



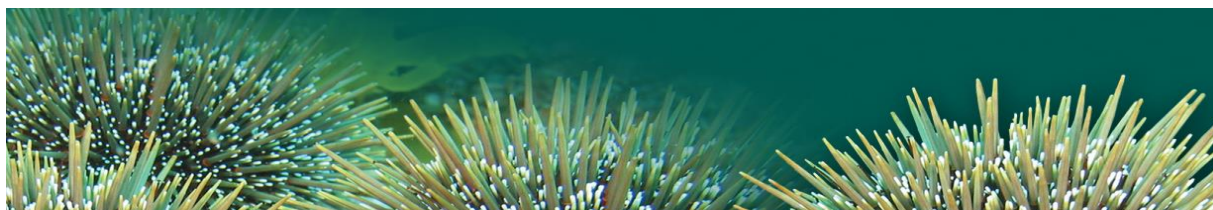
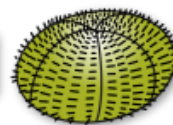
Northern Periphery and
Arctic Programme
2014–2020



EUROPEAN UNION

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URCHIN
Utilising the Arctic Urchin Resource



URCHIN project 36 month newsletter

Welcome to the 36 Month, and the final URCHIN Project newsletter describing the project activities between (and including) Nov 2017 and April 2018. The contents of the newsletter include the activities of the various project partners over the last 6 months and a brief summary of activities related to the URCHIN project that will continue after project end in April 2018.

As always we hope you enjoy the newsletter and even though the URCHIN project is officially finishing in April 2018 the project website will remain open and disseminating information well into the future so please continue to use this as a source of information. We believe this will be a useful tool to researchers, industry and support organisations for many years to come. Should you need to we encourage you to contact the project co-ordinator and/or the project partners in each of the participating NPA countries for further information regarding details of the URCHIN project (contact details are listed at the end of the newsletter) beyond April 2018.

Best regards,

Phil James (Nofima)

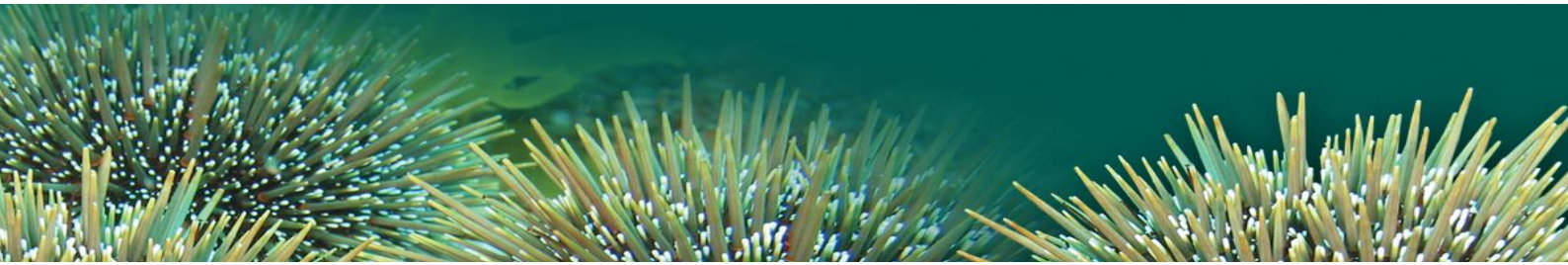
URCHIN Project Co-ordinator

URCHIN project finalist in Arctic Awards ceremony:

In November 2015 the URCHIN project participated in the inaugural Arctic Awards competition and was a finalist in the Sustainable Use of Resources category!



Project partner activities during the last six months:



Norway (Nofima):

Nofima have been busy producing the final outputs from the URCHIN project as well as starting the process of final reporting on the project. Representatives from Nofima attended the 'Final Reporting' seminar held by the NPA Secretariat in Copenhagen in February 2018.

