

Farmer Time | Experts In The Field Aquaculture: Oyster Farming 'The World's Your Oyster'

Teacher Guide

YEAR 9-10

This resource has been developed by:









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SURVEYS

TEACHERS, CAREERS ADVISORS AND STUDENTS

We hope you find this resource valuable, relevant and enjoyable. We would be grateful for your feedback on things that you liked and worked well, and areas that you feel could be improved upon. We invite you to please complete the below survey/s after using the resource. Your responses will be used to continuously improve PIEFA's food and fibre education resources.

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LEARNING AREAS

NSW CURRICULUM CONTENT

STAGE 5 AGRICULTURAL TECHNOLOGY

Exploring Agricultural Issues

- AG5-1 explains why identified plant species and animal breeds have been used in agricultural enterprises and developed for the Australian environment and/or markets
- AG5-4 investigates and implements responsible production systems for plant and animal enterprises

AUSTRALIAN CURRICULUM CONTENT VERSION 9.0

YEARS 9 and 10 - DESIGN AND TECHNOLOGIES

Technologies context: Food and fibre production

 <u>AC9TDE10K04</u> examining emerging production technologies and methods in terms of productivity, profitability and sustainability, for example taking account of animal welfare considerations in food and fibre production enterprises, protected cropping, hydroponics or aquaculture









Activity Objective

Students will research oyster farming and learn how its role in aquaculture exemplifies nature's efficiency and adaptability. In addition, students will make connections about the importance of oysters to the food and aquaculture industry. They will explore the crucial roles oysters play in marine ecosystems, particularly in water filtration, habitat creation, and sustainable food production. Students will have the opportunity to present their thinking about innovation, sustainability, and oyster farming, and will develop their vocabulary and conceptual understanding.

This resource has been created and designed to complement the SFIRP resource <u>Farmer Time |</u> <u>Experts In The Field - Oyster Farming</u> video. The activity has been delivered for teachers as a 20 minutes end of plenary, enjoy!

PHOTO ATTRIBUTION IN DESIGN - CANVA.COM.AU













Activity 1OYSTER FARMING IN AUSTRALIA

Students will explore the rich history of oyster farming in Australia, understanding its development from traditional practices to modern aquaculture techniques.

Activity 1 - Oyster Farming

- 1. Provide students with Farmer Time Experts in the Field Worksheet Oyster Farming
- 2. Instruct students to watch <u>Farmer Time | Experts In The Field Oyster Farming</u> (7.18mins) and complete the worksheet questions.
- 3. As a class, discuss the questions and video in relation to aquaculture enterprises in your region.

Worksheet Answers

Worimi Country. 2. Cole Bros Oysters. 3. Hatchery Spat Support Officer. 4. Hatcheries are in a lab environment, general duties include lab management skills. 5. Hatcheries are in a lab environment. Oysters are in a wild caught, natural environment attached to PVC slats. 6. SRO. 7. 2.5 - 3.5 years.
 8. 18 months. 9. The size of the oyster, grouping the same size oyster together.
 10. Oysters grow better when they are with oysters of the same size. 11. Better water flow, better growth of the oyster. 12. Poor water quality. 13. Oysters do not like fresh water and will not grow as they cannot feed and can die out.











ACTIVITY 1 | Page 1 of 2 Farmer Time | Experts In The Field - Oyster Farming

View Farmer Time | Experts In The Field - Oyster Farming (7.18mins) and complete the following questions.

- 1. Identify the Aboriginal country, Farmer Timel Experts In The Field was filmed on.
- **2.** Which organisation does Todd work for?
- **3.** Describe Todd's primary role?

- **4.** List the duties that are involved with Hatcheries.
- **5.** Explain the difference between hatcheries and wild caught oyster farming.

- **6.** Which oyster takes longer to grow? SRO or Pacific Oyster?
- **7.** Approximately, how long does it take for the SRO to grow?
- **8.** Approximately, how long does it take for the Pacific to grow?

Farmer Time | Experts In The Field - Oyster Farming link https://www.youtube.com/watch?v=HCxeJI10cJQ









ACTIVITY 1 | Page 2 of 2 Farmer Time | Experts In The Field - Oyster Farming

View Farmer Time | Experts In The Field - Oyster Farming (7.18mins) and complete the following questions.

- **9.** What are farmers looking for when grading oysters?
- **10.** Explain why grading is important to the oyster farming industry?
- **11.** How does the flow of the water help the oysters?

- 12. How does flooding affect your leases?
- **13.** Beside poor water quality after flooding what other causes have affected oyster leases?

Your thoughts: What are the advantages of hatcheries in farming oysters?

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Farmer Time | Experts In The Field - Oyster Farming

ATTRIBUTION, CREDIT & SHARING



This resource was produced by Primary Industries Education Foundation Australia (PIEFA), in collaboration with SFIRP (Storm & Flood Industry Recovery Program), **NSW Farmers Association** and **Cole Bros Oysters**. Primary Industries Education Foundation Australia's resources support and facilitate effective teaching and learning about Australia's food and fibre industries. We are grateful for the support of our industry and member organisations for assisting in our research efforts and providing industry-specific information and imagery to benefit the development and accuracy of this educational resource.



While reasonable efforts have been made to ensure that the contents of this educational resource are factually correct, PIEFA, SFIRP, **NSW Farmers Association** and **Cole Bros Oysters** does not accept responsibility for the accuracy or completeness of the contents and shall not be liable for any loss or damage that may be occasioned directly or indirectly from using, or reliance on, the contents of this educational resource.

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