

Eel Assessment – Salco Fishfarm Dronten BV

Assessment against:

Component 1: Core requirements
Component 5: Eel farming

Completed by
Thomas Bourner

4th February 2019

FINAL REPORT

Introduction

This document represents the report completed following the 2019 audit carried out under the Sustainable Eel Standard (Version 6.0, June 2018) against Salco Fishfarm Dronten BV. This assessment has been completed against Components 1 & 5 of the Standard only.

The assessment is of a eel farming business (Salco Fishfarm Dronten BV) located at Ketelweg 12, 8251 PR Dronten, Netherlands. The farm started business in 1990 as one of the first eel farms in Europe and has undergone two expansions since then, the first in 1996 and then again in 2007.

There are now around 100 tanks used to produce around 200T annually. Most fish are sold within 2 years of arriving at site with an average weight of around 160g. No eels are slaughtered or processed and all are sold for the domestic market.

An automated feed system is used throughout with feed pellets used as food. The eels are graded every 70 days and moved between different tank sizes using water pipes.

1. The assessment

The assessor was Thomas Bourner of Control Union Pesca Ltd, who visited Salco Fishfarm Dronten BV on the 4th February 2019. The audit included interviews with Stephen Salomons who is owner and manager of the facility and knows all of its systems, staff and procedures.

2. Client Contact Details

Client Contact Name	Stephen Salomons
Client Address	Ketelweg 12, 8251 PR Dronten, Netherlands
Client Email	salcofishfarm@live.nl
Client Phone Number	06 36 411 754

3. Results of the assessment

The outcome of this assessment is as follows;

A responsible score will result in 1, an aspiring score in 0. Score weighting will be taken into consideration for each element.

That Salco Fishfarm Dronten BV has scored the following for Component 1: General Requirements and therefore **should** be considered **RESPONSIBLE** under the SEG standard.

Component 1: General Requirements	Auditor's findings	Weighting	Score
1.1 Commitment to Legality	Responsible	1	1
1.2 Contribution to eel conservation projects	N/A	N/A	N/A
1.3 The facility trades in certified responsibly sourced eels	Aspiring	1	0
1.4 Traceability:			
1.4.1 Incoming products, separation and segregation	Responsible	1	1
1.4.2 Outgoing products	Responsible	1	1
1.4.3 Record keeping and documentation	Aspiring	1	0
1.5 Biosecurity & welfare:			
1.5.3 Eel farming	Responsible	1	1
1.5.4 Restocking	Responsible	1	1
Total		7	5/7
Percentage Responsibility Score:		71%	

That Salco Fishfarm Dronten BV has scored the following for Component 5: Eel farming and therefore **should** be considered **RESPONSIBLE** under the SEG standard.

Component 5: Eel farming	Auditor's findings	Weighting	Score
5.1 The total mortality rate during the culture is low	Responsible	2	2
5.2 The fish meal/oil ingredients in the feed come from a responsible source	Responsible	1	1
5.3 Feed is used as efficiently as possible	Responsible	1	1
5.4 Water Quality	Aspiring	1	0
5.5 There are minimal ecological impact from effluent discharge	Responsible	1	1
5.6 Grading, slaughter and transportation are carried out with respect to welfare	Responsible	1	1
5.7 The farm provides eel for restocking	Aspiring	2	0
5.8 The farm provides eel for restocking	Responsible	2	2
Total		11	8/11
		73%	

Summary of assessment and scoring

Component	Aspiring	Responsible
1	2	5
5	2	6
Total	4	11
Total Responsibility Score		73%

Recommendations:

1. It is recommended that an increased percentage of the yearly profits are donated to eel conservation projects.
2. In order to meet the responsible indicator it is recommended that at least 50% of the eels purchased in 2019 are SEG certified.
3. In order to meet the responsible indicator it is recommended that records demonstrating traceability of eels are kept for at least 3 years.
4. In order to meet the responsible indicator it is recommended that systems are implemented that allow the FCR to be calculated for individual size classes.
5. In order to meet the responsible indicator it is recommended that a greater number of eels are made available and sold for restocking purposes.

