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MSC SUSTAINABLE FISHERIES CERTIFICATION

On-Site Surveillance Visit - Report for Shetland & Scottish Mainland Rope Grown Mussel Enhanced Fishery



2nd Annual Surveillance Report

July 2014

Prepared For:

**The Scottish Shellfish Marketing Group Ltd (SSMG) &
Seafood Shetland**

Prepared By:

Food Certification International Ltd



Assessment Data Sheet

Certified Fishery	Shetland & Scottish Mainland Rope Grown Mussel Enhanced Fishery
Fishery Management Agency	Shetland Island Council and a number of Scottish Mainland councils including Argyll & Bute Council and Highland Council
Species	Blue Mussel
Fishing Method	Rope Grown
Certificate Code	F-FCI-0026
Certification Date	26.06.2012
Certification Expiration Date	25.06.2017
Certification Body	FOOD CERTIFICATION INTERNATIONAL Ltd Findhorn House, Dochfour Business Centre Dochgarroch, Inverness, IV3 8GY, Scotland, UK Tel: +44(0)1463 223 039 MSC Fisheries Department Email: fisheries@foodcertint.com Web: www.foodcertint.com
Surveillance Stage:	2nd Annual Surveillance Report
Surveillance Date:	17.06.14

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1. Introduction

The purpose of the annual Surveillance Report is fourfold:

1. to establish and report on whether or not there have been any material changes to the circumstances and practices affecting the original complying assessment of the fishery;
2. to monitor the progress made to improve those practices that have been scored as below “good practice” (a score of 80 or above) but above “minimum acceptable practice” (a score of 60 or above) – as captured in any “conditions” raised and described in the Public Report and in the corresponding Action Plan drawn up by the client;
3. to monitor any actions taken in response to any (non-binding) “recommendations” made in the Public Report;
4. to re-score any Performance Indicators (PIs) where practice or circumstances have materially changed during the intervening year, focusing on those PIs that form the basis of any “conditions” raised.

Please note: The primary focus of this surveillance audit is to assess changes made in the previous year. For a complete picture, this report should be read in conjunction with the Public Certification Report for this fishery assessment and the 1st annual Surveillance Report.

2. General Information

2.1 Certificate Holder details

Certificate holder: The Scottish Shellfish Marketing Group Ltd (SSMG) & Seafood Shetland

Address: **The Scottish Shellfish Marketing Group Ltd (SSMG)**

Unit 8, Block 22

The Motherwell Food Park

Bellshill, ML4 3NP

Seafood Shetland

Stewart Building

Lerwick

Shetland, ZE1 0LL

Contact Name: Ruth Henderson

Tel: +44(0) 1595 693 644

Email: ruth@fishuk.net

2.2 General Background about the fishery

2.2.1 Area Under Evaluation

The fishery takes place in the Shetlands Islands and Scottish coastal waters ranging from Argyll to Sutherlands.

2.2.2 Fishery Ownership & Organisational Structure

While establishing the Zetland County Council (ZCC) Act of 1974, Viscount Gormoyle intimated to then ZCC Chief Executive, Ian Clark, that Shetland would be an ideal location to develop an aquaculture industry. This was encouraged in 1975-76. The Highlands and Islands Development Board had also seen the potential for aquaculture in Shetland's waters and several experimental mussel rafts were deployed at sites including Ronas Voe and Skeld.

In 1980/81 and 82, a grant scheme was developed which offered 50% towards the construction of rafts and in the region of 40 were built. A growers' association was established in 1984/85. The Association bought bags and ice and P. & O. provided a carcass container to transport the product.

Seafood Shetland was formed in 2003 following the merger of Shetland Fish Processors' Association and Shetland Shellfish Growers' Association and represents the interests of Shetland's fish processing and shellfish growing companies. It comprises a fish processors' sub-committee and a shellfish growers' sub-committee, both with Chairman and Vice-Chairman. Seafood Shetland employs two staff and operates from an office in the Shetland Seafood Centre, Stewart Building in Lerwick, Shetland.

Scottish Shellfish Marketing Group Ltd (SSMG) was incorporated as an Industrial & Provident Society in 1992. SSMG is the marketing and processing arm of a cooperative group of mussel and oyster farmers, supplying shellfish products to a range of customers including UK supermarket retailers, Food Service and Export.

2.2.3 History of the Fishery

Mussel production has grown significantly since 1986. Shetland mussel harvesting began in 1991 and now forms the majority of Scottish mussel production (69% by volume in 2012 and 64% in 2013).

