



Illegal, unreported, and unregulated (IUU) fishing is when people fish outside of the law and is big problem around the world. It is often conducted without concern for marine life or the environment.

In Aotearoa New Zealand the Quota Management System works because we know roughly how many fish there are and how many fish we are catching – but if fish are being taken illegally then we might end up taking too many fish. The fishery might decline or collapse because we thought we were fishing it sustainably but actually the illegal fishing means we are taking too much.

Activities in this sub topic investigate illegal, unreported and unregulated fishing. We also take a brief look at slavery at sea [explored in more detail for older learners in Topic 9]. See slide sets **Illegal fishing** and **Slavery at Sea** and **Reviewing key concepts**.

## FOCUS QUESTIONS

- What is illegal and unreported fishing? What impact do these practices have?
- Why do human rights abuses occur on some fishing vessels at sea?
- What new words and concepts have we learnt?

## LEARNING OBJECTIVES

- Describe one or more types of illegal fishing and how this can impact on sustainability of a fish stock
- Why do human rights abuses occur on some fishing vessels at sea?
- Use seafood industry related vocabulary

### LOCATION

Indoors

### DURATION

50 mins +

### **TEAE**

Level 3 - 5+

### CURRICULUM

Science, Social Science, Tikanga-ā-iwi, Geography, Pūtaiao, Hauora

**Key competencies:** Thinking; Managing Self; Relating to others

### NEXT STEPS

#### Other topics:

• Topic 9 – Diving Deeper

#### Prior learning:

- Topic 1 Overfishing, Marine Stewardship Council & sustainable fishing
- Topic 5 Fisheries
   Management





## MATERIALS

- Slide set Illegal fishing (6.4)
- Slide set Slavery at sea (6.5)
- Slide set Reviewing key concepts (6.6)
- Teacher Outline (this)
- Access to internet (for film clips)
- Copies of Pirate story timeline challenge cards (page 8)
- Something to write with
- Copies of IUU fishing quiz (page 6)
- Copies of Illegal fishing worksheet

### PROCEDURE

#### Illegal fishing

- 1. DISCUSS the concept of illegal, unreported and unregulated fishing [slide 25 & 26]
- 2. BRAINSTORM what you already know about illegal fishing [slide 26]
- READ the <u>Marine Stewardship Council story about the hunt for pirates who illegally fished</u> toothfish [slide 27]
- 4. Use the Pirate story timeline challenge cards to test understanding and piece together the timeline of events [page 8] by:
  - a. Cut up the cards
  - b. Have learners put them together in the correct (chronological) order OR break leaners into groups of six and give each leaner one story card
  - c. Have them ask each other questions in order to piece together the story chronologically
- 5. TEST understanding of the difference between Illegal, Unreported and Unregulated fishing [slides 28 & 29] and then take the IUU fishing quiz [pages 6-7]
- 6. DISCUSS illegal fishing and poaching in Aotearoa and WATCH the short film how <u>poaching</u> <u>has impacted on the recovery of toheroa</u> [2:07] [slide 30]





- 7. EXPLORE what the Marine Stewardship Council is doing to deal with illegal fishing and complete the illegal fishing worksheet [slide Take the IUU fishing QUIZ [see 6.6 Teacher Outline] [slide 32]
- 8. INVESTIGATE the idea of a global fishing watch and WATCH the short film about <u>Global Fishing Watch</u> [0.53] [slide 32]
- EXPLORE the Global Fishing Watch map and DISCUSS using the questions provided [slide 33]

#### Slavery at sea

- 10. DISCUSS poor working conditions and slavery on board some fishing vessels and the concept of flags of convenience [slide 35]
- 11. WATCH the short film about forced labour on fishing boats [1:00] [slide 36].
- 12. BRAINSTORM reasons why people are being forced to work at sea for long periods of time [slide 36]
- 13. Extend learning by EXPLORING human rights & labour rights [slides 37 & 38]

#### **Review**

14. REVIEW learning using a continuum activity [slide 39]

## KEY WORDS

Slavery

Pirate Unregulated

Human rights Labour rights





## **CURRICULUM LINKS**

#### Nature of Science (Level 3-5)

• Participating and contributing

#### Science (Level 6+)

Participating and Contributing

#### **Social Science (Level 3-5)**

- Understand how economic decisions impact on people, communities and nations (Level 5)
- Understand how people's management of resources impacts on environmental and social sustainability (Level 5)
- Understand how people define and seek human rights (Level 5)

#### Tikanga-ā-iwi (Level 3-5)

- Kotahi tonu te matua o te tangata Māori, ko Ranginui e tū nei, ko Papa-tū-ā-nuku e takoto nei. Place and Environment
- E tama, e hine, tangata i ākona ki te whare, tū ana ki te marae, tau ana. The Changing World
- E kore e ngaoko te rākau ki te tīkina i te pūtake whakangaoko ai engari, me tiki ki te matamata. The Economic World

#### Geography (Level 6, 7, 8)

Geographic research

Contemporary New Zealand geographic issue

Geographic topic at a global scale

Application of geographic concepts

#### <u>Pūtaiao</u>

• The Natural World: The Biological Environment: Investigate the effect of human actions, and natural processes, on an Aotearoa ecosystem (Level 6+)





# IUU FISHING QUIZ

Read each of the examples in column one below. Decide is it illegal or legal (column 2). Would you class it as (1) illegal, (2) unreported or (3) unregulated.