4. Next Audit

At the completion of the audit the client was assessed against the risk assessment set out in the Methodology. This is set out in the table below.

Question	Performance of the Client at Audit	Yes	No
1	Has the client been part of any external investigation which may be of concern to SEG AND/OR been suspended from any other certification standard?	Enhanced Surveillance	Go to Q2
2	Has the client received a borderline ¹ pass for a Component in its previous audit?	Enhanced Surveillance	Go to Q3
3	Does the client only buy and sell product (does not physically handle it?)	Minimum Surveillance	Go to Q4
4	All other scenarios	Standard Surveillance	

¹ A borderline pass, under versions 1.0 to 5.0 of the standard, was considered a pass when one less amber indicator is received then would be required to fail (i.e. 5 green indicators and 4 amber indicators) or when a client is certified with equal number of amber and green indicators.

	Certification Audit	Year 1	Year 2	Year 3	Year 4 Recertification Audit
Minimum Surveillance	On-Site Audit	Remote Audit	Remote Audit	Remote Audit	On-Site Audit
Standard Surveillance	On-Site Audit	No Audit	On-Site Audit	No Audit	On-Site Audit
Enhanced Surveillance	On-Site Audit	On-Site Audit	On-Site Audit	On-Site Audit	On-Site Audit

As the client has been seen to fall into the Standard Surveillance bracket, the next audit will be due in February 2021 (in 2 years' time) and shall be an on-site audit.

The tables below give the standard and a rationale for the scores given above. The score is highlighted in the appropriate colour.

Component 1 – Generic requirements	
Criterion 1.1: Commitment to legality	
Responsible indicators	For at least the past two years: the organisation has not been found guilty for any offences relating to eel fishing or trading.
Aspiring indicators	For at least the past 12 months: the organisation has not been found guilty for any offences relating to eel fishing or trading.
Discussion	It was confirmed by the client during the audit that there had not been any legal proceeding against the company in the past 2 years and that there were no ongoing investigations either. No evidence of investigation based on basic auditor research.
Score	Responsible indicator
Criterion 1.2: Contribution to Eel Conservation Projects. (Optional bonus score)	
Responsible indicators	The organisation donates at least 2% of its profits or at least 20% of its corporate responsibility programme to projects that make a positive contribution to eel conservation or population enhancement, such as Eel Stewardship Funds, River Restoration projects, conservation and education projects.
Aspiring indicators	The organisation donates 1 – 1.99% of its profits or 10 - 20% of its corporate responsibility programme to projects that make a positive contribution to eel conservation or population enhancement, such as Eel Stewardship Funds, River Restoration projects, conservation and education projects.
Discussion	The company contributes 0.02 EUR per kg of feed purchased to help fund eel conservation projects in the Netherlands and the EU. This equates to around 10,000 EUR annually however is not sufficient to meet the requirements of this component and as an optional bonus score, no scoring is being applied for this element.
Score	N/A
Criterion 1.3: The facility trades in certified responsibly sourced eel	
Responsible indicators	The organisation trades in at least 50% (by number) of certified responsibly sourced eel and has the documentation to demonstrate that.
Aspiring indicators	The facility trades in 10 – 49.9% (by number) of certified responsibly sourced eel and has the documentation to demonstrate that.
Discussion	Approximately 800kgs of eels are purchased annually. In 2018 none of these were purchased as SEG. In 2017 none of these were purchased as SEG. In 2016 around 25% of eels purchased were purchased as SEG. In 2019 a greater % will be purchased as SEG due to increased supply and customer requirement. No eels have been purchased to date in 2019 however.