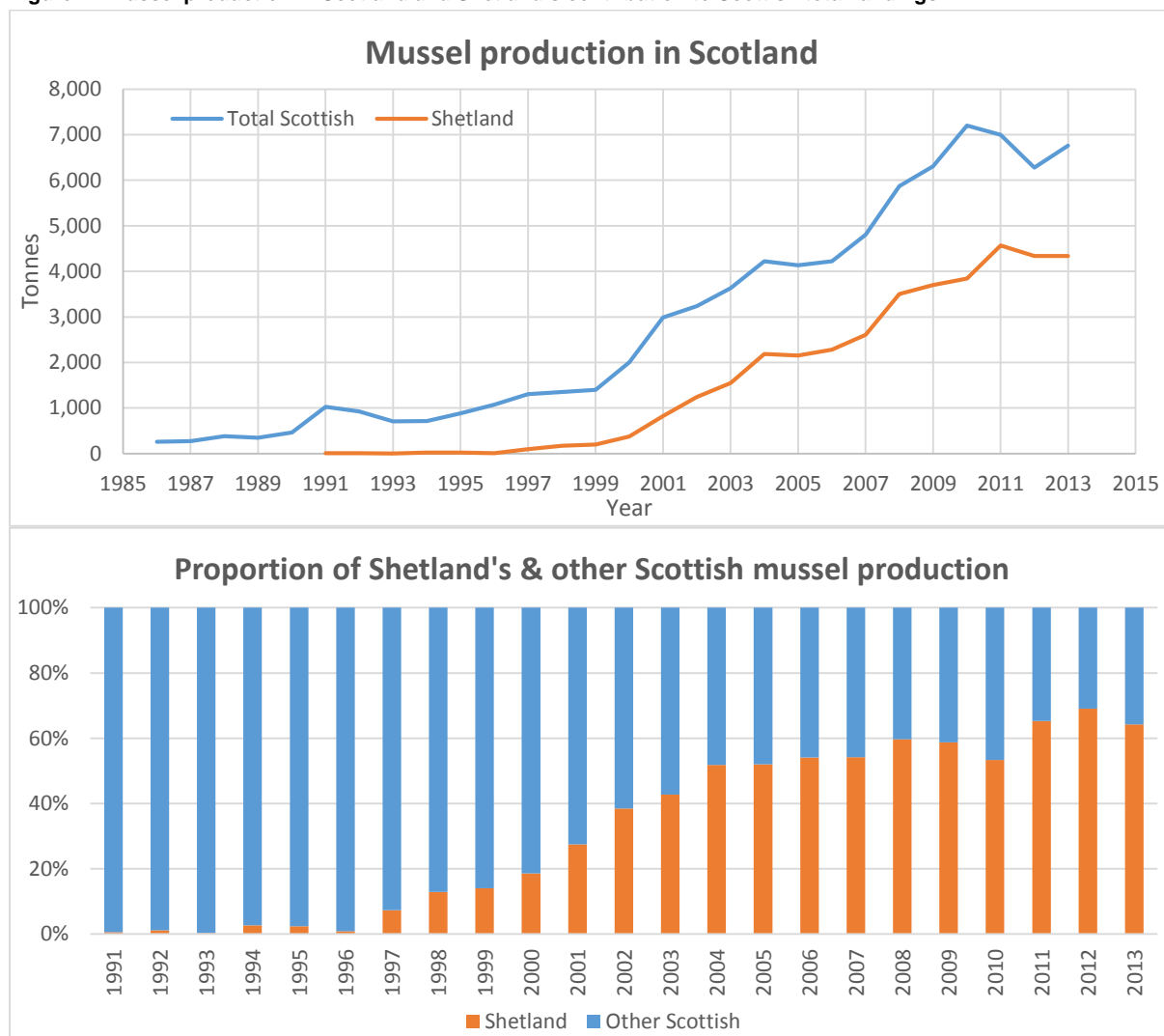
Table 1 and Figure 1 show trends in mussel production for Scotland and the proportion that is harvested from the Shetlands Islands.

Table 1 - Mussel production (for consumption) in Scotland and Shetland's contribution to Scottish total landings.

Year	Scottish Tonnage	Shetland's Contribution to Scottish Total	Percent of production from Shetland
1986	262	*	
1987	271	*	
1988	384	*	
1989	346	*	
1990	462	*	
1991	1,024	6	0.6
1992	923	10	1.1
1993	708	2	0.3
1994	716	19	2.7
1995	882	21	2.4
1996	1,072	10	0.9
1997	1,307	96	7.3
1998	1,355	175	12.9
1999	1,400	196	14
2000	2,003	372	18.6
2001	2,988	822	27.5
2002	3,236	1,246	38.5
2003	3,632	1,552	42.7
2004	4,223	2,188	51.8
2005	4,135	2,150	52
2006	4,219	2,284	54.1
2007	4,806	2,605	54.2
2008	5,869	3,506	59.7
2009	6,302	3,698	58.7
2010	7,199	3,840	53.3
2011	6,996	4,567	65.3
2012	6,277	4,340	69.1
2013	6,757	4,337	64.2

Source: Client

Figure 1 - Mussel production in Scotland and Shetland's contribution to Scottish total landings



(Source: Client)

3. Assessment Process

3.1 Scope & History of the Assessment

The Performance of the in relation to MSC Principles 1, 2 and 3 at time of original assessment is summarized in Tables 2 and 3.

Table 2- Allocation of weighted scores at Sub-criteria, Criteria and Principle levels

MSC Principle	Fisheries Performance	
	Scottish Mainland	Shetlands
Principle 1: Sustainability of Exploited Stock	84.7	84.7
Principle 2: Maintenance of Ecosystem	81.7	81.7
Principle 3: Effective Management System	84.8	84.8

(Sourced from original assessment)

Table 3 - Allocation of weighted scores at Criteria and Performance Indicator levels at original assessment

Principle 1 – Stock Status / Harvest Control Rules			Scottish Mainland	Shetland
1.1.1	Outcome (status)	Stock status	98.9	98.9
1.1.2		Reference Points	80	80
1.1.3		Stock Rebuilding	NA	NA
1.2.1	Management	Harvest Strategy	80	80
1.2.2		Harvest control rules & tools	80	80
1.2.3		Information & monitoring	80	80
1.2.4		Assessment of stock status	80	80

Principle 2 – Wider Ecosystem Impacts			Scottish Mainland	Shetland
2.1.1	Retained Species	Outcome (status)	100	100
2.1.2		Management	100	100
2.1.3		Information	80	80
2.2.1	Bycatch	Outcome (status)	80	80
2.2.2		Management	80	80
2.2.3		Information	80	80
2.3.1	ETP Species	Outcome (status)	80	80
2.3.2		Management	80	80
2.3.3		Information	70	70
2.4.1	Habitats	Outcome (status)	80	80
2.4.2		Management	80	80
2.4.3		Information	75	75
2.5.1	Ecosystem	Outcome (status)	80	80
2.5.2		Management	80	80
2.5.3		Information	80	80

Principle 3 – Management / Governance			Scottish Mainland	Shetland
3.1.1	Governance & Policy	Legal & customary framework	95	95
3.1.2		Consultation, roles & responsibilities	95	95
3.1.3		Long term objectives	100	100
3.1.4		Incentives for sustainable fishing	80	80
3.2.1	Fishery-specific Management System	Fishery specific objectives	80	80
3.2.2		Decision making processes	70	70
3.2.3		Compliance & enforcement	95	95
3.2.4		Research plan	70	70
3.2.5		Management performance evaluation	70	70

(Sourced from original assessment)

As a result of the assessment, 5 conditions of certification were raised by the assessment team, and maintenance of the MSC certificate is contingent on the Shetland & Scottish Mainland Rope Grown Mussel Enhanced Fishery moving to comply with these conditions within the time-scales set at the time the certificate was issued. These conditions are detailed in **Section 4.2.1** of this report. No recommendations were made for this fishery during the assessment process.

