

THE BLUE FISH TICK

CERTIFIED SUSTAINABLE SEAFOOD **MSC** www.msc.org

Teacher resources - Lesson plan





Years 9 & 10 (Stage 5) - Geography

- <u>AC9HG9K02</u> The effects on environments of human alteration of biomes to produce food, industrial materials and fibres
- <u>AC9HG9K04</u> Challenges to sustainable food production and food security in Australia and appropriate management strategies
- <u>AC9HG9K08</u>

The impacts of the production and consumption of goods on places throughout the world, and strategies to manage sustainability in these places

• <u>AC9HG10K01</u>

The human-induced changes that challenge the sustainability of places and environments

- <u>AC9HG10K02</u> The environmental world views of people and their implications for environmental management
- <u>AC9HG9S03</u> / <u>AC9HG10S03</u>
 Evaluate geographical data and information to make generalisations and predictions, explain patterns and trends and infer relationships
- <u>AC9HG9S04</u> / <u>AC9HG10S04</u> Evaluate data and information to justify conclusions
- <u>AC9HG9S05</u> / <u>AC9HG10S05</u>
 Develop and evaluate strategies using environmental, economic or social criteria; recommend a strategy and explain the predicted impacts



The Marine Stewardship Council (MSC) is on a mission to end overfishing. This 40-60 minute lesson for ages 14+ will introduce learners to the MSC Fisheries Standard, and how it can be used to measure and support sustainable fishing activities.

Key terms

- Marine Stewardship
- Standard
- Principle
- Overfishing
- Sustainable fishing
- Fish stocks
- Environmental management
- Fisheries management



You will need

- Access to the video <u>Overfishing</u> or <u>The</u> <u>Oceans and Us</u>
- Access to the videos <u>What is the MSC</u> and why is certified sustainable seafood important? and <u>The Three Principles of the</u> <u>MSC Standard</u>
- Access to the Shorthand story <u>Shuffling for</u> <u>Sustainability</u>
- Printed or projected versions of the MSC Fisheries Standard (pages 5 and 6)
- Printed or shared digital copies of the Supermarket Survey sheet (pages 8 to 10)
- Access to the Kahoot quiz The Blue Fish Tick

Key questions

- What is Marine Stewardship?
- What is sustainable fishing?
- What might a sustainable fishing standard look like?
- What are the three principles of the MSC Fisheries Standard?
- How does the Lakes and Coorong Pipi fishery meet the MSC Fisheries Standard?

Class Activities

- Learners will be introduced to the Marine Stewardship Council program
- Learners will consider what a Fisheries Standard might look like
- Learners compare their ideas with the MSC Fisheries Standard Guide
- Learners will watch a video from the MSC-Certified Lakes and Coorong Pipi Fishery in South Australia
- Learners complete an online audit of the seafood products at their local supermarket





Review (5-10 mins)

This lesson is designed to follow on from one of the Geography Stage 5 resources:

- Using the Oceans Resources Responsibly
- Why do we need the Ocean

If students have not completed one of these lessons, first show learners the clip <u>Overfishing</u> (2:55) from short film <u>My Dad The Fisherman</u>. Discuss as a class *What are the impacts of overfishing*?

Sort answers into environmental, economic, social and cultural factors such as:

Environmental: The ocean helps regulate the earth's temperature through ocean currents transporting warm water to colder parts of the world; the ocean absorbs carbon dioxide which would otherwise heat up the earth; the oceans are home to a huge number of different species of animals and plants; the ocean produces oxygen for us to breathe

Economic: Our fishing industry involves millions of people; tourism companies make money offering cruises or activities; we transport many of the foods and products we use every day by ship across the world

Social: People catch fish for their families; we eat fish as a source of protein and nutrients; we do sports like swimming and sailing; we visit the ocean to have fun

Cultural: Fishing or hunting activities carried out by Aboriginal Australian and Torres Strait Islander persons for education, ceremonial or traditional purposes; Inspiration for art and design; Spiritual, sacred or religious practices

Then skip straight to the Main Activity.

Starter (5-10 mins)

If students have already completed another Stage 5 Geography Lesson, begin by showing students the video <u>The Ocean and Us</u> (4:13) from the BBC Earth, United Nations Oceans Conference 2017.

Then ask students to recall

- Why is the ocean essential for life on earth?
- What are some of the impacts human activities have had on the ocean?
- What does overfishing mean?









Main activity (25-40 mins)

In this class, students are going to learn about an International program that's on a mission to end overfishing; the Marine Stewardship Council. Ask learners to break down the name,

- Marine Relating to the ocean
- **Stewardship** To take care for, look after
- **Council** An authority, group of people

The Marine Stewardship Council (The MSC) is an international, non-profit organisation on a mission to end overfishing.

