



Factsheet: Requirements for sea urchin fishing in the Northern Periphery and Arctic area



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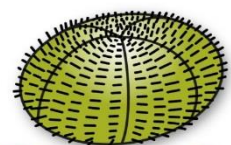
Northern Periphery and
Arctic Programme

2014–2020



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URCHIN

Utilising the Arctic Urchin Resource

1 Requirements for sea urchin fishing in the Northern Periphery and Arctic area



1.1 Introduction

This factsheet aims to provide a list of legislative and legal requirements for potential sea urchin fishers and sellers in countries participating in the Northern Periphery and Arctic funded URCHIN project. These include Norway, Ireland and Iceland. These regulations are relevant at the date of publication (April 2018) but are subject to change and so the authors recommend that anybody fishing sea urchins in these countries check for any changes in the legislation listed here.

Greenland is also participating in the URCHIN project and they follow the same EU regulations as Iceland and Norway. Because there is no established fishery, there is no clear regulatory framework in place in Greenland and it has not been included in this guide.

For further information on harvesting techniques, sea urchin roe enhancement, reseeding techniques, potential markets and other information regarding sea urchin fisheries refer to the URCHIN project website: www.urchinproject.com

This factsheet fulfills the requirements of Activity 4.6.1. of the URCHIN project:

Activity 4.6	<i>Activity title</i> <i>Legislative and regulatory issues</i>	<i>Start month:</i> 09.2015	<i>End month:</i> 12.2016
<i>Description:</i> Produce market based factsheet describing the necessary legislative and regulatory issues need to be complied with in order to export to EU. Also to carry out risk assessment on the catching and processing of sea urchin		<i>Deliverables:</i> Disperse information to fishermen, processors and regulatory bodies in NPA countries. Present results at Stakeholder workshop	
4.6.1	<i>Deliverable:</i> Factsheet and Stakeholder workshop	<i>Target value:</i> SME Factsheet to a minimum of 10 SME's in NPA. Workshop to be held in at least 2 different NPA countries	<i>Delivery month</i> 06.2017

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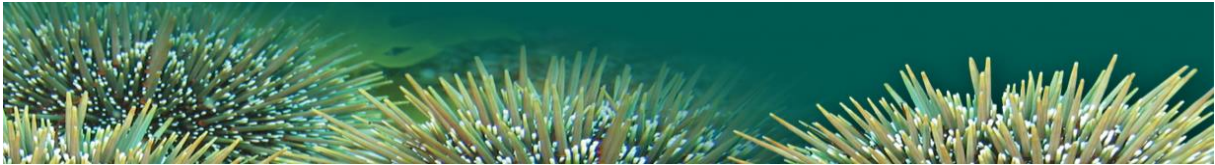
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2 Norwegian requirements



2.1 Introduction

There is no stock management, no total allowable catch (TACC) or quota management system for sea urchins in Norway, and although it is a free entry fishery to anybody who wishes to participate there are now a number of restrictions in place that have become increasingly expensive. These include that fishing sites have to be classified by the food health authority in Norway, the boats have to be within the fishing register and the Norges Råfisklag (Norwegian Fisherman's Sales Organisation), that pays the fisher, owns all sea urchins that are harvested. Before sea urchins can be exported from Norway they also must be registered with a catch certificate.

2.2 Legal and logistical requirements for fishing sea urchins in Norway

Step 1: Logistical requirements

- a) Potential sea urchin fishers must have a registered fishing boat
- b) A diving license if the method of harvesting is use of divers

Step 2: Site classification

The chosen site needs a classification for fishing from Mattilsynet. There are four kinds of classification:

A Classification – The site has been tested for 12 months for *Escherichia coli* and algae toxins without any failed results. Additionally, the urchins must be tested for Heavy Metals every 4 years. Obtaining this classification means the sea urchins can go directly to the market or consumer.

B Classification – There's been a failure of *E. coli* or algae toxin. These sea urchins cannot be sold directly to the consumer and must be heat-treated.

C Classification – A constant failure of *E. coli*, or algae toxins. The site can be fished, but the sea urchins must be moved onto an A, B or separate land site for a period of purification.