Date certified

26.06.2012

Certificate expiry

25.06.2017

Number of previous audits

The 1st surveillance audit involved a site visit to Shetland on 7th May 2013; the 1st Surveillance Report was published in June 2014. As a result of the 1st surveillance audit, all conditions remained open for the fishery.

This is the 2nd surveillance audit and involved a site visit to Bellshill, Glasgow.

3.2 Details of 2nd Surveillance Audit Process

3.2.1 Determination of surveillance level

Please see **Appendix 2**

3.2.2 Surveillance team details

The original assessment team for this fishery assessment comprised of Antonio Hervàs, who acted as team leader and Principle 1 specialist; Bert Keus who was responsible for evaluation of Principle 2 and Rod Cappell who was responsible for evaluation of Principle 3. Paul Macintyre was responsible for traceability / chain of custody considerations.

The 1st surveillance audit was carried out by Antonio Hervàs (P1), Tim Huntington (P2) with Rod Cappell (P3) contributing remotely.

This 2nd on-site surveillance visit was carried out by Bert Keus (P3 and Team Leader) and Fiona Nimmo (P2), with Julian Addison (P1) contributing remotely.

3.2.3 Date & Location of surveillance audit

17 June, 2014 in Bellshill, Glasgow.

3.2.4 Stakeholder consultation & meetings

Food Certification International (FCI) have actively sought the views of client and stakeholders (including managers, scientists, industry and environmental NGOs) with regards to this fishery and its

performance in relation to its sustainability certification and issues relevant to the MSC's Principles and Criteria for Sustainable Fishing.

In addition all key milestones in the fishery surveillance process have been announced on the MSC website. This 2nd surveillance audit was announced on the MSC website on 24th April 2014. Direct email notifications were sent to stakeholders that had previously been identified for this fishery, inviting interested parties to contact the assessment team. A total of 45 stakeholder organisations and individuals having relevant interest in the assessment were identified and consulted during this surveillance audit. The interest of others not appearing on this list was solicited through the postings on the MSC website.

All stakeholders were given the opportunity to request an onsite meeting with a locally based member of the team if necessary. No such requests were received and no verbal or written stakeholder submissions were received other than from the client in support of the surveillance audit process.

Documents referred to

See **Appendix 3**.

3.3 Surveillance Standards

3.3.1 MSC Standards, Requirements and Guidance used

This surveillance audit was carried out according to the MSC Fisheries Certification Requirements v1.3.

3.3.2 Confirmation that destructive fishing practices or controversial unilateral exemptions have not been introduced

- » No indication was given or suggested during the surveillance audit to suggest that either of these practices is in evidence for this fishery.

3.3.3 Enhancement Activities

The following criteria are met by the fishery under assessment and therefore the fishery is within scope in relation to enhanced fisheries (*CR paragraph 27.4.12*):

- » The system relies upon the capture of fish (finfish or shellfish) from the wild environment (in this case wild mussel seed).
- » The species are native to the geographic region of the fishery and the natural production areas from which the fishery's catch originates.
- » There are natural reproductive components of the stock from which the fishery's catch originates that maintain themselves without having to be restocked every year.
- » The production system operates without augmentation of food supply.
- » The production during the captive phase does not require disease prevention involving chemicals or compounds with medicinal prophylactic properties.
- » There are no irreversible modifications to the habitat that cause serious or irreversible harm to the natural ecosystem's structure and function.

The team assessed the fishery against the above criteria from the start of the evaluation process through the information gathering phase of the assessment. In particular the site visit and stakeholder consultation provided the team with the information needed to assess the fishery in relation to the enhanced fisheries criteria required under the MSC CR 27.4.12.

4. Results, Conclusions and Recommendations

4.1 Discussion of Findings

4.1.1 Changes in fleet structure or operation

There have been no changes to the manner in which farms operate. There have been some changes in operation of the fishery in that two mussel sites have become operational since the last surveillance audit. These have been subject to the normal planning process for establishing a new mussel site or extending an existing site. Each new or extended site requires planning permission from the relevant Local Authority and each planning application submitted is subject to review by a range of statutory consultees (including SNH, SEPA etc.). Through the mechanism of permitted development rights some changes to existing mussel farms are possible without planning permission, but these are limited in scale (i.e. size/area and/or tonnage).

Irish spat continues to be collected and used within some sites, however this remains outwith the MSC certificate. Enquires have been made with MSC regarding including this within the Unit of Certification (UoC), but the process was not considered economically viable and so the client has decided not to pursue extending the UoC to include Irish spat at any point in the future.

4.1.2 Changes in stock status and exploitation patterns

There are no changes in the stock status of Shetland and Scottish mainland rope grown mussels. It is noted by the assessment team that the original assessment was undertaken using the Risk Based Framework (RBF) and that this score was carried forward in the 1st surveillance audit. Enhanced fisheries no longer require Principle 1 to be scored as part of full MSC assessments.

4.1.3 Changes in ecosystem interaction or management

There have been no changes in ecosystem interaction or management within mussel farming since the 1st surveillance audit. Further information has been provided and monitoring systems are being implemented in relation to eider ducks in Shetland (see Condition 1 for details). Furthermore, sediment analysis has been undertaken within sites in Shetland and mainland Scotland as part of a research programme to investigate risk to habitats over time (see Condition 2 for details).

It is noted that the planning permission procedure requires information to be considered on environmental aspects, including carrying capacity and habitat and ETP interactions; the latter is largely informed by the site's proximity to Special Protection Areas (SPAs) and Special Areas of Conservation (SACs), as well as other environmental designations. So while a formal Environmental Impact Assessment is not required for mussel farming, environmental parameters are still considered within the planning process and consulted on with the relevant statutory environmental organizations. This planning process is consistent for sites in Shetland and mainland Scotland.

No other significant changes in scientific knowledge relating to the fishery (other than accounted for above) are known to the client group's knowledge.

4.1.4 Changes in management

There have been no infringements, complaints, issues or actions against the client group.

There have been no changes in the management system (e.g. regulations, legislation, key scientific or management personnel), other than the decision to utilize the already established Ministerial Working Groups for Sustainable Aquaculture as a forum to discuss information and future management decisions with key stakeholders and decision makers.