	Despite not having purchased any SEG eels since 2016 it is thought to meet the aspiring indicator based on the last year they intended to sell products as SEG (2016). In order to meet the responsible indicator this would need to be increased by the next audit.
Score	Aspiring Indicator
Criterion 1.4: Traceability	
1.4.1: Traceability - Incoming product, separation and segregation	
Responsible indicators	<ul style="list-style-type: none"> • Certified and uncertified eel products can be clearly and easily traced back to their source. • Where a fishery or buyer, an electronic tele-declaration system is used • It operates a clear system which ensures that the product remains separated at all stages from arrival to dispatch from non-certified eel products. • The organisation ensures that any products wishing to make a claim as certified do not contain any non-certified eel-based ingredients. • If resolved through mass- or number- balance calculations, the margin of error does not exceed 2%
Aspiring indicators	<ul style="list-style-type: none"> • Certified and uncertified eel products can be traced back to their source. • It operates a system which ensures that the product remains separated at all stages from arrival to despatch from non-certified eel products. • The organisation ensures that any products wishing to make a claim as certified do not contain any non-certified eel-based ingredients
	<ul style="list-style-type: none"> • If resolved through mass- or number- balance calculations, the margin of error does not exceed 5%
Discussion	<p>All batches are kept sperate from each other regardless of certification or not.</p> <p>Only 2 batches are purchased a year so when SEG is purchased the month and year will be recorded and act as the batch number going forward.</p> <p>No batch number on invoices yet but when SEG products are sold the batch number will also be present.</p>
Score	Responsible indicator
1.4.2: Traceability - Outgoing product	
Responsible indicators	<ul style="list-style-type: none"> • Where a fishery or buyer, an electronic tele-declaration system is used • Documentation is well maintained with a maximum of 2% error in the following: • The organisation correctly uses batch-coding for labelling certified product, which can be on the packaging for the product, or included in the documentation (e.g. invoice) with the assignment • All product to be sold as certified by an organisation is accompanied by an invoice which meets the following criteria: <ul style="list-style-type: none"> - Includes an appropriate batch code - Includes a record of the quantity (no. & weight) of product and to whom it was sold

Aspiring indicators	<ul style="list-style-type: none"> • Documentation is well maintained with a maximum of 5% error in the following: • The organisation correctly uses batch-coding for labelling certified product, which can be on the packaging for the product, or included in the documentation (e.g. invoice) with the assignment • All products to be sold as certified by an organisation are accompanied by an invoice which meets the following criteria: - Includes an appropriate batch code - Includes a record of the quantity (no. & weight) of product and to whom it was sold
Discussion	<p>All batches are kept separate from each other regardless of certification or not. Only 2 batches are purchased a year so when SEG is purchased the month and year will be recorded and act as the batch number going forward. No batch number on invoices yet but when SEG products are sold the batch number will also be present.</p>
Score	Responsible indicator
1.4.3: Traceability - Record keeping and documentation	
Responsible indicators	<ul style="list-style-type: none"> • The organisation operates a system that allows the tracking and tracing of all eel from purchase to sale and including any steps in between. In the case of live eels this should include the ability to track each batch delivered to a buyer to be connected back to a water, a time period (maximum duration one month) and specific fisherman/vessel • If a fisherman or buyer, a tele-declaration system is used to report catches and trade • The organisation operates a system that also allows for the completion of a batch reconciliation of eel product by weight over a given period. • The organisation maintains records for a minimum of three (3) years.
Aspiring indicators	<p>The above requirements are met except that:</p> <ul style="list-style-type: none"> • Records have been maintained for less than three (3) years • If a fisherman or trader, a tele-declaration system is planned to be used to report catches and trade in the next season
Discussion	<p>Currently records are kept for around 2 years (less than the three required for responsible indicator). Those that are kept allow the products to be traced from the point of purchase through to the point of sale.</p>
Score	Aspiring indicator
Criterion 1.5: Biosecurity & welfare – Eel and eel products are provided with minimal risk of diseases, parasites and alien species	
Eel farming: Biosecurity is present and disease is treated rapidly and appropriately	