Live transport trials:

Nofima have completed a series of trials investigating current and novel methods of transporting live sea urchins by road, sea and air. The trials have been ongoing for the past 18 months with the final trials completed in the final reporting period. The resulting report and transport techniques will be summarised and published in a Nofima report, and disseminated on the URCHIN website at the end of April.



Tor Evensen from Nofima taking water quality measurements during live transport trials conducted in the Nofima live transport testing system in Tromsø, Norway.

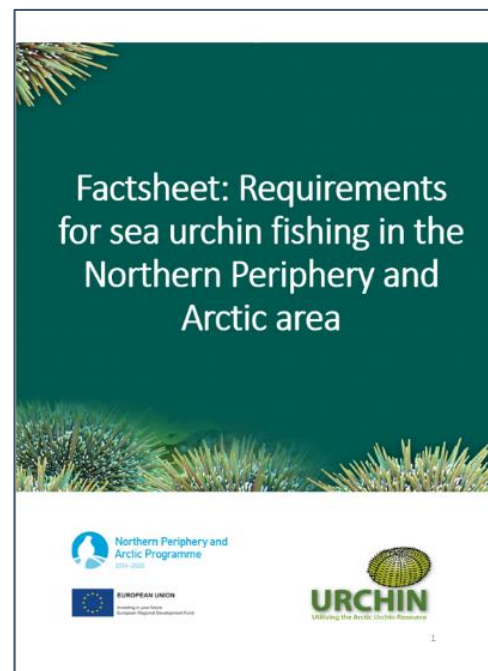
Amendment to fishing techniques report:

During the final 6 month period Nofima were involved in testing new, novel sea urchin harvesting equipment (The Pathfinder) designed and produced by a Norwegian SME (Pure Arctic AS). The testing resulted in a short amendment to the Sea Urchin Fishing Techniques Report (Nofima Internal Report 15/2016). The amendment will be available, as an extension of the original report on the URCHIN website at the end of April.

Rune Svendsen from Pure Arctic holding sea urchin collected by the new, novel harvesting system (the Pathfinder) in 2017.

**Factsheet publication:**

Nofima, in conjunction with GMIT and Hafrannsóknastofnun have produced a simple factsheet listing the requirements for SME's to get established in the sea urchin harvesting industry in NPA countries. The factsheet includes a list of legal and logistical requirements that must be fulfilled in order to harvest and sell urchins in Norway, Ireland and Iceland. The requirements in Greenland are unclear at this stage as the harvesting of sea urchins is still at a very experimental stage. The factsheet will be published on the URCHIN website by the end of April.



Factsheet to be published in the URCHIN website in April 2018

Greenland (Royal Greenland):

Royal Greenland participated in the final project meeting in Galway via skype and contributed to a number of outputs and final project reports in the final project period.

Ireland (Marine & Freshwater Research Centre, Galway Mayo Institute of Technology and SME partners):

The reseeding trial continued throughout the last 6 months with a final census taken in early 2018. A final report from the trials will be published on the URCHIN project website within the next month.

GMIT also hosted the final project meeting in Galway in March 2018. This was a great opportunity to meet and discuss final project outputs and the ongoing impacts of the URCHIN project after project end.



The final URCHIN project meeting in Galway, Ireland

Roe enhancement

The roe enhancement has finished with our partners the Bantry Marine Research station in Co. Cork and results and information will be included in the reseeding report.



Sampled sea urchins from the roe enhancement trial at the Bantry Marine Research Centre, Co. Cork.



***Clockwise from top left:** Reseeding site, rock pool with sea urchins, rock pool with sea urchins, sea urchin roe quality, sea urchin roe quality, sea urchin measuring.*

