

# Student Innovation at the Nexus of Nutrition and Ocean Health

## SeaMade at UNE

**Carrie J. Byron, Ph.D.**, Professor, School of Marine and Environmental Programs

**Lisa Herschbach, Ph.D.** Director, Center for Innovation and Entrepreneurship

**Cameron Wake, Ph.D.** Director, UNE North  
**Megan Letendre**, Associate Program

Coordinator, UNE North

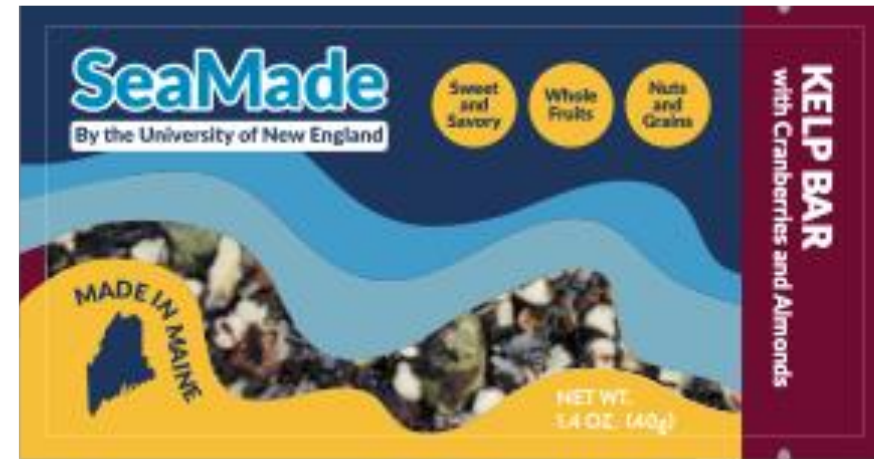
**Matthew Duddy, M.S.**, Sea Farm Manager

**Jayden Schoppee '27**, Athletic Training and Nutrition (B.S., M.S.), Student Project Manager for SeaMade

*Northeast Aquaculture Conference & Expo  
January 9, 2026, Portland, Maine*



INNOVATION FOR A HEALTHIER PLANET



Nutrition Facts		Amount/serving	% Daily Value*	Amount/serving	% Daily Value*
Serving size 1 bar (40g)		Total Fat 11g	14%	Total Carbohydrate 20g	7%
Calories per serving <b>190</b>		Saturated Fat 4.5g	22%	Dietary Fiber 3g	12%
		Trans Fat 0g		Total Sugars 10g	
		Cholesterol 0mg	0%	Includes 9g Added Sugars	17%
		Sodium 115mg	5%	Protein 4g	
		Vitamin D 0mcg 0% • Calcium 60mg 4% • Iron 1.5mg 8% Potassium 290mg 6%			

\*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

**INGREDIENTS:** Brown Rice Syrup, Almonds, Dried Cranberries (Cranberries, Apple Juice Concentrate, Sunflower Oil), Pumpkin Seeds, Honey, Dried Coconut, Coconut Oil, Dried Sugar Kelp, Dried Alaria, Puffed Brown Rice. **CONTAINS:** Tree Nuts (Almonds). **MAY CONTAIN:** Shellfish

Manufactured by the University of New England, 11 Hills Beach Road, Biddeford, ME 04005

**FROM SEA TO DELICIOUS NUTRITION BAR**

UNE students are creating the next wave in sustainable snacking! The SeaMade Bar project is driving innovation through hands-on learning across the sciences, nutrition, business, design, and entrepreneurship, using seaweed and honey harvested from our coastal campus in Biddeford, Maine. [une.edu/seamade](http://une.edu/seamade)

# In the beginning

**SEA MADE**

**CRANBERRY ALMOND KELP BAR**

18+ VITAMINS & MINERALS

OCEAN'S SUPERFOOD

GLUTEN FREE

NON GMO

SWEET & SAVORY + WHOLE FRUITS + NUTS & GRAINS + MAINE KELP

NET WT. 1.4 OZ. (40g)

**SeaMade**

By the University of New England

Sweet and Savory Whole Fruits Nuts and Grains

MADE IN MAINE

**KELP BAR**

with Cranberries and Almonds

NET WT. 1.4 OZ. (40g)

**CRANBERRY ALMOND KELP BAR**

Nutrition Facts		Amount/serving	% Daily Value*	Amount/serving	% Daily Value*
<b>Total Fat</b> 10g			<b>13%</b>	<b>Total Carbohydrate</b> 20g	<b>7%</b>
Saturated Fat 4.5g			<b>23%</b>	Dietary Fiber 3g	<b>11%</b>
Trans Fat 0g				Total Sugars 8g	
<b>Cholesterol</b> 0mg			<b>0%</b>	Includes 7g Added Sugars	<b>14%</b>
<b>Sodium</b> 115mg			<b>5%</b>	<b>Protein</b> 4g	
<small>*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.</small>					
Vit. D 0mcg 0% • Calcium 57mg 4% • Iron 2mg 8% • Potas. 295mg 6% • Vit. A 4% Vit. E 15% • Riboflavin 15% • Niacin 25% • Vit. B6 15% • Folate DFE 2% • Vit. B12 6% Phosphorus 10% • Iodine 4% • Magnesium 20% • Zinc 8% • Selenium 2% • Copper 20% Manganese 30%					

1 serving per container  
**Serving size 1.4 oz (40g)**  
**Calories per serving 180**

**INGREDIENTS:** BROWN RICE SYRUP, ALMONDS, DRIED CRANBERRIES (CRANBERRIES, APPLE JUICE CONCENTRATE, SUNFLOWER OIL), PUMPKIN SEEDS, WILDFLOWER HONEY, DRIED COCONUT, COCONUT OIL, DRIED SUGAR KELP, DRIED ALARIA, PUFFED BROWN RICE, GREEN TEA EXTRACT (SUNFLOWER OIL, LIPID SOLUBLE GREEN TEA EXTRACT), SUNFLOWER LECITHIN.

**CONTAINS: TREE NUTS (ALMONDS, COCONUT).**

MANUFACTURED BY: SEAMADE® SEAMADE COMPANY, LLC  
 PO BOX 125 FOREST AVE. PORTLAND, ME 04103 • PLEASE SHARE YOUR FEEDBACK AT: SEAMADESEAWEED.COM

**FEEL GOOD ENERGY FROM LAND & SEA** As a health-conscious, active person, I seek foods that are nutritious, taste great, and make me feel good in body and mind. I was amazed to discover the clean taste and nutrient-packed goodness of kelp while guiding kayak trips along our northern coastlines. With nuts, fruits, grains and kelp harvested from the pure waters of the Gulf of Maine, our unique recipe offers you the best of land and sea—try it and feel great yourself!

—TARA TRECHSEL, FOUNDER

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**FROM SEA TO DELICIOUS NUTRITION BAR!**  
 UNE students are creating the next wave in sustainable packaging. The SeaMade Bar project is driving innovation through hands-on learning across the university. Nutrition, business, design, and entrepreneurship, along with research and industry partnerships from our new Coastal Campus in Biddeford, Maine.

**UNE**  
 UNIVERSITY OF  
 NEW ENGLAND

# In the beginning



Gift from Tara Treichel & Mark Dvorozniak

# Why a kelp bar at UNE?

*A shining example of UNE's distinct educational model:  
student-led innovation & experiential learning*



Gift of SeaMade embraced with enthusiasm by university leadership, faculty across the disciplines, and students.



UNIVERSITY OF  
NEW ENGLAND

INNOVATION FOR A HEALTHIER PLANET



# Why a kelp bar at UNE?



College of Arts and Sciences



Westbrook College  
of Health Professions



INNOVATION FOR A HEALTHIER PLANET

# Project Review AY 2024-25

AUG 2024

Founders gifted the bar to UNE



# Project Review AY 2024-25

AUG 2024 Founders gifted the bar to UNE

FALL 2024 First production in UNE's Teaching Kitchen

- Innovation team of 10 students formed
- Tested new recipes (blueberries and pecans)
- Shared progress with Board of Trustees



## Combining Wet and Dry Ingredients

Dried kelp, alaria, cranberries, almonds, and puffed brown rice bind with wildflower honey and brown rice syrup to form a malleable mixture.



## Cutting the Bars

A custom cutting board and slicing implement ensures uniform size and weight (1.4 oz).



## Rolling and Chilling the Bar Mixture

The mixture is rolled out onto baking pans and chilled in the refrigerator to achieve the appropriate consistency for cutting.



## Time to Eat!

Our team of faculty and professional staff, including mentors of our student innovation team, are ready to savor the results of their hard work!

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SPRING 2025 Harvest from UNE seaweed farm

- Retail Food Establishment license
- Mobile Vendor license
- Commercial Food Processor license
- Seafarm conversion to Standard lease



SACORIX



INNOVATION FOR A HEALTHIER PLANET

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SUMMER 2025 UNE design branded wrapper



INNOVATION FOR A HEALTHIER PLANET

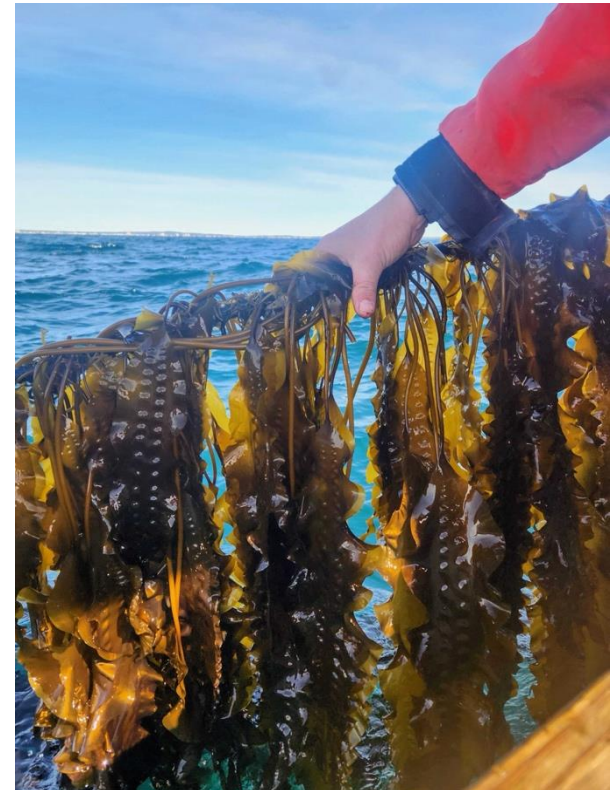
# Project Goals 2025-26

FALL 2025

- Source ingredients from our campus land and waters (seaweed, honey, blueberries...)
- Explore new recipes
- Produce ~ 5,000 SeaMade bars for internal distribution
- Develop business plan
- Develop marketing strategy
- Develop distribution plan

FALL 2026

- Begin wholesale and retail
- 100% seaweed from UNE Commercial Seafarm



# Core Values



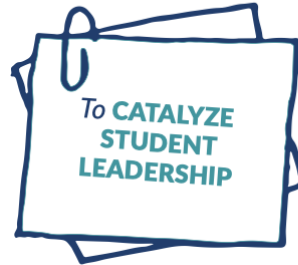
Discover the Power of Reimagining  
**UNE SEAMADE BARS**



To **REGENERATE**  
OUR OCEANS



To **INNOVATE**  
for a **HEALTHIER**  
**PLANET**



To **CATALYZE**  
**STUDENT**  
**LEADERSHIP**



To Source  
**SUSTAINABLE,**  
**LOCAL** Ingredients

## WHAT IS THE WHY?



To Provide  
**INTERDISCIPLINARY**  
**LEARNING**  
Opportunities



To **ENRICH** the  
**ENVIRONMENT**



To Provide  
a **NUTRITIOUS**  
**BAR**



To Advance **UNE**  
**AQUACULTURE**  
Research



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INNOVATION FOR A HEALTHIER PLANET

# On-water student training



**Matt Duddy**  
Seafarm Manager



cold water safety badge



Degree Programs:  
Sustainable Ecological Aquaculture  
Aquaculture, Aquarium Science, & Aquaponics

# UNE invites industry – student relationships

SeaMade Bar Innovation Team



## Shaw Fellows Program

- Lisa Herschbach

## Summer Sustainability Fellowship

- Cameron Wake

## Research with UNE faculty

- Carrie Byron

# For More Information

Research & Academics:

UNE Sea Farms:

SeaMade bars:

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Cameron Wake [cwake@une.edu](mailto:cwake@une.edu)