Example	Do you think this is legal? Yes or No?	If not, is it: 1. Illegal 2. Unreported or 3. Unregulated
A recreational fisher sells six tāmure / snapper to his local fish shop		
A Commercial fisher fishes for tāmure / snapper in Area 1 when she owns quota for Area 2.		
Local whānau take 10 toheroa from Ripiro Beach using a customary fisheries permit issued by the legally appointed kaitiaki / tiaki.		
A commercial fisher reports he caught 200 kingfish when he actually caught 400		
A foreign vessel sneaks inside the 200 mile limit and fishes for orange roughy under cover of darkness		
A hoki fisher reports no bycatch when they actually caught two albatross		
Unknown to the kaitiaki / tiaki and under cover of darkness 50 toheroa are taken from Oreti Beach		
A New Zealand commercial fisher sneaks across into Australian waters and fishes for Orange Roughy.		
Taiwanese and NZ fishers fish large numbers of Janthina (small surface pelagic shellfish not included in the QMS) commercially		



# TEACHERS: ANSWERS

Read each of the examples in column one below. Decide is it illegal or legal (column 2). Would you class it as (1) illegal, (2) unreported or (3) unregulated.

Example	Do you think this is legal? Yes or No?	If not, is it: 1. Illegal 2. Unreported or 3. Unregulated
A recreational fisher sells six tāmure / snapper to his local fish shop	No	1. Illegal
A Commercial fisher fishes for tāmure / snapper in Area 1 when she owns quota for Area 2.	No	1. Illegal
Local whānau take 10 toheroa from Ripiro Beach using a customary fisheries permit issued by the legally appointed kaitiaki / tiaki.	Yes	1. Illegal
A commercial fisher reports he caught 200 kingfish when he actually caught 400	No	2. Unreported
A foreign vessel sneaks inside the 200 mile limit and fishes for orange roughy under cover of darkness	No	3. Unregulated
A hoki fisher reports no bycatch when they actually caught two albatross	No	2. Unreported
Unknown to the kaitiaki / tiaki and under cover of darkness 50 toheroa are taken from Oreti Beach	No	1. Illegal
A New Zealand commercial fisher sneaks across into Australian waters and fishes for Orange Roughy.	No	3. Unregulated
Taiwanese and NZ fishers fish large numbers of Janthina (small surface pelagic shellfish not included in the QMS) commercially	Yes	3. Unregulated



## PIRATE STORY TIMELINE PUZZLE CHALLENGE

Cut up the cards and have learners put them together in the correct (chronological) order OR break leaners into groups of six and give each learner a story card. Have them ask each other questions in order to piece together the story chronologically.

2014-2015

The 'Bob Barker', a boat owned by the eco warrior group Sea Shepherd chased the pirate illegal fishing vessel 'Thunder' across the ocean over 16,000 km. The captains of the two ships spoke often to one another – trying to convince each other to give up!

After 110 days at sea being chased by the 'Bob Barker', 'Thunder' finally came to a stop. And suspiciously sunk.

All crew were rescued and taken aboard 'Bob Barker'. It seems the pirate vessel crew were working in slave like conditions (something we explore more in topic 9).

It is suspected that pirate's crew purposefully flooded 'Thunder' to hide all evidence of their plunder.



2010's

Toothfish bounced back. Several more toothfish fisheries were certified by the Marine Stewardship Council. However, there were still a handful of pirate vessels fishing illegally – known as the Bandit 6.

The most notorious of the pirate vessels was a 62m fishing vessel named Thunder. Thunder was banned from fishing in the Arctic in 2006 but had continued to fish illegally netting her owners more than \$60 million from illegal catches.

Thunder was listed on the International police Purple Notice List (a list of the world's most wanted poachers).







2004

South Georgia was the very first toothfish fishery to become a Marine Stewardship Council certified fishery. The fishery introduced a range of measures to help sustainability of the fishery like: licensing vessels (and excluding unlicensed ones), catches were barcode to prevent illegal sales, lines were weighted to make them sink faster and set only at night (hard for birds to see) and only in winter (birds not breeding).

Albatross accidental catches fell from several thousand per year to just a few! Ethical supermarkets and chefs began offering toothfish again (but only when certified by the Marine Stewardship Council).







1990's
- early
2000's

Soon illegal catches were higher than legal ones and the fishery was edging towards collapse.

Ethical supermarkets and chefs, realizing that the toothfish stocks were being destroyed, took toothfish off the menu.

The fishery became regulated and COLTO (Coalition of Legal Toothfish Operators) was formed.

Governments, retailers, scientists and (otherwise rival) fisheries began to work together to stop unsustainable fishing (both illegal fishing of toothfish and large numbers of seabirds lost through bycatch – including large numbers of albatross).





1970's & 1980's Toothfish were highly sought after. But toothfish are slow to mature and reproduce making them vulnerable to overfishing.

The toothfish were growing in popularity for their white flesh and easy cooking. Supermarkets and chefs couldn't get enough of them! More fishing vessels began targeting toothfish.

The toothfish fishers were making so much money that soon pirates were joining in. Both illegal catches and legal catches were huge. But too many fish were being caught and soon catches began to decline due to overfishing.



