

Future Capacity for
Algal culture in NI
Answering the 3 Vs -
Value
Vicinity
Viability

Dr Naomi Wilson
SSIA conference 12 – 13th
November 2025
afbini.gov.uk



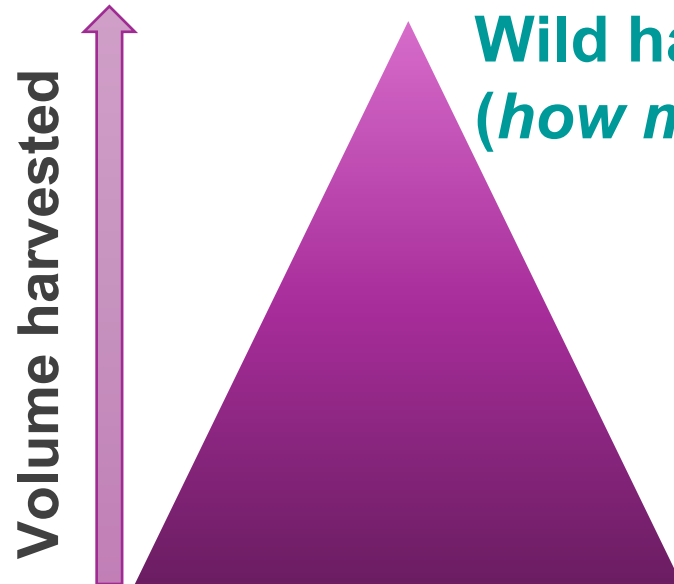
Seaweed Industry in NI

- One seaweed farm (Islander Kelp, Rathlin island).
- Unknown number of wild harvesters.
- Products made from locally sourced seaweed readily available – quality/health control?
- Currently no licence specific to seaweed farming/algal culture.
- Local shellfish producers interested in growing seaweed.
- Increasing interest in sourcing local supply of seaweed for livestock supplements, nutraceuticals and biostimulants.
- Need for knowledge on suitability of NI marine environment for seaweed farming.

Value



Wild harvesters
(*how many?*)



Single farm



Region	Production type	Biomass volume harvested (wet weight, annual tonnage)	Market price per tonne (£) * *Species dependent
Northern Ireland	Farmed (Sugar kelp, Atlantic Wakame)	50	£8000 (wet)
	Wild harvested 1 (Dulse)	1.25	£25, 000 (wet)
	2 (Dulse, Irish moss)	3	£80, 000 (dry)
Ireland (excluding NI)	Farmed	42	Unknown
	Wild harvested (mostly egg wrack)	33, 700	£120 (wet)
Scotland	Farmed (Sugar kelp)	80	£4000 (wet)
	Wild harvested (mostly egg wrack)	8 – 15, 000	£500 (wet)

NI Wild harvesters anonymized. Volumes and prices from company websites, The Seaweed Academy course, industry booklets ([Growing the Scottish seaweed sector](#)) and direct communication with seaweed producers (farmed, wild harvesters and processors).

Vicinity

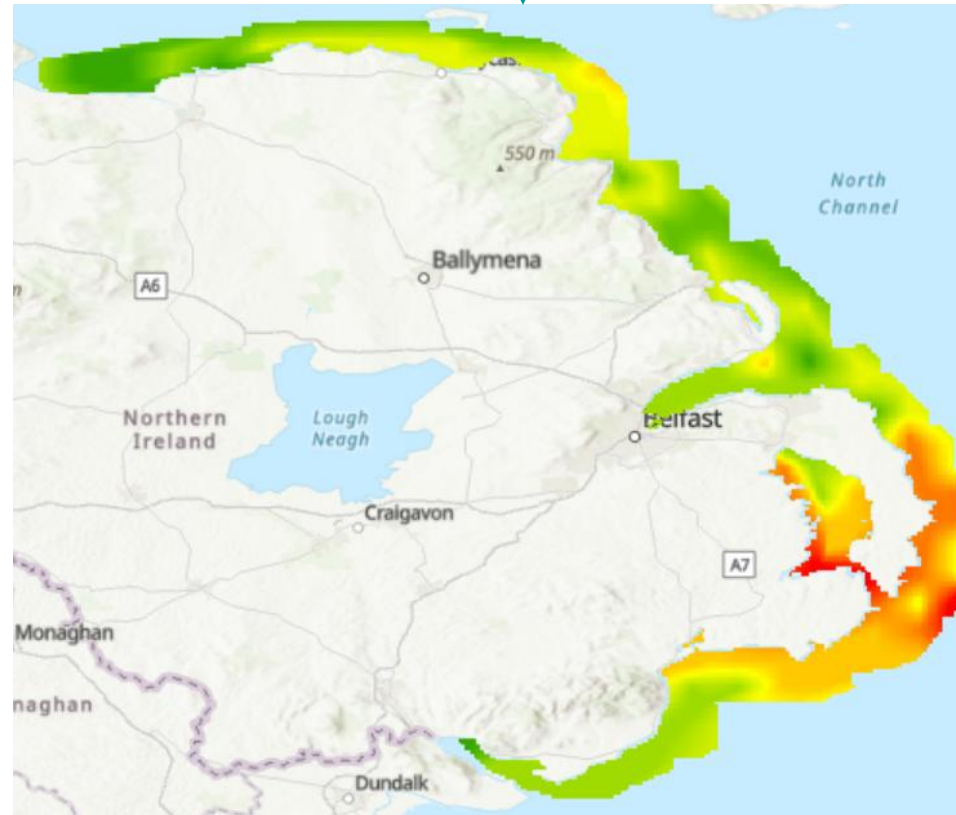
Locations of ports/harbours, seaweed processors, outfalls, DIN, Phosphate, surface temperature....