The MSC sets a **standard** for **sustainable fishing** that fisheries work to meet all around the world. Show learners two short video clips: 1. <u>What is the MSC and why is certified sustainable seafood important?</u> (1:30)

2. <u>The Three Principles of the MSC Standard</u> (0:52)

Using the MSC Fisheries Standard (page 6) ask students to work in pairs and make a list:

- What might the MSC might consider under each principle of the Fisheries Standard?
- What sort of outcomes might a fishery expect when implementing changes to achieve the MSC standard?

Ask students to share some of their answers with the class, and then check answers against the MSC Fisheries Standard Guide (page 7).

To understand how the MSC Fisheries Standard looks in practice, ask students to read and watch <u>Shuffling for Sustainability</u> a story from an MSC-certified pipi fishery in South Australia, Lakes and Coorong Pipi. If you are short on time, just watch the video <u>Sustainable Pipi Cockles from South Australia</u> (2:58). Discuss as a class *How did the Lakes and Coorong meet the MSC Fisheries Standard?*



Discussion (10-15 mins)

Ask students to search for the online store of a local supermarket and check to see if they sell any MSC-Certified seafood products. Fill them out in the Supermarket Survey Sheet (pages 8 to 10). Where do these products come from - Australia or another country?

In the next class, review survey findings and if time allows create a graph of any seafood products found. with the MSC blue fish tick label compared to other seafood products.

Review

Host a 5-minute Kahoot challenge on this topic at The Blue Fish Tick



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Sustainable Fishing Fact Box

Defining Sustainable Fishing

Sustainable fishing means fishing in a responsible way, making sure fish populations do not drop below levels where they cannot reproduce and grow faster than they are caught. It is also important to make sure fishing doesn't damage marine life and their ecosystem.

Fishers practice sustainable fishing by

- Learning as much as they can about the species of fish and shellfish they catch, and the ecosystem they live in
- Working with scientists to understand how the fish and shellfish populations grow and shrink over time (calculating the Maximum Sustainable Yield)
- Fishing for a certain number or quota every year
- Choosing the right time of day or night to avoid bycatch
- Using nets and devices that ensure smaller fish and sea creatures can escape
- Using bright coloured flags on their boats to scare sea birds away

What is Maximum Sustainable Yield?

Maximum Sustainable Yield is a scientific calculation that shows fishers how much they can catch without overfishing

Extension Activities

1. Students use the <u>MSC Track a Fishery tool</u> to choose one of the MSC-certified fisheries in Australia. Learners imagine that they are the owner of this fishery which is about to undergo an audit for sustainability. Explain some of the steps you would take to check that your fishery is meets the three principles of the MSC standard.

The following links will be helpful, but students should also draw upon other sources in their research

- What does the MSC label mean? Principle 1
- What does the MSC label mean? Principle 2
- What does the MSC label mean? Principle 3
- MSC Fisheries: Real life stories





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2. The Marine Stewardship Council Fishery Standard was first developed in 1998. The standard is regularly reviewed and updated to incorporate new developments in science, technology and management practices. The MSC continually revise the standard according to feedback from scientists, the fishing industry and ocean conservation experts.

Ask students to write a one-page essay on the question:

What are the different Environmental, Social, Political and Economic perspectives that the MSC should take into account when developing the Fisheries Standard?

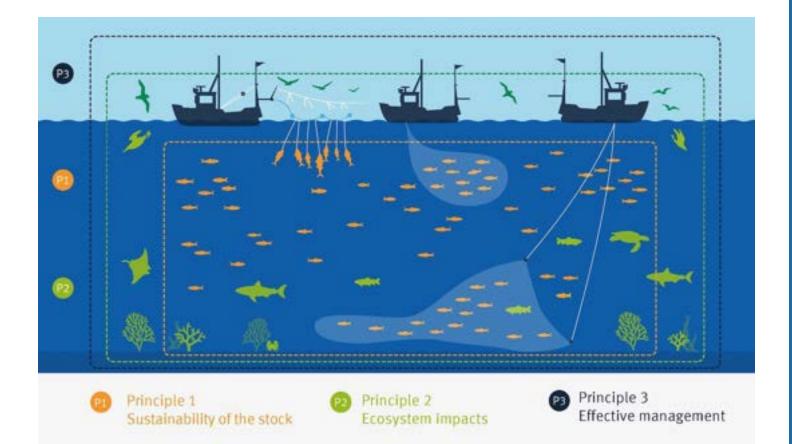
Answers

How does the Lakes and Coorong Pipi Fishery meet the MSC Fisheries Standard?