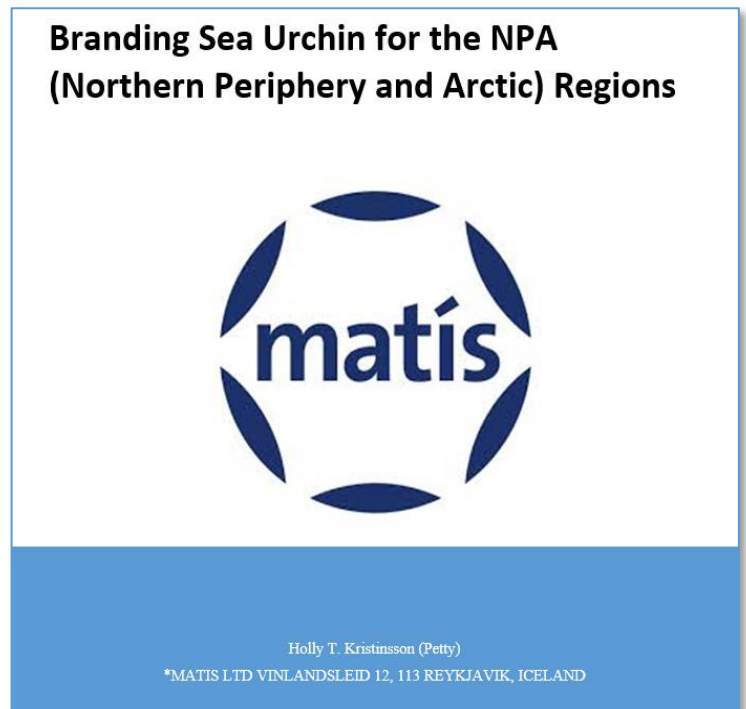
Iceland:

Matis:

Matis has been focused on the final outputs from the URCHIN project, primarily on a 'Branding Report'.

Branding report:

This branding report supplements the report, Markets for Sea Urchins: A Review of Global Supply and Markets that the URCHIN project delivered last October. It explains the concept and elements of branding with examples provided to give insight into these basic elements of branding. Additionally, examples of sea urchin branding and other high value seafood products are highlighted. Considerations and steps to building a brand are also discussed and can serve as a basis for brand strategy. It is important that the NPA sea urchin fisheries and associated partners create a branding strategy and discuss whether they want to work on building a corporate brand/ and or a consumer brand. The NPA should consider the purpose of branding their regional sea urchin and what a brand will accomplish for the end customer and for the NPA as a whole.

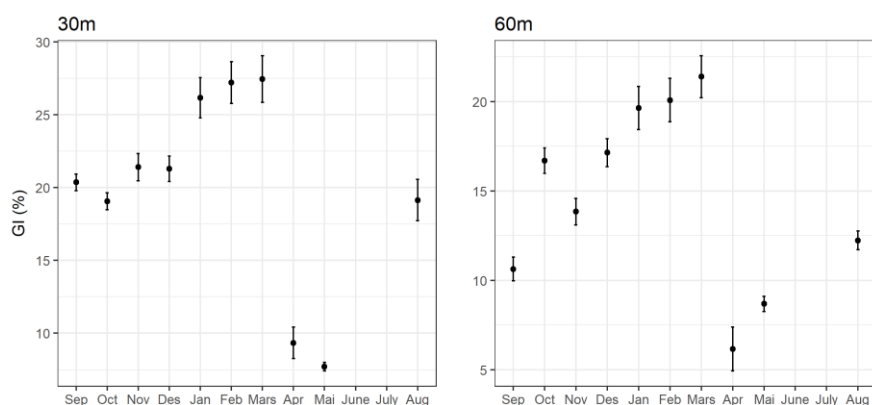


The Matis 'Branding Report' will be released by the end of April on the URCHIN website.

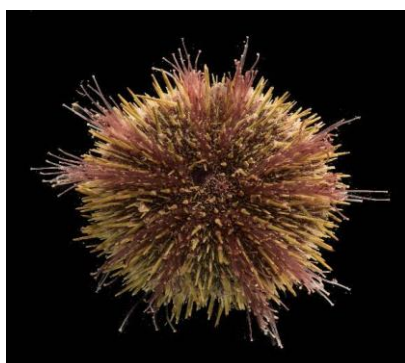
Hafrannsóknastofnun (Marine and Freshwater Research Institute) and Thorisholmi:

Hafrannsóknastofnun continued the program of describing the annual reproductive cycle of sea urchins from two different fishing areas (30 and 60m depth) in Iceland. The results indicate a relatively high GI at both sites throughout the whole investigation period. One spawning season in April was observed at both sites. However, minor spawning continued into May at 30m depth.

