidates

At all times during the assessment process — from planning through to making your assessment decision — feedback should be on-going, clear and constructive. Feedback should be given against the national standards by relating it to the evidence provided, including the knowledge specifications.

Where there are any shortfalls in a candidate's competence, you should discuss these with your candidate and make plans for re-assessment.

Judging candidate evidence and making an assessment decision

In judging candidate evidence, you must be satisfied that your candidates can work consistently to the required standard, and that the evidence they have produced is their own. You must consider whether your candidate understands and applies the knowledge evidence and how this links to performance evidence.

Evidence must:

- ◆ be relevant to the SVQ
- ◆ be authentic
- ◆ show current competence
- ◆ be sufficient to help you form a decision about the candidate's competence

Insufficient evidence

You have to judge whether the candidate has produced enough evidence required by the standards for you to reach a decision about their evidence.

Where there is insufficient evidence, you should say this to your candidate. You should tell them that it is not that they are not yet competent — there is simply not enough evidence on which to make a decision.

In this situation, your feedback to your candidates must help them produce more evidence and/or plan for further assessment.

Authenticating candidates' evidence

Authentication is required where you have not observed candidates' performance at first hand.

You can check whether a candidate has produced evidence which they claim shows their competence by questioning them or, if this is appropriate, asking them to produce a personal statement, using witness testimony, or seeking peer reports from colleagues.

An example

Authentication could be needed when determining the accuracy of a candidate's fish behaviour observations during feeding, following fish movement, or treatment activities. An experienced fish husbandryman could verify that the observations and any deductions made were accurate.

4 Recording achievement

You should retain all evidence — clearly referenced — for internal and external verification.

The candidate's evidence is normally kept in a file, often called a *portfolio*. These documents help you and your candidates to collect, present and cross-reference the evidence to the national standards. They are also a means of recording your assessment decisions, and they tell an external verifier what stage a candidate has reached in achieving the SVQ.

There are a few SVQs where you are strongly recommended to use the nationally-devised recording documents. Should you choose to use your own material, this has to be approved by us or by the awarding partner (where this is a requirement). For all other SVQs, you can use your own recording documents so long as they meet with our quality assurance requirements.

Recording documents do not need to be paper-based — it is possible to use an electronic format for collecting and structuring the evidence. Whatever format you and your candidates choose to use, the documents must show what evidence was generated, the assessment decisions you made, how the evidence meets the standards, and where the evidence can be located. You should avoid photocopying items simply to put them in a portfolio — a clear explanation of where the evidence can be found (for example, in a filing cabinet) may be sufficient for the external verifier to follow it up and include it in the visit.

There are various reasons why record keeping is so important:

- ◆ it provides a way of tracking a candidate's progress in achieving an SVQ
- ◆ it helps candidates to make claims for certification of their competence
- ◆ internal verifiers and external verifiers use the records to sample assessment decisions
- ◆ it helps us to monitor the quality assurance of our qualifications

If your candidates' evidence is incomplete, or cannot be located, or if there is inaccurate cross-referencing to the standards, there is a risk that an internal verifier or external verifier will be unable to confirm your assessment decisions.

5 Further information

What else should I read?

The publications listed here provide additional information on how to implement SVQs. Details of these and other SQA publications are available on our website at www.sqa.org.uk on the 'Publications, Sales and Downloads' section. They can be ordered from SQA's Customer Contact Centre — telephone 0845 279 1000. Please note that there may be a charge for some of these publications.

Assessor/Verifier Units: assessment guidance

External Assessment Moderation in National Qualifications and Higher National Qualifications: a guide for centres

Guide to Assessment and Quality Assurance for Colleges of Further Education

Guide to Assessment and Quality Assurance for Employers and Training Providers

Arrangements for Candidates with Disabilities and/or Additional Support Needs in Examinations and Assessments

Quality Assurance Principles, Elements and Criteria

Operational Help Centre

The Operational Guide for Centres has been replaced by the online Operational Help Centre on www.sqa.org.uk

Appendix 1: Blank recording forms

Unit:

Element:

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:

Date:

Assessor:

Date:

Internal Verifier:

Date:

Personal statement

Date	Evidence index number	Details of statement	Links to other evidence (enter numbers)	Unit, Elements, PCs covered

Signed by candidate:

Date:

Observation record

Unit/Element(s):

Candidate:

Date of observation:

Evidence index number:

Skills/activities observed:	PCs covered:

Knowledge and understanding apparent from this observation:
--

Other Units/Elements to which this evidence may contribute:
--

Assessor's comments and feedback to candidate:

I can confirm the candidate's performance was satisfactory.

Assessor's signature:

Date:

Candidate's signature:

Date:

Witness testimony

SVQ title and level:	
Candidate's name:	
Evidence index no:	
Index no of other evidence which this testimony relates to (if any):	
Element(s):	
Date of evidence:	
Name of witness:	
Designation/relationship to candidate:	
Details of testimony:	
I can confirm the candidate's evidence is authentic and accurate. Signed by witness: _____ Date: _____	

Witness (please tick the appropriate box):

Holds A1 or D32/D33 qualifications

Is familiar with the SVQ standards to which the candidate is working

Record of questions and candidate's answers

Unit:	Element(s):
Evidence index number:	
Circumstances of assessment:	
List of questions and candidate's responses:	
Assessor's signature:	Date:
Candidate's signature:	Date: