

**2021 ROCKWEED (*Ascophyllum nodosum*)  
HARVEST PLAN  
FOR COBSCOOK BAY  
WASHINGTON COUNTY, MAINE**

**Submitted to:**

**MAINE DEPARTMENT OF MARINE RESOURCES  
Augusta, Maine**

**Submitted by:**

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## Introduction

In accordance with Sec. 1. MRSA § 6803-C., Robert Morse submits this harvest plan for the purpose of identifying Robert Morse's objectives and methods for the harvest of rockweed (*Ascophyllum nodosum*) in Cobscook Bay for the year of 2021.

Robert Morse has long held the belief that the responsible and sustainable harvest of the people of Maine's marine resources is essential for the economic health of this state.

## Biomass Assessment

In 2021, Robert Morse plans to harvest 17% or less of the total harvestable biomass from Cobscook Bay, as allowed by Sec. 1. MRSA § 6803-C.

The annual harvestable biomass for the sectors in which Robert Morse will conduct harvesting operations is determined using information supplied to us by Tim Sheehan. Tim has a degree in biology from the University of Maine. Using satellite imagery, we are able to calculate, in square meters, the total area of the rockweed beds in each sector. These numbers are then revised to exclude all the conservation area designated as "no harvest" zones. This data is then taken and revised into square meters, converted into square footage, and the total harvestable biomass is calculated in each sector using the pounds of rockweed per square foot numbers generated by sampling each sector. Sampling consists of laying a one hundred foot transect at random, laying down a yard square frame every twenty five feet along this line, cutting and weighing the "harvestable" rockweed within the frame (above 16 inches or lowest lateral branch), and then calculating a pounds per square foot figure. The annual harvestable biomass figures are then determined by multiplying the total harvestable biomass by the 17% per year allowable harvest. Biomass assessments, having not been completed for all of Cobscook bay, will be conducted prior to any harvesting activity for the 2021 season.

## Harvest Areas and Quantities

Robert Morse, in 2021, plans to harvest no more than 17% of the harvestable biomass contained in our allotted sectors. Biomass estimates, if not already done, will be completed once sectors are allotted and before harvesting. The sectors Robert Morse intends to harvest in 2021 are A-27, A-28, A-29, and A-30.

Due to predominately mechanized harvest methods and our ability to process rockweed, we are able utilize this resource year round regardless of weather. For this reason, we should have no problem reaching our quota for the 2021 harvest year.

(Please note that the 17% harvestable biomass figures represent the data from the last biomass assessment done, and are not necessarily current. Sectors without current biomass assessments will be reassessed once the sectors are allotted and before any harvesting is done in those sectors).

### Harvest Records and Audit Trail

Harvesters will harvest rockweed in designated sectors managed by Robert Morse.

Each trained licensed harvester will be issued specified management sectors to harvest weekly/daily. When harvesters bring their seaweed in for weigh in, a pick-up record will be created to verify the sector number that the seaweed came from and the tonnage received, and will be signed by the harvester.

The pick-up record will be retained by Robert Morse will go to the accounting department for payment to harvester. The tonnage and sector number from each slip will be recorded and saved in a separate database. This will allow us to keep track of harvest data for both the monthly seaweed buyers report and for the harvesting management plan.

These records will ensure a simple and timely third party verification of harvest numbers.

### Methods of Harvest

Robert Morse plans to harvest rockweed in Cobscook Bay using:

1. Maine designed cutting blade on a hand rake, used effectively in Maine for over twenty years.
2. Maine designed, and built, mechanical cutters on harvest boats, used effectively in Maine for over fifteen years.

### Bycatch Management

All harvesters will be instructed to return all visible by-catch to the waters of Cobscook Bay as soon as practicable.

Random sampling will be done on each truck load of rockweed, prior to processing, by Robert Morse or another employee, to inspect for bycatch. Samples will be looked at for the presence of animal and plant species. Records of bycatch observed will be kept.

Robert Morse takes the issue of the harvesting of non-target species seriously. Any harvester shown to have a disregard for limited bycatch will be subject to disciplinary actions or termination.

### Harvester Training

All new harvesters will be trained by an experienced harvester in the areas of cutting regulations and techniques, sector recognition, by-catch avoidance, and reporting requirements.

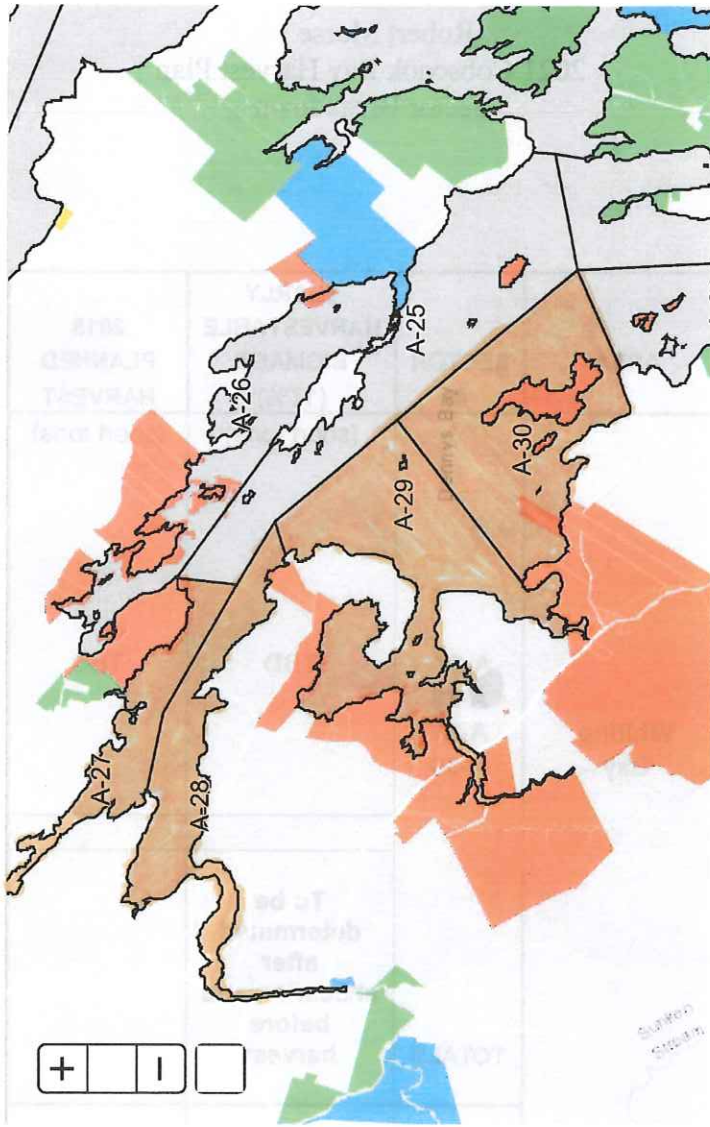
Harvesters who do not abide by the regulations set forth by the Department of Marine Resources, or the guidelines set forth by Robert Morse, will be terminated.

**Attachment A**  
 Robert Morse  
 2021 Cobscook Bay Harvest Plan  
 Sector Breakdown

AREA	SECTOR #	YEARLY HARVESTABLE BIOMASS (17%)	2018 PLANNED HARVEST
<b>Whiting Bay</b>	A-27 A-28 A-29 A-30	(short tons)  TBD	(short tons)  TBD
	TOTALS	To be determined after allocation and before harvest	

# ArcGIS ▾ MaineDMR Cobscook Bay Rockweed Management Area Map

Details | Basemap |



## Attachment B