The investigation will continue past April with a Masters Student working on the gonad histology preparations from the urchins that have been samples over the past 24 months. These will be classified into four different developmental stages to obtain monthly volume fractions (Vv) for gonial cells, NP and residual and new gametes, the relative proportion of different cell types within the germinal epithelium of each gonad will be evaluated by sterology. The result will be compared to the GI calculated from weight and the gonad colours will be evaluated using colour plates developed for sea urchin gonads.



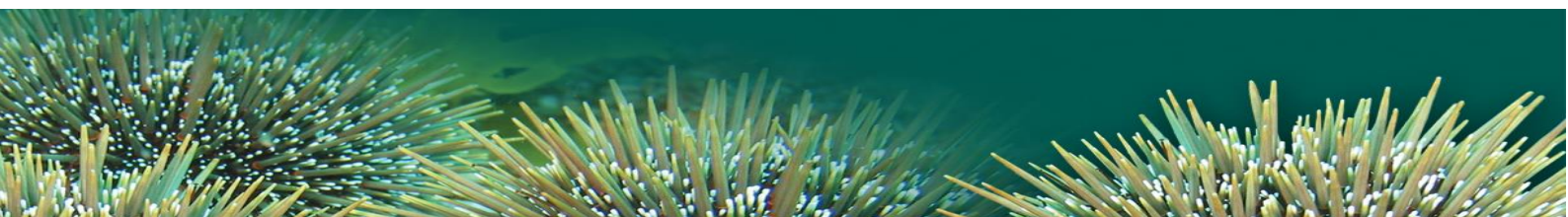
Gonad index \pm SE from September 2016 to August 2017 at two fishing sites in Breiðafjörður at 30m and 60m depth respectively.



The green sea urchin seen from beneath with the mouth in the middle (left). The roes and mouth with five teeth situated in the "Aristotle's Lantern" (right). Photos: Svanhildur Egilsdóttir.

The conclusions of the investigations carried out by the MFRI in the URCHIN project have been published in number of final reports and an article (Ígulkerið Skollakoppur við Ísland; líffræði og veiðar) in an Icelandic journal (Náttúrufræðingurinn) that is submitted for publication. A report indicating all results from the investigations carried out in Breiðafjörður by the MFRI in this project (Distribution, abundance, population structure, dredge efficiency, gametogenesis and spawning of green sea urchin (*Strongylocentrotus droebachiensis*)) will be published in autumn 2018 on the MFRI website.

Ongoing networks and activities for the URCHIN project



A sea urchin industry conference is planned in Iceland (autumn 2018) and will be organised and run by Matis. This will be an ideal opportunity to extend the networking established during the URCHIN project into the future.

A number of the research activities established in the URCHIN project are ongoing in their respective countries and we are very happy to receive news and continue publishing on the URCHIN project website. The URCHIN website will continue to act as a platform for establishing and developing sea urchin fisheries in the NPA. If there are any queries related to any aspects the project, please contact one of the following national contact points to discuss results from the URCHIN project and the sea urchin fishery in the Northern Periphery and Arctic area. If you are outside of these NPA countries, please do not hesitate to contact Phil James at Nofima, Norway for further information.

National contacts for URCHIN related queries:

Norway:	Phil James	philip.james@nofima.no
Ireland:	Collin Hannon	colin.hannon@gmit.ie
Iceland:	Guðrún Þórarinsdóttir	gutho@hafro.is
	Guðmundur Stefánsson	gudmundur.stefansson@matis.is
Greenland:	Nikoline Ziemer	nikz@royalgreenland.com

We wish you all the very best in your endeavours to establish and develop sea urchin industries!

Best regards from the URCHIN team