The Ministerial Group for Sustainable Aquaculture (MGSA) was established in May 2013 to replace the Ministerial Group on Aquaculture (MGA). Its aim is to support Scotland's aquaculture industry to achieve sustainable growth targets by 2020, with due regard to the marine environment, while also ensuring the implementation of: A Fresh Start - the renewed Strategic Framework for Scottish Aquaculture. The MGSA includes four working groups of particular relevance to mussel farming: Shellfish, Capacity, Interactions and Science & Research. Ruth Henderson (Seafood Shetland) chairs the Shellfish Working Group, on which SSMG are also members. Both Seafood Shetland and SSMG are members on the other aforementioned Working Groups. A range of stakeholders sit on the groups including:

- » The Scottish Government Minister for Environment and Climate Change;
- » Marine Scotland;
- » Scottish Association for Marine Science (SAMS);
- » Scottish Aquaculture Research Forum (SARF);
- » Scottish Environmental Protection Agency (SEPA);
- » Scottish Natural Heritage (SNH);
- » Scottish Water;
- » Food Standards Agency;
- » The Crown Estate;
- » CoSLA;
- » Seafish;
- » Shellfish industry; and
- » Shellfish processors.

Other stakeholders, such as RSPB are invited to join specific meetings should their input on particular agenda items be required. The first MGSA meeting on Shellfish took place on 5 June 2013 and was therefore not taken into consideration within the 1st annual surveillance audit. Meetings are expected to take place quarterly, with the next MGSA on Shellfish to be held on 3rd July 2014.

Since the establishment of the MGSA, the client group have recognized it as the best mechanism for disseminating information, liaising with relevant stakeholders and informing future management decisions.

Further details on the groups are available on the Scottish Government website, in particular:

- » <http://www.scotland.gov.uk/Topics/marine/Fish-Shellfish/MGSA>
- » <http://www.scotland.gov.uk/Topics/marine/Fish-Shellfish/MGSA/Shellfishwg>

4.1.5 Catch data

Production of mussels (tonnes) for 2013 is provided for Scotland as a whole, Shetland and mainland Scotland. See **Section 5** for these statistics.

4.2 Reporting on Conditions & Recommendations

4.2.1 Condition 1

Condition 1	Principle 2: ETP Species
Performance Indicators:	2.3.3 – Information / monitoring Relevant information is collected to support the management of fishery impacts on ETP species, including: <ul style="list-style-type: none"> » information for the development of the management strategy; » information to assess the effectiveness of the management strategy; and » Information to determine the outcome status of ETP species.
Summary of issues	The information available is not sufficient to quantitatively estimate the impact of the fishery on the eider duck populations. (SG 80-2 is not met).
Suggested Action	Client is advised to liaise with scientific institutions and NGO's in order to initiate a study on the impact of the mussel culture on eider duck populations.
Milestones	Years 1-2: Proof of discussion with scientists and representatives of NGO's. Resulting score: 70 Year 3: Clear proof that the information shortcomings on this issue have been addressed. Resulting score: 80 Years 4-5: No further action required

Progress against interim milestones

Seafood Shetland recently held a meeting with Scottish National Heritage (SNH), the Royal Society for the Protection of Birds (RSPB) and Sullom Voe Oil Terminal Environmental Action Group (SOTEAG) to follow up discussions on the eider duck population on Shetland and their interaction with mussel farming. A record sheet has been developed for mussel farmers to log eider duck numbers, observations and any deterring activity that has taken place. This is being implemented across Shetland mussel farms and forms are being updated to include further information, such as effectiveness of anti-predator nets and any damage sustained at sites as a result of eider duck presence. The environmental organizations were extremely satisfied with the data and information being generated by these forms. They also highlighted that it was unlikely that mussel farming was significantly contributing to the decline in eider duck numbers, due to the range of varying factors at play.

The Scottish Shellfish Marketing Group (SSMG) are currently reviewing the eider record sheet developed by Seafood Shetland and have disseminated it to a number of mussel farmers for comment. The SSMG are keen to first establish whether interaction with eider ducks is an issue of concern for eider duck populations on Scottish mainland before implementing a recording protocol. It is noted that eider interactions with mussel farms have not specifically been raised as an issue by environmental organisations directly with the client group in relation to Scottish mainland sites.

A suite of scientific papers are available on eider duck predation of mussel farms around Scotland, the resultant loss to mussel stock and the financial cost for farmers. Focus is placed on efficient anti-predatory measures (such as nets). It is noted that in 2000 eider numbers were increasing around Scotland, while decreasing numbers were noted in Shetland (Ross and Furness, 2000). It is therefore entirely plausible that information protocols are required for the Shetland UoC and not the Scottish mainland UoC. Although, it is recognized that good knowledge as well as collaboration among mussel growers, bird specialists, and government authorities are important for reducing effort and costs associated with predator control (Varenes *et al.*, 2013).

Evidence was provided by SSMG indicating that discussions are taking place with relevant organisations to establish the potential risk and interactions between Scottish mainland mussel farms and eider ducks. This evidence was in the form of email communication between SSMG and SNH (David Donnan) with agreement to discuss eider duck interactions at the next MGSA Shellfish Working Group meeting (to be held on 3rd July). The client provided evidence of this in the form of an agenda for the forthcoming meeting, which Seafood Shetland will chair. In addition it is intended that a relevant RSPB representative will be invited to attend the meeting for their input and comment on this matter.

The year 1-2 milestone has therefore clearly been met for both the Shetland and Scottish mainland UoCs. Year 3 milestone requires evidence that the information shortcomings are being addressed. This is currently being progressed for the Shetland UoC, while the Scottish mainland UoC focuses on identifying the level of risk and appropriate information requirements.

Remedial actions

None.

Changes to condition

None.

Updated status

Shetland UoC on target.

Scottish mainland UoC on target.