Seasonal Fishing Classification – This is a temporary classification of a site and is probably the most relevant to sea urchin fishers. *E. coli*, algae toxin and Heavy Metal testing must be carried out. Three *E. coli* tests are needed to take place in a three-week period with no failed results before any fishing can take place, followed by *E. coli* every 4 weeks during the period of fishing.

Additionally – A site map showing industrial and residential area is required, highlighting sewage outlets and charting the sea currents.

There is currently no legislation around the size of a harvesting site (this is up to the individual food health authorities) but they are usually around 5km².

Step 3: Catch reporting and certification

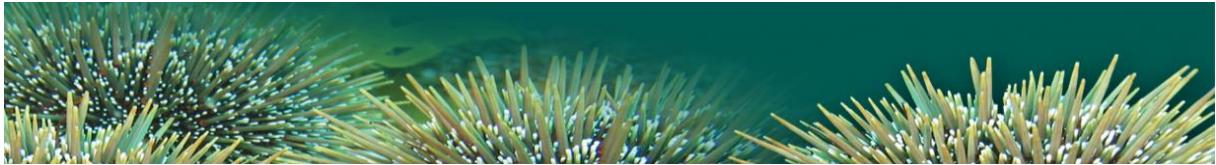
- a) When the catch is landed, it must be reported to the Fishermen's Association.
- b) The packing centre must be approved by the food health authority, with annual inspections and 3-yearly audits.
- c) For exporting within the EU: sea urchins currently need a catch and health certificates and an export licence.
- d) For exporting to the US and Japan: Need a health certificate for the export, issued by the food and health authorities.

Possible future requirements:

Norovirus testing may be applied to the fishery at some point.

NOTE: The regulations for sea urchins are based on EU regulations for filter feeding shellfish. The EU recognise that this is not the correct category for sea urchins and so the regulations for sea urchins testing will be revised in 2019. Norway follows the EU regulations and so this will change the sea urchin regulation and requirements in Norway.

3 Icelandic requirements



3.1 Introduction

The Icelandic sea urchin fishery has been subject to relatively passive regulation. There were no regulations in 1993 when the sea urchin fishery started and no imposed limits on quantity of catch. The only requirements were that the boat was legally operated had a dredge or a diver and a legal fishing permit.

In 1993 Ministry of Fisheries introduced regulations to limit access to the sea urchin fishing where it was claimed that only vessel with a legal fishing permit and a contract with a legal processing company approved by the Directorate of Fisheries were allowed to harvest sea urchins. The government could limit the permit if necessary by demanding reports on the fishing, maximum size of boats, size and kind of fishing gear used and the fishing season. Each license was limited to one big area (7 areas around Iceland in total) but there were no limitations for number of licenses that could be granted (Regulation no 492/1993).

In November 2013, a new regulation was introduced and now there are no limitations to areas, and fishing reports are demanded weekly to the Marine and Freshwater Institute (MFRI) and monthly to the Directorate of Fisheries (logbook). Classification of harvesting areas and monitoring of biotoxins and harmful algae are required by the competent authority (Icelandic Food and Veterinary Authority (Mast)) and the catch must be monitored by authorities when landed (Regulation no 1010/2013).

Since 2013 the sea urchin fishery has operated without a fishery management plan, where no restrictions on catch, effort, number of boats, dredge constructions, area closure or fishing seasons exists. The only requirements for the fishermen to be able to catch sea urchins are that the boat is legally operated and has a fishing permit. No regulations regarding size limits exist but the market demand is that the urchins have reached 40-50 mm in diameter. There are no limited fishing seasons but because of market demands for roes of good quality (> 10%, preferred colour and quality) which can only be reached between September and April in Icelandic waters, the fishery is conducted in these months only. However, logbook information is required weekly, where catch, location and effort is reported for every fishing day and the stock status catch per unit effort (CPUE) has been determined annually from that information by the MFRI.

Since 2016 the green sea urchin stock in the main fishing area in Iceland (Breidafjörður) has been managed, based on advice from the MFRI (maximum allowable catch in the area). Outside this area fishing is unlimited as long as the weekly log book information sent to the MFRI do not provide any reasons to interfere or close the fishery.