- The fishery leaves plenty of pipis in the water unharvested, so that the stock can replenish itself Principle 1
- The fishery uses a low-impact fishing method, 'the pipi shuffle'. This technique has a very low risk of catching unwanted fish species or other marine creatures (bycatch) Principle 2
- The fishery undergoes annual surveillance audits, and works to obtain consistent data on the health of its pipi stocks and fishery area Principle 3



THE MSC FISHERIES STANDARD



Three Principles of the MSC Standard

1. Sustainable Fish Stocks

Fishing must be at a level that it can carry on indefinitely and the fish population will stay healthy

2. Minimising Environmental Impact

Fishing must be done carefully so that other species and habitats are looked after

3. Effective Fisheries Management

The fishery must be well managed and able to adapt to changing environmental conditions

Did you know? Today, over 15% of global fisheries catch is MSC-Certified!



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GUIDE TO THE MSC FISHERIES STANDARD

Principle 1: Sustainable fish stocks

Stock evaluation

- There is a sustainable population of a fishery's main catch or the population is rebuilding.

Harvest management strategy

- There is a precautionary harvest strategy and no shark finning.
- There are harvest control rules, so if the population drops below sustainable levels, the fishery will reduce its catch.
- There is reliable information and the main catch is regularly monitored.
- There is a robust assessment of the main catch population.

Principle 2: Minimising environmental impact

What else does the fishery catch, and is it sustainable?

- There are sustainable populations of any other species regularly caught.
- There is a management strategy and a way to reduce unwanted death for these species.
- There is reliable information about these species.

What else does the fishery catch? Does it catch any birds, reptiles, amphibians or mammals?

- There is no threat to the populations of these species.
- There is a management strategy and reduction of unwanted death for these species.
- There is reliable information on the risk of the fishery on these species.

Impact on endangered, threatened or protected (ETP) species

- There is no threat to ETP species populations.
- There is a management strategy to minimise effect on ETP species.
- There is reliable information on the risk of the fishery on these species.

Impact on habitats

- The fishery causes no serious or irreversible harm to habitats.
- There is a strategy to minimise fishery impact on habitats.
- There is information on vulnerable habitats and the impacts of the fishing gear.

Impact on the ecosystem

- The fishery causes no serious or irreversible harm to the ecosystem.
- There is a management strategy to protect ecosystems.
- There is reliable information on ecosystem function and impact.

Principle 3: Fishery management

Governance and policy

- There is an effective legal or customary framework that supports achieving Principle 1 (P1), Principle 2 (P2) and
 recognises rights of people dependent on fishing for food or livelihood.
- There is an effective consultation process with stakeholders.
- There are long-term management objectives that are consistent with the Fisheries Standard.

Fishery specific management system

- There are clear fishery specific objectives for achieving P1 and P2.
- There are effective decision-making processes.
- There are compliance and enforcement systems.
- There is performance evaluation of fishery management.

SUPERMARKET SURVEY SHEET

Your name(s):	Date & time:	Name of Supermarket:
Michael Parker &	Thursday 4th June	Woolworths, Illawarra
Susan Abrahams	2020, 6pm	Rd, Marrickville

EXAMPLE:

Company or brand	Product name & description eg. flaked tuna	Fish species and country of origin	Product category 1. Tin 2. Frozen 3. Fresh 4. Other	# of different flavour varieties	MSC Blue Fish Tick label √
John West	Mackerel Fillets	Scottish mackerel (Atlantic mackerel)	1	2	\checkmark
Goolwa Pipi Co.	Cooked pipis	Australian pipi	4	1	\checkmark

Instructions

1. Complete the top part of the survey sheet with name(s), the date and time and the name of the supermarket (see the example above).

2. Look around for fish and fish products (including tinned fish, frozen fish products and fresh fish). There is a column for flavour varieties to avoid spending hours recording many different flavour varieties of the same product!

3. Record findings on the table (see the example below).



SUPERMARKET SURVEY SHEET

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Company or brand	Product name & description eg. flaked tuna	Fish species & country of origin	Category 1. Tin 2. Frozen 3. Fresh 4. Other	# of different flavour varieties	MSC Blue Fish Tick label √



D.

SUPERMARKET SURVEY

Company or brand	Product name & description eg. flaked tuna	Fish species & country of origin	Category 1. Tin 2. Frozen 3. Fresh 4. Other	# of different flavour varieties	MSC Blue Fish Tick label √