4.2.2 Condition 2

Condition 2	Principle 2: Habitats
Performance Indicators:	2.4.3 – Information / monitoring Information is adequate to determine the risk posed to habitat types by the fishery and the effectiveness of the strategy to manage impacts on habitat types. Score: 75

Condition 2	Principle 2: Habitats
Summary of issues	The policy for mussel culture in Scotland includes an objective to double the mussel production. This development could result in an increased risk to bottom habitats. Currently it is unclear whether the information collected and available at scientific institutions is regularly updated and disseminated to inform the marine planning process. (SG 80-3 is not met).
Suggested Action	Client is advised to liaise with local planning authorities and scientific institutions to develop procedures for the regular update and exchange of information on habitats.
Milestones	<p>Years 1-2: Proof of discussions with scientific institutions on procedures on the specification, collection and exchange of information on habitats. Resulting score: 75</p> <p>Year 3: Clear proof of the establishment of clear procedures on the provision of information on habitats to the marine planning process. Resulting score: 80</p> <p>Years 4-5: No further action required</p>

Progress against interim milestones

SSMG provided an outline of the benthic survey undertaken in June 2013 (Williamson, 2013) which collated sediment samples from three mussel sites (two in Shetland and one in Scottish mainland). Organic matter was found to be relatively low at all sites (Williamson, 2013). It is confirmed that this survey will be repeated in 12-18 months' to monitor any changes over time at these sites. SSMG note that these surveys are a specific requirement of their Friends of the Sea certification, but also inform the MSC habitat condition. It is intended to disseminate the report to the MGSA Shellfish Working Group.

It is noted that the planning permission procedure requires consideration of carrying capacity and site location in proximity to environmental designations. The planning process involves consultation with a wide range of statutory consultees, dependent upon the local authority within which the application lies. For example, the statutory consultees consulted as part of the planning process for mussel farming in the Shetland Isles are presented in Box 1.

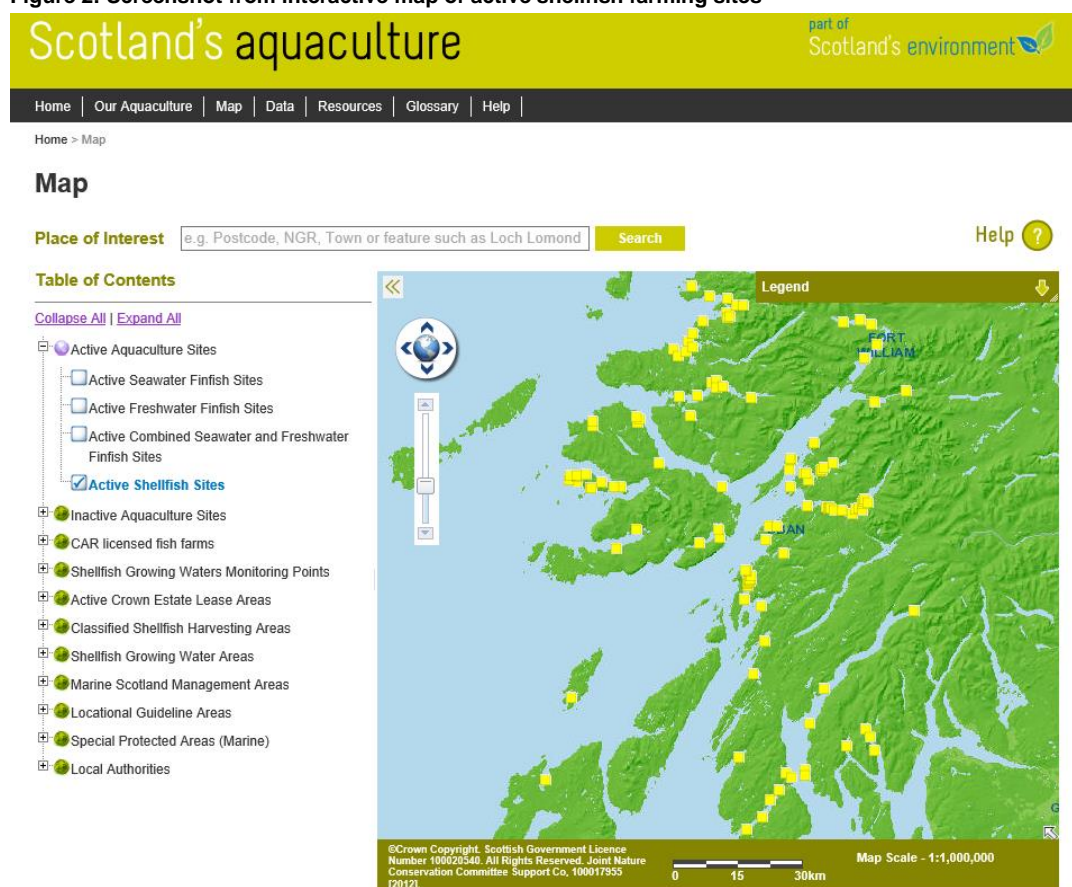
Box 1: Bodies consulted on planning applications for mussel farms in Shetland:

- » Community Council within which the application lies;
- » The Crown Estate;
- » Royal Society for the Protection of Birds (RSPB);
- » Scottish Environment Protection Agency (SEPA);
- » Marine Scotland;
- » Scottish Natural Heritage (SNH);
- » Shetland Islands Council:
 - › Environmental Health;
 - › Ports and Harbours Operations;
- » Shetland Fishermen's Association (SFA);
- » Shetland Inshore Fishermen's Association (SIFA);
- » Shetland Shellfish Management Organisation (SSMO);
- » Northern Lighthouse Board (NLB);
- » Shetland Amenity Trust;
- » Historic Scotland; and
- » Other bodies may be consulted on specific matters, if appropriate.

(Source Shetland Islands Council, 2012)

It is also noted that mussel farm production is logged for each specific site and that the Scottish Government annual Shellfish Aquaculture Production Survey includes the location of active shellfish sites. Analysis across production surveys allows identification of any increase of risk based on the number and location of active sites. In addition this information is available as part of an interactive map database (Figure 2) available on Scotland's Aquaculture website developed by the Crown Estate,

Figure 2: Screenshot from interactive map of active shellfish farming sites



(Source Scotland's Aquaculture, 2014)

The year 1-2 milestone has therefore clearly been met for both the Shetland and Scottish mainland UoCs. Year 3 milestone requires evidence that procedures are in place to ensure information on habitats is available to and, where appropriate, informing the marine planning process. Provision of minutes from the next MGSA Shellfish Working Group is expected to form such evidence. This, together with the knowledge that the planning procedure for new mussel farms or expansion of existing sites considers habitat and ecosystem carrying capacity, and that new sites are recorded as part of the Scottish Government annual Shellfish Aquaculture Production Survey, should be sufficient to close the condition at the 3rd surveillance audit.

Remedial actions

None.

Changes to condition

None.

Updated status

Shetland UoC on target.

Scottish mainland UoC on target.