The Directorate of Fisheries is an Icelandic government institution responsible for implementing government policy on fisheries management and handling of seafood products. It collects processes and publishes data on fisheries in collaboration with Statistics Iceland. Information on sea urchin catch (by fishing boats) by area, day and effort is available on the Directorates web site (<http://fiskistofa.is>).

3.2 Legal and logistical requirements for fishing sea urchins in Iceland

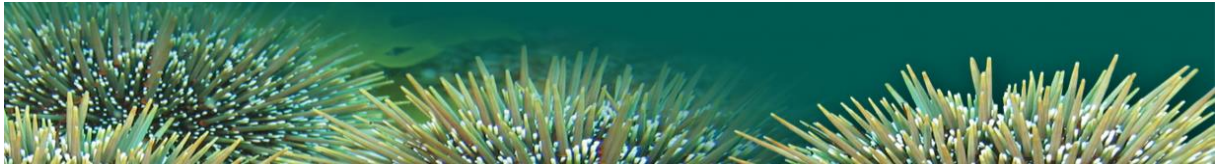
The current regulations from the Ministry of Fisheries in Iceland (nr 1010/2013) regarding sea urchins fishery are as follows:

1. A special license from The Directorate of Fisheries (Fiskistofa) must be issued. The license duration is one fishing year and to get it the boat has to operate a legal fishing permit and have a contract with a legal processing company approved by the Icelandic Food and Veterinary Authority (Mast).
2. Monthly reports on the fishing (log books) shall be delivered to The Directorate of Fisheries and weekly to The Marine and Freshwater Institute. Logbook informations as catch, location and effort is reported for every fishing day and the stock status (CPUE) has been determined annually from that information by the MFRI.
3. The catch must be monitored by authorities when landed (Regulation no 1010/2013).
4. Since 2010 the requirements for harvesting sea urchins are the same as for shellfish (European regulations 253 and 254/2004) but this will be revised in 2019.
5. The fishery is only allowed in a harvesting area that has been classified (A,B,C) by the competent authority (Icelandic Food and Veterinary Authority) (Mast) concerning bacteria, viruses, heavy metals (Pb, Cd, Hg) and poison algae for a year and is open. Once an area is open, monitoring is required by the competent authority to keep it open.
6. Annual maximum allowable catch in the main fishing area in Breidafjörður, which has been mapped, has been set. Unlimited number of boat can fish in the area as long as the catch limit is not exceeded. Outside this area, fishing is unlimited as long as the logbook information sent to the MFRI do not provide any reasons to interfere or close the fishery.

3.3 Catch reporting and certification

- a) When the catch is landed it must be monitored by authorities (Directorate of Fisheries).
- b) The packing center/processing must be approved by Icelandic Food and Veterinary Authority (Mast).
- c) For exporting within the EU: sea urchins currently need a catch and health certificates and an export license.
- d) For exporting to the US and Japan: Need a health certificate for the export, issued by Icelandic Food and Veterinary Authority.

4 Irish requirements



4.1 Introduction

In Ireland, there are no fisheries controls or legislation on the harvesting or fishing of sea urchins as echinoderms are not legislated for. The only requirement for selling sea urchins in Ireland is that they are harvested from a safe environment, which is free of bio-toxins and heavy metals before been transported to certified premises, where they are cleaned, weighed and packed in poly-boxes. They are then sealed in heavy-duty plastic bags and transported either by air or by sea to their final destination. To get an Export Licence Number or in fact a Licence to sell sea urchins for human consumption in Ireland, it is necessary to contact the Sea Food Protection Authority (SFPA) to obtain the required Licences (www.sfpa.ie). Further information on the process is detailed in the following text.

4.2 Legal and logistical requirements for fishing sea urchins in Ireland

The SFPA will inspect the premises and before issuing a Licence as a Depuration/Export Unit there are some basic standards to be satisfied. In the case of sea urchins, the absolute minimum standards are required (unless any form of processing is involved including gonad extraction which would then involve the full Food Handling Standards). The following are a list of the requirements for the certified premises:

- a) The premises should have a reception area where the Suppliers deliver the product where it will be cleaned and weighed.
- b) A Clean Area follows where the sea urchins are checked, graded and packed in polystyrene boxes – with no holes in the boxes. Each box will have a label which identifies the sender and the destination. It also states the contents of the box, where and when harvested, Export Licence number, date packed and the “consume by” information.
- c) For export packaging (particularly for Air Transport) the polystyrene boxes are placed in heavy duty plastic bags which are then heat sealed.
- d) The sealed cartons are stacked on a pallet and leave the premises without re-entering any of the original areas.
- e) The Documentation that accompanies the cargo will include the depuration or export unit Certificate which will show the total contents and their origin/s, it will also indicate the state of each location (Class A, B etc..) – there must be full traceability of the product from Collector to Table.
- f) All walls must be washable, working tables Stainless Steel. hot and cold potable water (with elbow or foot operated capability), protective clothing as required to be provided.
- g) Full protection against rodent and fly infestation to be demonstrated. Documentation to show that all packaging materials comply with Food Safety Standards. Similarly soaps/washing liquids and bleaches are of approved type.
- h) Storage areas for boxes and packaging will be inspected routinely.

A list of key Irish and European legislation relating to food safety is required to be maintained on file for company staff to access electronic copies of the relevant legislation by logging on to the Food Safety Authority Website (www.fsai.ie/legislation) and the European Legislation website (eur-lex.europa.eu/)

Amendments to existing legislation can be made at any time. Updates to this legislation can be checked by logging on to the Food Safety Authority Ireland Website (www.fsai.ie).

Step 1: Logistical requirements

The packaging of sea urchins does not normally include ice; this is because if the temperature during transport is as low as 4°C the Urchins will die and hence the shelf life will be shortened. Sea urchins are usually transported dry in poly-boxes and then sealed in heavy duty plastic bags.

It is routine practice for random checks on the temperature of the product to be taken at the destination. Sea urchins can be as high as 16 -17°C and under normal circumstances be rejected.

The SFPA are delegated the authority to authorise the sale of seafood for human consumption. In the case of the transportation of live animals it is the responsibility of the Animal Welfare Department to ensure the sea urchins are kept at a temperature within the normal range of their usual habitat. Sea urchins normally live at a temperature which can vary between 7 and 16°C. These temperatures are taken as the outside guidelines at which the product may be accepted.

Step 2: Site classification

Under EU legislation sea urchins are classified under rules and regulations imposed on bivalves therefore harvesting site classification follows the same procedures.

Table 1. Shellfish Classification based on E. coli monitoring

Category	Microbiological Standard (MPN 100g ⁻¹ shellfish flesh)	Treatment required
Class A	<230 <i>E.coli</i>	May go direct for human consumption
Class B	<4,600 <i>E.coli</i> (90% compliance)	Must be depurated, heat treated or relayed to meet class A requirements
Class C	<46,000 <i>E.coli</i>	Must be relayed for 2 months to meet class A or B requirements or may also be heat treated

The above table is taken from the SFPA website where they detail the requirement for calcification of shellfish harvesting waters which sea urchins are grouped under (<http://www.sfpa.ie/Seafood-Safety/Shellfish>).

Shellfish harvesting waters are also classified by the SFPA (<http://www.sfpa.ie/Seafood-Safety/Shellfish/Classified-Areas>) and these waters are monitored by the Marine Institute for bio-toxins and harmful algal blooms. The marine Institute keep an up to date recorded of area classifications on their website (<http://www.marine.ie/Home/site-area/data-services/interactive-maps/latest-shellfish-safety-data>). The status of these waters must be monitored by operators.

Step 3: Catch reporting and certification

All sea urchin suppliers or harvesters must have a shellfish gatherers document Book. This is provided by the SFPA. When a delivery of fresh sea urchins is received, it must be accompanied by a signed copy from this book. This copy must be retained for several years for inspection.

To be able to collect sea urchins from any Bay or Area, the location must be declared "Clear". This is done by sending a series of samples (usually 12-16 sea urchins) for analysis over several weeks. If all samples are declared "Clear" then the area in question is declared to be Class-A for sea urchins and hence does not require Depuration. Under current EU Legislation sea urchins are classified as bivalves which is why this procedure is required.

Possible future requirements:

Currently there are no changes or planned changes due to current legislation in Ireland. However, there will be a change in EU legislation on the classification of sea urchins as echinoderms which in turn change current legislation in Ireland.

Acknowledgments

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