Responsible indicators	<ul style="list-style-type: none"> • The facility has the appropriate permissions to operate from the relevant authority. • The use of chemicals follows legal requirements of the EU and of the country concerned • An effective and documented biosecurity plan is in place and there is evidence that it is being followed. • Daily records are available showing monitoring of fish health and signs of stress and daily mortality is recorded • Records are maintained according to the Medicines Regulations for use of any medicines and/or chemicals used in the facility • UV is used at an appropriate level and separation between tanks
Aspiring indicators	<ul style="list-style-type: none"> • The facility has the appropriate permissions to operate from the relevant licensing authority • The use of chemicals follows legal requirements of the EU and of the country concerned. • An effective and documented biosecurity plan is in place and there is evidence that it is being followed. • Eels are regularly inspected for disease (although this may not be documented) and daily mortality is recorded. • Records are maintained according to the Medicines Regulations for use of any medicines and/or chemicals used in the facility.
Discussion	<p>The facility has the appropriate permissions by the Netherlands Authorities to operate as an aquaculture facility.</p> <p>When the eels arrive, they are inspected. The gills are inspected and if worms/parasites are present a vet is called. The vet confirms the presence of the worms and the delivers an approved drug to kill the worms. This process is all documented when applicable. Mortality is recorded.</p>
Score	Responsible indicator
Restocking: The risk of restocked eels introducing disease into wild populations has been assessed and is minimal	
Responsible indicators	Eels are tested before restocking and found to be free of disease AND/OR eels are from a known source which is tested on at least an annual basis and known to be free of disease.
Aspiring indicators	Eels are tested before restocking when first sourced from a new area, and periodically (at least annually) thereafter to ensure they are free from disease.
Discussion	Most of the clients that are purchasing eels for restocking require a health test to be completed prior to purchase. This is completed by a vet and confirms that the fish are disease free.
Score	Responsible indicator

Component 5 – Eel farming

Criterion 5.1: The total mortality rate during the culture process is low

Weighting: 2

Responsible indicators	<ul style="list-style-type: none"> The Percentage Mortality Rate of eels in culture is less than or equal to 10% on average in the current and previous year OR as an average of the previous five years An accurate daily log is maintained of the number and causes of mortality
Aspiring indicators	<ul style="list-style-type: none"> The Percentage Mortality Rate of eels in culture is between 10 and 15% on average in the current and previous years OR as an average of the previous five years. An accurate daily log is maintained of the number of mortalities
Discussion	Based on the calculation provided by the SEG Standard (No. piece per year/ stock in the year x 100) there was a mortality rate of 3.55% per year (101370/2850000x100) therefore for 2 years as set out in the Standard, the rate would be seen as 7.1%. This was for 2018.
Score	Responsible indicator

Criterion 5.2: The fish meal/oil ingredients in the feed come from a responsible source

Weighting: 1

Responsible indicators	Fish meal/oil in the feed (including juvenile feeds) is certified by IFFO or MSC or shown in some other way to be from responsible or sustainable sources
Aspiring indicators	Fish meal/oil in the feed (including juvenile feeds) is not certified by IFFO or MSC or shown to be from responsible sources, but there are credible plans to move to such a supplier within 2 years
Discussion	All of the fish feed (pellets ranging from 0.5mm to 2mm) are from Biomar. A statement has been provided confirming that the feed is IFFO certified.
Score	Responsible indicator

Criterion 5.3: Feed is used as efficiently as possible

Weighting: 1

Responsible indicators	The average feed conversion ratios in the farm are as follows: glass eel to fingerlings: 1.1 or less fingerlings to 200g: 1.6 or less large eels: 2.0 or less
Aspiring indicators	The average feed conversion ratios in the farm are as follows: glass eel to fingerlings: 1.3 or less fingerlings to 200g: 1.8 or less large eels: 2.2 or less
Discussion	The feed conversion ratio can only be calculated as an average across all size categories and not individual sizes. Based on the 2018 data this equates to: 1.53. Note that around 95% of eels sold are around 160g per piece. The FCR of 1.53 is therefore deemed to be a responsible indicator.
Score	Responsible indicator