4.2.3 Condition 3

Condition 3	Fishery Specific Objectives
Performance Indicators:	3.2.2 - Decision-making processes The fishery-specific management system includes effective decision-making processes that result in measures and strategies to achieve the objectives. Score: 70
Summary of issues	There is no management plan or contingency planning for the fishery as a whole specifying how issues associated with P1 and P2 objectives will be addressed. The resulting process may not therefore be timely or transparent (SG 80-2 is not met).
Suggested Action	A management plan should be developed and implemented for the mussel fishery ideally at a whole sector level and for all client farms at a minimum to enable strategic planning and its integration into wider marine planning at a local and national level. This should be subject to regular review and should incorporate a research plan (see condition 4) and ensure management responses to research findings
Milestones	Year 1: Develop management plan Resulting score: 75 Year 2: implement management plan Resulting score: 80 Years 3-5: No further action required

Progress against interim milestones

In year 1 a management plan was drafted and presented to the assessment team at the 1st surveillance audit. The team has welcomed the plan but also concluded that the plan did not clearly specify how decision making processes in the management system would result in measures and strategies to achieve the objectives. The management plan included the objective of sustainable practices but was not very specific on how objectives concerning ecological issues would be addressed.

Seafood Shetland and SSMG have therefore redrafted the plan and the plan now clearly formulates objectives associated with P2 objectives (reduce impact on ETP species and Habitat). At the same time the actions described in the management plan have been more clearly connected to the objectives concerning protection of habitats and ETP species.

Client has also further provided the team with information regarding the work of the Ministerial Group on Sustainable Aquaculture (MGSA) (see details in Section 4.1.4 of this report). According to the information provided this “Head” group and its sub working groups are clearly directed at the objective of developing and safeguarding sustainable aquaculture practices. The group is planned to meet quarterly and discuss upcoming issues and develop strategies.

Seafood Shetland and SSMG have clearly carried out actions in the management plan within the timelines described. They have also discussed the management plan, the actions described and the information requirements from the MSC certification process within the MGSA Shellfish Working Group. Therefore, it can be concluded that the fishery specific management system includes effective decision making processes both at the governmental level and in the framework of the sectoral management plan.

Remedial actions

None.

Changes to condition

None.

Updated status

Shetland UoC condition closed.

Scottish mainland UoC condition closed.

Rescoring of Performance Indicator

	Criteria	60 Guideposts	80 Guideposts	100 Guideposts
3.2.2	Decision-making processes The fishery-specific management system includes effective decision-making processes that result in measures and strategies to achieve the objectives.	There are <u>informal</u> decision-making processes that result in measures and strategies to achieve the fishery-specific objectives. Decision-making processes respond to <u>serious issues</u> identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take <u>some</u> account of the wider implications of decisions.	There are <u>established</u> decision-making processes that result in measures and strategies to achieve the fishery-specific objectives. Decision-making processes respond to <u>serious and other important issues</u> identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions. Decision-making processes use the precautionary approach and are based on best available information. <u>Explanations</u> are provided for any actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring, evaluation and review activity.	Decision-making processes respond to <u>all issues</u> identified in <u>relevant</u> research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions. <u>Formal reporting</u> to all interested stakeholders describes how the management system responded to findings and relevant recommendations emerging from research, monitoring, evaluation and review activity.

80

Justification

Fishery-specific management at regulator and operator level does have established decision-making processes (SG80-1 is met). The responses to emerging issues are discussed within the Ministerial Group for Sustainable Aquaculture (MGSA) Shellfish Working Group which meets quarterly to share knowledge, discuss upcoming issues and develop strategies., allowing industry, stakeholders and regulators to seek the best available information and adopt the precautionary approach (SG 80-3 is met). For example, concerns over the length of planning process were identified and planning has subsequently been streamlined. The need to increase investor confidence has also been recently addressed with longer terms of lease (Crown Estate, 2010).

There are clear procedures and planning in Scottish waters in relation to water quality and disease management in shellfish growing waters. Seafood Shetland and SSMG have a specific management plan for their industry specifying how issues associated with p1 and p2 objectives will be addressed. Seafood Shetland and SSMG have clearly carried out actions in the management plan within the timelines described. They have also discussed the management plan, the actions described and the information requirements from the MSC certification process within the MGSA Shellfish Working Group. Therefore, it can be concluded that the fishery specific management system includes effective decision making processes both at the governmental level and in the framework of the sectoral management plan. The resulting process is both timely and transparent (SG 80-2 is met). While this management plan responds to serious and other important issues, it does not respond to all issues; furthermore the MGSA is relatively new and therefore focused on serious and important issues (SG 100-1 is not met).

Regulators do have 'customer service commitments' and seek to be transparent in decision making. The MGSA Shellfish Working Group allows a forum for proactive fishery-specific management and for explicit explanations to be given for actions, or lack of actions (SG 80-4 is met). While minutes are taken from the MGSA meetings, these are not considered formal reporting and therefore SG 100-2 is not met.

References

- » Crown Estate, 2010 Rent Review: Shellfish leases
- » Seafood Shetland and SSMG Management Plan, 2014.

4.2.4 Condition 4

Condition 4	Decision-making processes
Performance Indicators:	3.2.4 – Research plan The fishery has a research plan that addresses the information needs of management. Score: 70
Summary of issues	Research associated with the fishery tends to be in an <i>ad hoc</i> manner via the Marine Scotland Science or the Scottish Aquaculture Research Forum (SARF). There is no overall research plan with a strategic approach linked to a management plan that ensures this is in a timely manner (SG-80 1 not met). A condition is therefore raised.
Suggested Action	Develop and implement a research plan that will in the first instance address the information shortcomings raised under P1 & P2, and thereafter regularly review research needs associated with the fishery.
Milestones	Year 1: Draft research plan as part of management plan development Resulting score: 75 Year 2: Implement research plan Resulting score: 80 Years 3-5: No further action required

Progress against interim milestones

In Year 1 a research plan was drafted and provided to the assessment team. The team welcomed the plan but noted that it did not clearly detail how research links to the objectives and actions in the management plan including how and when research will be considered in order to inform management actions.

