

## Present

Andrew Mackenzie	Lews Castle College
Prof Lisbeth Truelstrup Hansen	Arktisk Teknologi Center, Greenland
Clíodhna Ní Ghríofa	Údarás na Gaeltachta, Na Forbacha, Co. na Gaillimhe
Dr Ronan Sulpice	NUI Galway
Ms Agnes Mols Mortensen	TARI – Faroe seaweed
Dr Angus Murray	Lews Castle College
Dr Roy Bartle	Lews Castle College
Prof Rúnar Unnþórsson	University of Iceland
Prof Francesco Gentili	Swedish University of Agricultural Sciences
Dr Calle Niemi	Swedish University of Agricultural Sciences

## Apologies

Dr Alasdair Macleod	Lews Castle College, Stornoway
Jon MacLeod	An Lanntair

## Minute

	ITEM	Comment	Decision	Task	Who?	By date
1.	Approval of minute of 30 July 2020	The minute was approved.	No matters arising.			
2.	Update on progress by person/organisation since last meeting at the end of July	<p><b>Lews Castle College</b>  <b>Roy Bartle:</b>  <b>Andrew Mackenzie: Work package Management;</b> Continuing to chase up FLC and finance claims – completed Period 1 Project Report.            Have registered for the NPA 2020 Annual Event - Innovation for smart and resilient communities (<a href="http://www.interreg-npa.eu/events/npa-2020-annual-event-innovation-for-smart-and-resilient-">http://www.interreg-npa.eu/events/npa-2020-annual-event-innovation-for-smart-and-resilient-</a></p>				

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		<p><a href="#">communities/</a> ) be held on 23rd September 2020. Michela Gaifami suggested that we have an input from SW Grow at the beginning of the session to start a discussion about: <i>what kind of innovation is desirable to increase business opportunities in the bio-based industry? What are the path/avenues to pursue for increasing sustainable/circular business ideas based on natural resources? What are the trends or where are potential markets opportunities?</i> So I have included this in the registration. <b>Arrange a virtual meeting nearer the time with Partners to decide who will take part. (Andrew)</b></p> <p>Have discussed with Richard Searle (Scottish Seaweed Industry Association) how the questionnaire could be improved with clearer separation between Cultivation and Harvesting questions – revised questionnaire sent to all Partners. Agreed a fee of £400 for the Scottish Seaweed Industry Association to circulate the questionnaire and Press Release to their members.</p> <p>Keeping an eye on the COVID-19 situation re travel restrictions for a meeting in October in Ireland or Inverness to finalise the proposal to have a Project Plan for all work packages.</p> <p><b>Roy Bartle</b> <b>Work package T1.2.1 Drying systems.</b> Finished drying curves and isotherms for both seaweed species. In the last month preparing a paper to demonstrate this work and publish. Hoping to be able to send some more samples to Lisbeth for nutritional analysis This might make a nice paper because it would combine the drying aspects with nutrition (possibly in the Journal of Phycology). Samples also sent to Sweden but no analysis of these is possible at the moment – because of preparatory work being done. It is hoped that work on building a full-sized drying rig will start on 11 September at Lews Castle College that will precisely evaluate the effects of relative humidity, air temperature and air velocity on the drying kinetics of seaweed species.</p> <p><b>Angus Murray</b> <b>Work package C</b> Has been analysing the activity on the SW-GROW website to compile monthly reports. This includes the number of hits on the site, number of unique users and where they are from. A report will be generated every month and uploaded to the Documentation page on the web site.</p>			

