



Maine Agriculture in the Classroom Protein Resource Page

www.MaineAgintheClassroom.org



Maine Aquaculture provides **GREAT sources of protein!** You can read our [Aquaculture for ME](#) book right from our website on your computer or smart device, or project onto a screen or smart board!

Our [Teach ME Food and Farms](#) website has tons of **Aquaculture lessons and activities** to accompany the book and supplement instruction. Here are just a few examples of the many you can find on the website:

Aquaculture Activities:

- [Salmon Lifecycle Maze](#)
- [Kate's Oyster Farm fill-in-the-blanks](#)
- [Aquaculture games & physical activities](#)
- [Seafood Recipes](#)
- [Aquaculture Jeopardy](#)
- [Graph Reading Activity](#)

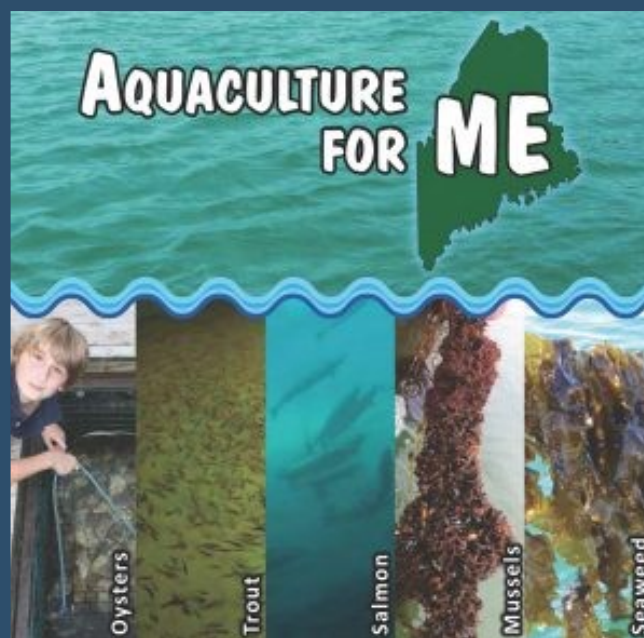


Check out our [Oyster Farm Tour Video!](#)

Tour an Oyster Farm in Surry, ME!



Teachers can register for a ***Harvest of Curricula*** to support Maine Farmers and producers, and harvest of the month! For Direct delivery to your inbox [Sign up here!](#)



Funding from this Specialty License plate and the **Department of Agriculture, Conservation and Forestry** supports teacher curriculum materials connecting classrooms to the HARVEST OF THE MONTH project! Please thank everyone you know with this plate!



Suggested MAITC Aquaculture Lesson Plans for Educators

(Aligned to State & National Standards)

www.TeachMEFoodandFarms.org

- [Fish on a Farm](#). Grades K-2. The concept of fish farming is explored with comparisons made between farmed fish and wild fish.
- [Investigating Salmon & Trout](#). Grades 3-5. Students will work in small groups and research either salmon or trout with regard to their natural habitat and their life cycle. Groups will analyze the differences and similarities between the two species and create a model of the life cycle of either salmon or trout. Students will discuss the differences between the natural and aquaculture environments and how "finfish farmers" cope with problems of a changing environment. Students will also present information in picture and bar graphs and solve word problems.
- [Marine Ecosystems](#). Grades 6-12. Students will explain recent changes in the Gulf of Maine (GoM) ecosystem with regard to ground fish, sea urchins and kelp and describe the human factor in the changing GoM ecosystem and the role that Ecosystem-Based Management could have on the GoM ecosystem.





Videos!



March is Protein Month!



[My Healthy Plate](#). Grades K-2. Students will become familiar with the foods they eat and healthy eating habits while learning about the MyPlate food campaign. This lesson introduces students to the concept of MyPlate while placing foods they eat into categories for eating a balanced diet.

[FoodMASTER: Meat, Poultry and Fish](#). Grades 3-5. In this lesson students will learn how animals utilize nutrients and energy from food humans cannot digest and convert it to meat, a food rich in zinc, iron, and protein. Students will discover how hamburger is formulated for leanness, compare two kinds of hotdogs, and learn about fish.

[Nuts About Peanuts](#). Grades 3-5. Students label the parts of a peanut plant on a diagram, follow step-by-step instructions to plant a peanut, and use a chart to record the growth of peanut plants.

[Eggs: Protein MVP](#). Grades 3-5. Students will explore the importance of protein to a healthy diet and discover that eggs are a nutritious protein source.

[In A Nutshell](#). Grades 3-5. The students will explore pecan production from farm to fork, simulate the process of grafting, and create a nutritious snack.

[Overfishing and Aquaculture](#). Grades 3-8. Students will discover the sources of various fish and seafood, compare wild-caught and farm-raised aquaculture systems, and use a simulation to learn how overfishing can damage the ocean ecosystem.

[FoodMASTER Middle: Protein](#). Grades 6-8. Students will examine dietary sources of protein and generally understand the relationship between protein synthesis and amino acids while completing an activity to use beads as a representation of amino acids to construct proteins (polypeptide chains). Students will identify complete and/or incomplete proteins found in both animal and plant food sources.

[Growing Pulses](#). Grades 6-8. This lesson introduces agriculture as a managed system that has environmental impacts, and how farmers employ practices such as growing pulses to minimize these impacts.

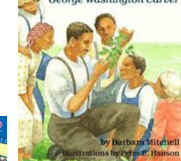
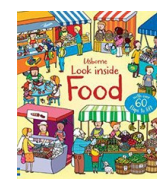
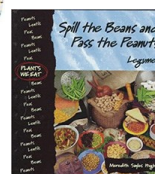
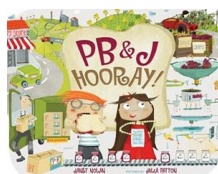
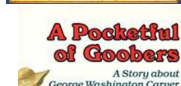
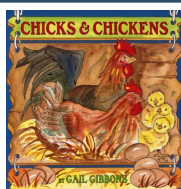
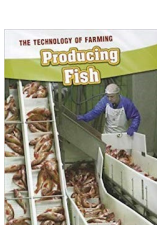
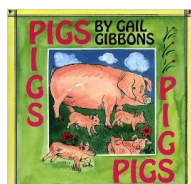
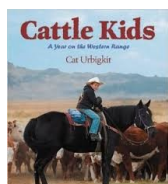
[Don't Forget the Eggs!](#) Grades 9-12. Students will discover the five culinary functions of eggs by completing a cooking lab comparing recipes with and without eggs. Students will see how eggs leaven, bind, thicken, coat, and emulsify our foods.

[Beef: Making the Grade](#). Grades 9-12. Students will evaluate the USDA grading system for whole cuts of beef and discuss consumer preferences and nutritional differences between grain-finished and grass-finished beef. Students will also distinguish various labels on beef products and discuss reasons for the government's involvement in agricultural production, processing and distribution of food.

[A Tale of Two Burgers: Beef and Plant-based Protein](#). Grades 9-12. Students will compare the components of beef and plant-based burgers by determining the production and processing methods of each product; evaluate the ingredients and nutritional differences between beef and plant-based products; and discuss different points of view in the agricultural industry concerning plant-based proteins and traditional beef.



Books about Protein!



Other protein resources:

[Meat Cut Posters and Fact Cards](#). Purchase these colorful posters and fact cards to illustrate the wholesale and retail cuts of meat found in beef, lamb, pork, and chicken or print a black and white copy for use as a coloring page or an interactive notebook.

[Food Models](#). These full-color, life-size cardboard photographs of 200 commonly eaten foods are pictured in portion sizes with nutrition information presented in label format on the back.

[Virtual Egg Farm Field Trips](#). Learn why each farmer chose their career, how their farm manages their ecological footprint and how they conserve natural resources all while raising the laying hens that produce eggs for our food supply.

[Eggs 101: A Video Project](#). Designed for the classroom, this collection of short videos showcases an egg's journey from the hen house to our plates.

[Egg Science Videos](#). Your questions about egg science answered.