Seafood Shetland and SSMG have since updated the research plan making it clear through which processes and in what forum (i.e. MGSA) research planning is coordinated. In addition the actions in the research plan have been further clarified ensuring clear connection with the information requirements of the MSC process and P2 objectives of the management system. Of note, the research plan outlines actions related to eider duck populations; annual sampling programme for sediments at three sites; exchange of information; and improving methods for determining carrying capacity; as well as other industry priorities including managing toxin risk and developing rapid test kits. The research plan has been drafted to ensure compatibility with the Aquaculture Science and Research Strategy, which also has a significant social aspect covering promotion of healthy eating, recruitment and skills development, and working closely with schools to educate children on the benefits of eating mussels. Seafood Shetland and SSMG have communicated their research requirements and priorities to the MGSA and these have been acknowledged and included within the Aquaculture Science and Research Strategy. The Strategy brigades research requirements for finfish and shellfish aquaculture into the following topics (which are cross-referenced to actions within the client's research plan):

- » Nutrition;
- » Stock improvement;
- » Health and welfare;
- » Food safety and hygiene;
- » Technology and engineering;
- » Wild-farmed Interactions;
- » Markets, economics and social science;
- » Capacity; and

» Blue biotechnology/growth.

Since the research plan includes several actions that have been completed e.g. monitoring of sediment within three sites (see Condition 2 and Williamson, 2013), it can be concluded that the research plan has been implemented during the second year of certification. As such the milestone for year 2 is met and the condition is closed.

Remedial actions

None.

Changes to condition

None.

Updated status

Shetland UoC condition closed.

Scottish mainland UoC condition closed.

Rescoring of Performance Indicator

	Criteria	60 Guideposts	80 Guideposts	100 Guideposts
3.2.4	Research plan The fishery has a research plan that addresses the information needs of management.	<u>Research</u> is undertaken, as required, to achieve the objectives consistent with MSC's Principles 1 and 2. Research results are <u>available</u> to interested parties.	A <u>research plan</u> provides the management system with a strategic approach to research and <u>reliable and timely information</u> sufficient to achieve the objectives consistent with MSC's Principles 1 and 2. Research results are <u>disseminated</u> to all interested parties in a <u>timely</u> fashion.	A <u>comprehensive research plan</u> provides the management system with a coherent and strategic approach to research across P1, P2 and P3, and <u>reliable and timely information</u> sufficient to achieve the objectives consistent with MSC's Principles 1 and 2. Research <u>plan</u> and results are <u>disseminated</u> to all interested parties in a <u>timely</u> fashion and are <u>widely and publicly available</u> .

80	
Justification	
<p>Seafood Shetland and SSMG have an industry specific research plan making it clear through which processes and in what forum (i.e. MGSA) research planning is coordinated. In addition the actions in the research plan have been further clarified ensuring clear connection with the information requirements of the MSC process and P1 and P2 objectives of the management system. Of note, the research plan outlines actions related to eider duck populations; annual sampling programme for sediments at three sites; exchange of information; and improving methods for determining carrying capacity; as well as other industry priorities including managing toxin risk and developing rapid test kits. The research plan has been drafted to ensure compatibility with the Aquaculture Science and Research Strategy, which also has a significant social aspect covering promotion of healthy eating, recruitment and skills development, and working closely with schools to educate children on the benefits of eating mussels. Seafood Shetland and SSMG have communicated their research requirements and priorities to the MGSA and these have been acknowledged and included within the Aquaculture Science and Research Strategy. The Strategy brigades research requirements for finfish and shellfish aquaculture into the following topics (which are cross-referenced to actions within the client's research plan):</p> <ul style="list-style-type: none"> » Nutrition; » Stock improvement; » Health and welfare; » Food safety and hygiene; » Technology and engineering; » Wild-farmed Interactions; 	

- » Markets, economics and social science;
- » Capacity; and
- » Blue biotechnology/growth.

Since the research plan includes several actions that have been completed e.g. monitoring of sediment within three sites (Williamson, 2013), it can be concluded that the research plan has been implemented.

In addition, the Association of Scottish Shellfish Growers (ASSG) works closely with both SNH and WWF on issues of mutual concern. On April 19, 2002, the ASSG signed a concordat with Scottish Natural Heritage (SNH), and on October 18, 2002 the ASSG signed a concordat with WWF Scotland. The aim of each concordat was to outline areas of common interest, establish a general commitment to work together on issues of joint concern, and provide a non-binding framework for cooperation and communication with the ASSG.

It is therefore concluded that SG 80-1 is met. However, the research plan does not focus on P3 elements and is therefore not considered to be comprehensive (SG 100-1 is not met).

Research results are disseminated to all interested and relevant stakeholders via the MGSA Shellfish Working Group; in addition information and papers are also available via the Scottish Government and SARF websites, the Scottish shellfish forum and the Association of Scottish Shellfish Growers (ASSG), particularly through its annual conference (SG 60 -2 met). The MGSA Shellfish Working Group meet quarterly and therefore information is disseminated in a regular and timely manner (SG 80-2 is met). The Research Plan and its results are not publically available and therefore SG 100-2 is not met.

References

- » Scottish Aquaculture Research Forum (www.sarf.org.uk)
- » Association of Scottish Shellfish Growers website: www.assg.org.uk accessed 12/08/11
- » Seafood Shetland and SSMG Management Plan, 2014.
- » Ministerial Group for Sustainable Aquaculture, MGSA. (2014). Draft Aquaculture Science and Research Strategy.
- » Williamson, I. (2013). Benthic Survey: Physico-chemical analysis of sediments from West of Blackwell, Ronas Voe, Clift Sound and Loch Eriboll. Prepared for Scottish Shellfish Marketing Group (SSMG) by Biotikos Ltd.

2.5 Condition 5

Condition 5	Decision-making processes
Performance Indicators:	3.2.5 – Monitoring and management performance evaluation There is a system for monitoring and evaluating the performance of the fishery-specific management system against its objectives. There is effective and timely review of the fishery-specific management system. Score: 70
Summary of issues	Different aspects of management are administered by different agencies it is not evident that all <u>key</u> parts of the management system are subject to regular internal review and occasional external review. SG-80 is therefore partially met.
Suggested Action	A management plan to be developed in line with condition 3 should be subject to regular internal review and subject to occasional external review.
Milestones	Year 1: Management plan contains review procedures Resulting score: 75 Year 2: Evidence of internal review Resulting score: 75 Year 3: Evidence of external review Resulting score: 80 Years 4-5: No further action required

Progress against interim milestones

In the 1st surveillance audit it was concluded that the management plan did not clearly detail how the performance of the fishery specific management system is evaluated against its objectives.