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	<p><b>Swedish University of Agricultural Sciences</b> <b>Dr Calle Niemi</b> Doing extensive literature research to determine protein and micro algal methods and working on a protocol to accurately measure proteins in micro algae but will need samples of Dulse (Palmaria Palmata) from Partners. Agnes agreed to send freeze dried and oven dried product. Calle has now obtained a machine for disrupting cell walls and a refrigerated centrifuge for protein analysis.</p>				
	<p><b>An Lanntair</b> No information available.</p>				
	<p><b>Arktisk Teknologi Center, Greenland</b> Some samples were meant to be sent from Greenland to NUI and SLU – to be chased up. Been working on characterisation of the samples received from the Faroes and Greenland and doing a small fermentation experiment with Saccharina and Alaria and are finding large differences in the way that they ferment. The drying experiments have probably been postponed until next year because of restrictions on travel to Greenland. <b>Lisbeth to discuss with Calle the best way to analyse samples from Roy – Proteins, fats, carbohydrates etc.</b></p>				
	<p><b>TARI – Faroe seaweed</b> Still taking water and bacterial samples from the fjord and looking at nutrient content. The idea was to make an assessment of certain parameters at different times of the year, but the problem is that the crop is contaminated with snails and other marine invertebrates so sending samples for analysis will not be possible. Some more field trips will be undertaken to see how the nutrients are changing with time. <b>Samples will be gathered from two more locations and sent to Ronan.</b> Looking to progress work on the pilot at Fámjin with Roy with the theme “how to build a green hatchery”. It is hoped to include the municipality of Fámjin in this project – but this will make it more complex. The turbine size will have to be selected based on whether the municipality is included but will be constrained by the available budget. Discussions will be held with the Municipality when our own ideas are clearer but TARI’s aim is to run completely on “green” power.</p>				
	<p><b>Údarás na Gaeltachta</b> Has been looking at a shared resource for all the Partners and “Dropbox” was selected as the most suitable. There is a cost implication (per user) and the idea is to trial this so that files can be shared amongst Partners – e-mail will be sent soon. Working on a presentation on the work packages for online conference</p>				

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	<p>Seagriculture 2020, 9th International Seaweed Conference, "Seaweeds: supporting the European Green Deal", 24 - 25 September 2020. <b>We need to move on with the questionnaire – Clíodhna happy to lead on this.</b> Clíodhna is happy to send seaweed samples to Calle (<b>Action: Calle to send Clíodhna an e-mail stating what quantity is required, packing instructions and address</b>).</p> <p><b>NUI Galway</b> Because of the COVID-19 situation, NUI Galway will have €0 claim for period 2. They have been doing a little analysis of samples, but nothing could justify a claim. The post doc is now recruited and will start work at the beginning of September. A paper will be submitted on the variations in seaweed species in relation to where they come from, and Ronan will send to all Partners by e-mail (<b>work package 2.1</b>).</p> <p><b>University of Iceland</b> Been working on the design of a drying cabinet and in the process of starting to make one based on geothermal heat to make pellets with a moisture content of approximately 15%.</p>					
3	Website status	See above.				
5	Questionnaire	It was felt that there needs to be a re-structure of the questionnaire and probably move to an on-line questionnaire.	Agreed to set up a sub-Committee comprising Clíodhna, Ronan, Jon, Andrew and Roy. Possibly consider two different questionnaires and how can we engage with the end user?	Convene meeting to discuss other questions like "quality of product" and what does the consumer want?	Clíodhna	As soon as possible.
6.	Face-to face meeting	Considered not possible at the moment with COVID-19 restrictions.	Wait another month to see if COVID-19 restrictions are relaxed.			

## Summary of Actions

ACTION	WHO	WHEN
Develop a plan to deal with the commercial aspects of end use. Possibly set up a separate group led by Jon.	Clíodhna, Jon.	Before 30 September 2020
Convene meeting to discuss other questions in the questionnaire, like “quality of product” and what does the consumer want?	Clíodhna	As soon as possible
Arrange a physical meeting between Lews Castle College staff, Steve Husband and Jon to discuss a pilot – in the next couple of months.	Andrew	As soon as possible
Consider organising a face-to-face meeting in October to finalise the proposal to have a Project Plan for all work packages (to replace the cancelled Greenland meeting). Keep an eye on the COVID-19 situation re travel restrictions for a meeting in October in Ireland or Inverness.	Andrew	As appropriate
Register for the NPA 2020 Annual Event - Innovation for smart and resilient communities ( <a href="http://www.interreg-npa.eu/events/npa-2020-annual-event-innovation-for-smart-and-resilient-communities/">http://www.interreg-npa.eu/events/npa-2020-annual-event-innovation-for-smart-and-resilient-communities/</a> ) be held on 23rd September 2020.	All	Before 11 September 2020
Send in any pictures or information that Clíodhna can use on the various media channels.	All	As appropriate
Gather samples from two more locations in Faroe and send to Ronan.	Agnes	As soon as possible
Discuss with Calle the best way to analyse samples from Roy – Proteins, fats, carbohydrates etc.	Lisbeth	When appropriate
Send Clíodhna an e-mail stating what quantity of sample is required, packing instructions and address	Calle	When appropriate

Next meeting:

Skype Wednesday 30 September 2020