2023 ROCKWEED (*Ascophyllum nodosum)*
HARVEST PLAN
FOR COBSCOOK BAY, MAINE

Submitted to:
DEPARTMENT OF MARINE RESOURCES
State of Maine
Augusta, Maine

Submitted by:

ACADIAN SEAPLANTS LIMITED
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February 16, 2023

Proposed Harvest Sectors for Cobscook Bay 2023

Area	Sector	Total Harvestable Biomass (Short tons)	Budget 2023 (Short tons)	Last survey
Johnson Bay	A-1	760	129	2022
	A-2	527	89	2022
	A-3	528	89	2022
	A-4	1,185	201	2021
	A-5	445	76	2022
	A-6	184	31	2020
	A-7	712	121	2020
	A-8	669	114	2020
	A-13	465	79	2018
		5,475	**929**	
Bar Harbor	A-16	364	62	2022
	A-17	1,194	203	2021
	A-19	1,024	174	2021
		2,582	**439**	
East Bay	A-20	2,139	364	2022
	A-21	1,593	271	2022
		3,732	**635**	
Bar Harbour	A-14	356	61	2022
	A-15	392	67	2022
		748	**128**	
Pannamaguan	A-22	458	78	2020
River	A-23	1,111	189	2020
		1,569	**267**	
Whiting Bay	A-34	468	80	2020
	A-35	1,135	193	2020
	A-36	625	106	2020
		2,228	**379**	
Grand Total	**21**	**16,334**	**2,777**	

Harvest Method
The harvest of Rockweed in Maine will be carried out primarily from small boats utilizing unique cutter rakes designed by the company specifically for the Rockweed harvest. Additionally, some harvest may be conducted with a mechanical harvester.

These harvest methods have proven to be efficient and sustainable with minimal disturbance to the habitat and influence on associated species.

By nature, the boat and rake method ensure a low exploitation rate and leaves more than ample canopy for intertidal dwellers, allows for rapid regeneration of harvested plants and suppressed shoots and minimizes the disturbance of the habitat architecture. Mechanical harvesting also leaves behind ample canopy and has shown to result in even lower bycatch than the boat and rake method.

HARVEST AREAS AND HARVEST QUANTITIES

During the 2023 season harvesting will be carried out in 21 selected sectors in Cobscook Bay. The total projected harvest will be no more than 2,777 short tons. All the harvesting sectors will be harvested at 17% or less of their total harvestable biomass. Control of the daily harvested amount for each sector is recorded as per ASL's sector landing reporting instructions.

This will be achieved by recruiting a sufficient number of local harvesters operating for up to twenty-six weeks from May to the end of October.

Our plan involves harvesters using mobile bagging platforms as boat unloading sites that can be moved to various harvesting locations within the harvesting are. Bagged seaweed is then transported via barge.

Success in the recruitment of harvesters within the general area will be paramount in establishing a harvesting force capable of achieving our objective.

Biomass Survey
Of the 21 sectors applied for Sectors A-6, A-7, A-8, A-13, A-22, A-23, A-34, A-35, and A-36 have not been surveyed during the last three years. A new survey will be carried out between May and June by ASL in these sectors to determine their current biomass status. The survey will be carried out before harvesting begins in those sectors using the established standard procedure; taking 10 random 50 x 50 cm samples along a 30m transect positioned in the middle portion of a rockweed bed. The number of transects will be determined in the field according to the size of the sector. The results of the survey will be used to adjust this pre-established budget.

Harvester Safety
Prior to the 2023 season, harvesters will be provided with safety training on shore and on the water that will consist of familiarization with US Coast Guard Regulations for small vessels, the effects of wind and tides and the partnering of inexperienced harvesters with experienced

harvesters. ASL will provide harvesters with a copy of its Rockweed Harvesting Safety Guidelines and it will be stressed to all harvesters that good judgment and responsible actions are key elements to safe harvesting. Small vessel training will be scheduled by ASL on behalf of the harvesters prior to the start of the harvest season. Harvesters will be required to participate in all training sessions sponsored by the company.

All harvesting vessels will be equipped with the required safety devices (e.g. life jackets, flares, sound devices, etc.) complying with the US Coast Guard Regulations. Additionally, the company Health and Safety Director will work with harvesters to educate and encourage them to ensure their equipment meets required safety specifications.

Harvester Recruitment and Training

ASL will place a strong emphasis on the hiring of local people who may already have the operational skills and knowledge required for working safely on the water. Other persons interested in Rockweed harvesting will be recruited and trained on the safe operation of a small vessel and all components of the Rockweed harvesting operations with a strong emphasis on safety. It is estimated that 6 - 8 direct jobs and 4 indirect jobs will be created related to the harvest activity.

Familiarization of all aspects of Rockweed harvesting will be carried out during the company's pre-harvest kick-off meeting with the seasoned and new harvesters. Training of new harvesters will be conducted via information sessions with company resource personnel and in the field by experienced harvesters who will remain on site for training for as long as necessary. Training will include familiarizing harvesters with proper boat handling, general boat safety, harvesting technique, cutter rake maintenance, boat unloading technique, harvesting regulations and guidelines, harvest data collection and other related information.

Respectfully submitted,

Jake Patryn and Alison Feibel

Deidre Gilbert
Maine Department of Marine Resources
21 State House Station
Augusta, Maine 04333

February 16, 2023

Dear Deirdre:

Please find enclosed, Acadian Seaplants' proposed 2023 Harvest Plan for Cobscook Bay, State of Maine. We are applying for the following sectors; A-1, A-2, A-3, A-4, A-5, A-6, A-7, A-8, A-13, A-14, A-15, A-16, A-17, A-19, A-20, A-21, A-22, A-23, A-34, A-35, and A-36 for a total of 21 sectors with 2,777 short tons of available annual harvestable biomass.

Sincerely,

Jake Patryn and Alison Feibel
Acadian Seaplants Limited