Seafood Shetland and SSMG have since updated the management plan to include the procedure of evaluating the fishery specific management system against its objectives, which is organized within the MGSA and its sub working groups.

Evidence was also provided that the fishery management plan and the research plan have been reviewed internally through the provision of minutes from a meeting held on 14th February 2014. The year 2 milestone is therefore met and the condition is on target.

The client group intends to disseminate the management plan and research plan to the MGSA Shellfish Working Group for external review. Since SNH and other external organizations are seated in MGSA it can be concluded that external review of the performance of the management system will take place regularly. Evidence that this external review has taken place (to be provided at the 3rd surveillance audit) will allow the condition to be closed.

Remedial actions

None.

Changes to condition

None.

Updated status

Shetland UoC on target.

Scottish mainland UoC on target.

4.3 New Conditions & Recommendations

None.

4.4 Conclusions

Table 4: Summary of progress on conditions/recommendations

Binding Conditions / Recommendations	Descriptions	Status of Progress
Condition 1	Proof of discussion with scientists and representatives of NGO's regarding eider duck interactions	On target
Condition 2	Discussions with scientific institutions on procedures on the exchange of information on habitats.	On target
Condition 3	Develop management plan	Condition closed
Condition 4	Develop research plan	Condition closed
Condition 5	Management plan contains review procedures	On target

4.5 Status of Certification

Certified.

5. Catch Data

Table 5 - Catch Data (for 2013)

Total Scottish mussel production for most recent fishing year (2013):		6,757 tonnes
Unit of Certification share of the total Scottish mussel production established for the fishery in most recent fishing year*		
Shetlands Islands	UoC 1	4,337 tonnes
Scottish coastal waters ranging from Argyll to Sutherland	UoC 2	1,205 tonnes
Client share of the total Scottish mussel production in most recent fishing year:		5,542 tonnes (82%)
Total greenweight catch taken by the client group in the two most recent calendar years:		

* To be added into MSC database for each Unit of Certification

(Source: Fishery client)

Appendix 1 – Written Submissions from Stakeholders

None.

Appendix 2 - Surveillance Plan

Table A2.1: Fishery Surveillance Plan

Score from CR Table C3	Surveillance Category	Year 1	Year 2	Year 3	Year 4
5	Normal Surveillance	COMPLETED	COMPLETED	On-site surveillance audit	To be confirmed

Appendix 2.1 Rationale for determining surveillance score

The rationale for determining the surveillance score is detailed in table A2.2.

Table A2.2. Surveillance score rationale.

Criteria	Fishery under Assessment	Score
Use of Default Assessment tree	Use of the RBF	2
Number of opened conditions	3	1
Principle level score	P1 = 84.7, P2 = 81.7, P3 = 84.8 (for both UoCs)	2
Conditions on outcome PIs	None	0
Overall Score		5

Appendix 3 – References

- » Marine Scotland Science. (2013). Scottish Shellfish Farm Production Survey 2013.
- » Ministerial Group for Sustainable Aquaculture, MGSA. (2013). Minutes of meeting held on 9th December 2013 with Walter Speirs, ASSG- Shellfish Working Group Chair; Alex Adrian, The Crown Estate; David Attwood, Loch Fyne Oysters Ltd; Craig Burton, Seafish; Stephen Cameron, SSMG; David Fell, SI Seafarms; Lauren Ferrari, Scottish Government; Jennifer Howie, FSA(S); Adam Hedges, MASTS/SAMS; Iain MacKinnon, Environmental Health, Argyll and Bute Council; Iveta Matejusova (VC), Scottish Government; Andy Mayes, Scottish Government; Alastair Mitchell, Scottish Government; Iain Sutherland, HIE; Michael Tait, SSMG; David Dornan, SNH.
- » Ministerial Group for Sustainable Aquaculture, MGSA. (2014). Shellfish Working Group Draft Agenda for meeting on 3rd July 2014.
- » Ministerial Group for Sustainable Aquaculture, MGSA. (2014). Draft Aquaculture Science and Research Strategy.
- » Ross, B.P. and Furness, R.W. (2000). Minimizing the impact of eider ducks on mussel farming. University of Glasgow.
- » Scotland's Aquaculture. (2014). Interactive map. <http://aquaculture.scotland.gov.uk/map/map.aspx>
- » Scottish Shellfish Marketing Group (2014). Email communication between SSMG (Stephen Cameron) and SNH (David Donnan) detailing discussions in relation to eider ducks and their interaction with Scottish mussel farms.
- » Seafood Shetland. (2014). Observation Form for Presence of Eider Ducks at Mussel Sites.
- » Seafood Shetland and Scottish Shellfish Marketing Group. (2014). Management Plan.
- » Seafood Shetland and Scottish Shellfish Marketing Group. (2014). Research Plan.
- » Seafood Shetland and Scottish Shellfish Marketing Group. (2014). Minutes of a meeting held on 14th February 2014 between Mr. Michael Tait; Mr. Kenny Pottinger; Miss Ruth Henderson; Mr. Stephen Cameron; and Ms. Gillian Dickie.
- » Seafood Shetland and Scottish Shellfish Marketing Group. (2014). Minutes of a meeting of representatives of Seafood Shetland, Scottish Natural Heritage (SNH), Royal Society for the Protection of Birds (RSPB) and the Sullom Voe Oil Terminal Environmental Action Group (SOTEAG) held in Stewart Building, Lerwick on Wednesday, 11th June, 2014 at 2.00 p.m.
- » Shetland Islands Council. (2012). Shetland Local Development Plan, 2012: Supplementary Guidance Aquaculture Policy.
- » Varennes É, Hanssen SA, Bonardelli J, Guillemette M. (2013). Sea duck predation in mussel farms: the best nets for excluding common eiders safely and efficiently. *Aquacult Environ Interact* 4:31-39
- » Williamson, I. (2013). Benthic Survey: Physico-chemical analysis of sediments from West of Blackwell, Ronas Voe, Clift Sound and Loch Eriboll. Prepared for Scottish Shellfish Marketing Group (SSMG) by Biotikos Ltd.