Criterion 5.4: Water quality

Weighting: 1

Responsible indicators	<ul style="list-style-type: none"> • A system is in place that is expected to keep key water quality parameters within suitable tolerances for healthy eel survival (e.g. Ammonia, Suspended Solids, pH, Oxygen) • Water quality management procedures are in place including regular monitoring of relevant parameters which shows that water quality is always high and stable • Water quality monitoring is linked to an alarm-based system in the event of a sudden drop in water quality • The facility operates a back-up system to ensure that water quality will not adversely affect survival rates in the case of a power supply failure.
Aspiring indicators	<ul style="list-style-type: none"> • A system is in place that is expected to keep key water quality parameters within suitable tolerances (e.g. Ammonia, Suspended Solids, pH, Oxygen) • Water quality management procedures are in place and there is regular monitoring of relevant parameters which shows that water quality is always high and stable.
Discussion	<p>A computer operated system monitors the oxygen level average in the tanks. This is set to an alarm which will sound if the oxygen levels get too high or too low.</p> <p>Every morning the pH and temperature of the systems are recorded manually. As a result of this being completed manually there are no alarms associated should the levels change. Once a week the ammonia and suspended solids are tested using a spectrometer.</p>
Score	Aspiring indicator
Criterion 5.5: There are minimal ecological impacts from effluent discharge	
Weighting: 1	
Responsible indicators	<ul style="list-style-type: none"> • The system is closed-circuit and has no discharge OR • Effluent discharge is regularly tested by the farm AND • Effluent discharge complies with all local and national requirements AND • Has not been found to be non-compliant in the past 5 years.
Aspiring indicators	<ul style="list-style-type: none"> • Effluent discharge is regularly tested by the farm AND/OR • Has been found to be non-compliant on no more than 1 occasion in the past 5 years.
Discussion	<p>The local water operator has set maximum limits on various items allowed within the discharge water. Samples are taken once a year by the authority and tested. The most recent test from Dec18 demonstrates that the levels are all much lower than the allowed.</p>
Score	Responsible indicator
Criterion 5.6: Grading, slaughter and transportation are carried out with respect to welfare	
Weighting: 1	
Responsible indicators	<ul style="list-style-type: none"> • Grading is completed in an efficient manner • Slaughter is completed by a method that provides an instant death or renders them insensible to pain, i.e. electric stunning or percussive stunning. • Procedures are in place to ensure transportation provides suitable conditions for fish welfare.

Aspiring indicators	<ul style="list-style-type: none"> Other, previously acceptable methods of stunning before slaughter are used, e.g. chilling, but there are credible plans in place to invest in the latest methods within the next 2 years
Discussion	<p>No slaughter occurs.</p> <p>The initial grading is completed using pipes from the tanks, a grader and then baskets to move them to the new tanks.</p> <p>The next level of grading used pipes direct from the tanks, a grader and then pipes back to new tanks depending on the size.</p> <p>All transport in pipes whilst grading is completed in water.</p> <p>Prior to sale they are put in separate tanks for about 4 days to habituate and purge eels prior to final weighing, loading and transportation.</p>
Score	Responsible indicator
Criterion 5.7: The farm provides eel for restocking	
Weighting: 2	
Responsible indicators	The farm can provide documented evidence that 10% or more of the farm's annual eel production (by piece) <u>has been provided</u> for restocking for the purpose of conservation / escapement.
Aspiring indicators	The farm can provide documented evidence that it makes 10 % of their annual eel production (by piece) <u>available</u> for restocking for the primary purpose of conservation / escapement AND/OR for new clients, the farm can demonstrate that they have bookings for re-stocking in the following year at more than 10% of the predicted annual eel production (by piece) for the purpose of conservation / escapement.
Discussion	<p>2018 – 150kgs</p> <p>2017 – 0kgs</p> <p>2016 – 0kgs</p> <p>2015 – 2779kgs</p> <p>In 2019 of the 2227500 pieces approx. 650000 are available for restocking. However they will only be sold for restocking if there is demand.</p>
Score	Aspiring indicator
Criterion 5.8: Eels for restocking are not graded out slow-growers	
Weighting: 2	
Responsible indicators	The size range and quantities in the eels for restocking reflect 100% that for the age group in the whole farm
Aspiring indicators	The size range and quantities indicate no more than a 25% supplement of those for restocking are from slower growing fish of the same age group.
Discussion	All fish designated for restocking are sent to the size specification requested. The fish are randomly picked based on the size category.
Score	Responsible indicator