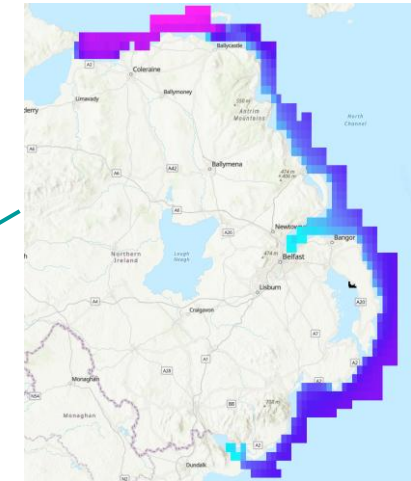
Water depth (m)



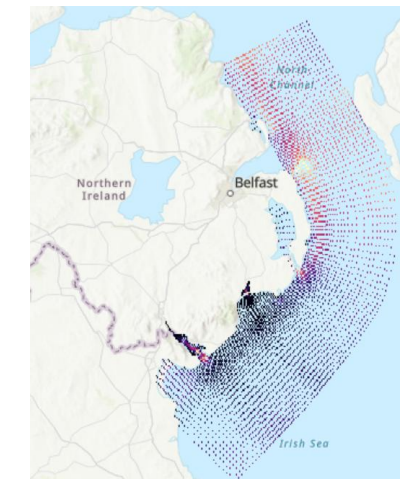
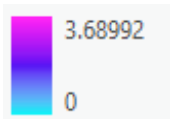
Wave exposure



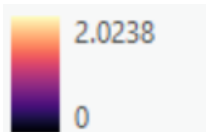
Preliminary mapping of site suitability for farming *Saccharina latissima* and *Alaria esculenta* (Red – less optimal, Green – optimal)



Significant wave height (m)



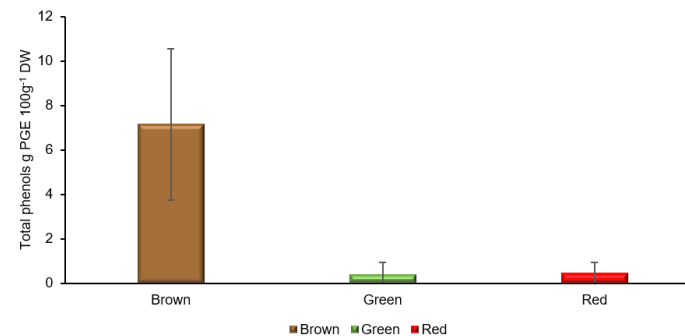
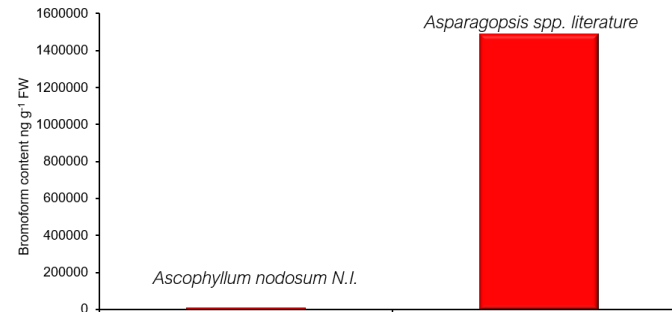
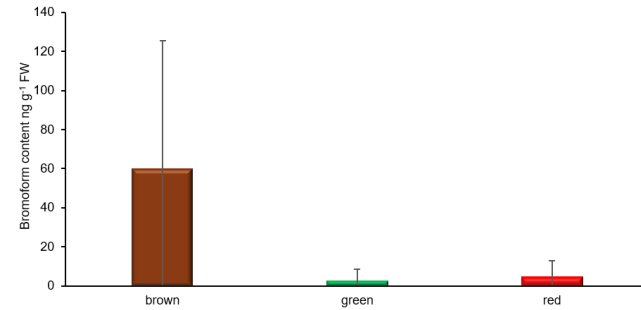
Current (m/s)



Viability

Home

- Analysed 96 samples from 6 locations in NI for bromoform content, polyphenols, fatty acid, Iodine and heavy metals.
- Work with seaweed producers, The Crown Estate and DAERA in collaborative engagement.



Away

- Took NI representatives from shellfish industry, seaweed industry and DAERA to Integrated Trophic Aquaculture and algal culture workshops in EU



