

**How to use Whales of Iceland in your classroom…**

Whatever key stage you teach, whether in Geography or Science, there are some topics that just grab student curiosity and intrigue. We’ve all been enthralled with documentaries like Blue Planet, and students of all ages are taking a wider world view and displaying their interest in environmental concerns whether animal welfare, consumer behaviour, plastics pollution or climate change.

This resource helps to introduce students not just to different whale species but to the concept of endangerment, and the key threats faced by marine life such as ocean pollution, human activity, and climate change. It links to Iceland as a case study, and how this environment which was once rich for feeding and cold currents is facing change and potentially altering the ecological balance. Finally, there is opportunity to consider what can be done to try to resolve some of the threats faced – starting small with home solutions and the choices we make as consumers and users of planetary resources.

The Whales of Iceland resource would make an effective comparison case study alongside the Turtles of Costa Rica resource, whereby students can consider threats faced by marine species across the globe in different ecosystems, different oceanic conditions, yet all linked by common threats and facing common problems. Students could compare and contrast human activity across the globe, and how decisions we make at home (such as plastics use and waste) can have global consequences.

**Supporting activities**

1. Which whales are most at risk? What is threatening their existence?
2. Consider the different threats to whale populations. Which do you feel is the biggest cause for concern? Why?
3. Compare and contrast the Whales of Iceland and Turtles of Costa Rica resource. What threats do they have in common? What role does human activity have on global ocean ecosystems?
4. Using the resource and your own knowledge, create an action plan for how we can reduce the threats to whale populations. This could be in the form of a poster, leaflet, rules list, etc.
5. Complete a decision-making exercise to determine how to manage whale populations in Iceland.

**Whales of Iceland: Decision Making Exercise instructions**

Imagine you work for the Icelandic government. Your country is a small island nation, which can be vulnerable to economic changes and has only recently recovered from a severe recession. 10% of the national $GDP income and 42% of exports comes from tourism directly, and 17% of exports come from fishing. 5% of Icelandic workers are involved with fishing including whale-watching boat trips, and 14% of all workers are involved in tourism. Whales are a natural resource in Iceland – either for their tourist value or for commercial hunting and sale of meat. Your job is to consider what you feel is the best decision for managing whales in Iceland.

Whaling (hunting whales to kill, either to control population growth or purely for economic purposes such as selling meat and blubber) was banned globally in 1986 because of extreme declines in whale stocks. Japan, Norway and Iceland have campaigned for this ban to be cancelled for some species and to allow more controlled whaling. In 2006 Iceland resumed commercial whaling but under strict control for the numbers per year and species – only hunting fin whales and minke whales. In previous years, whaling brought in an income of $93 million per year, and some claim that whale populations are so high in Iceland that they are causing harm to fish stocks, and that careful controls of population size through hunting would be of benefit not just financially but also to the food chain. The government has given permits for the hunting of 2000 whales over the next five years, and claim this is a sustainable number.

Income from whale watching businesses in Iceland amounts to $26.5 million, however if too many companies run trips from the same locations then it can change whale behaviour and their feeding habits, changing where they migrate to. Interestingly, 20% of tourists visiting Iceland will try eating whale meat products because they feel it is a popular traditional local dish – yet only 2% of Icelandic people eat whale meat! Most whale meat is exported to Japan for profit. Only a third of Icelanders support commercial whaling and many are concerned that it risks damaging Iceland’s image to tourists – particularly when whale-watching tour boats might be found parked in the harbour just over the dock from a ship hauling in whale meat. However, many are also concerned about whale watching with fears that noise from too many boat engines is distressing the whales and is causing migration. Some suggest limiting the number of trips per day.

Food for thought: currently whales eat *seven* times more fish than Icelandic fishing businesses can catch. If the whale population is controlled, such as through hunting, then fish stocks will increase in Icelandic waters and this means more fish for humans to catch and sell and eat, meaning more income.

**Task 1:**

* Research the different stakeholder views regarding whaling and whale conservation (for example, compare views of local Icelandic people, governments, IUCN, Greenpeace, whaling companies, fishing businesses, etc.)
* Create a table to compare the pros and cons for both commercial whaling and for whale-watching
* *Consider the IUCN endangerment status for fin and minke whales*

**Task 2:**

* Consider the options below. For each option, decide what the advantages and disadvantages of this option would be:

|  |  |  |  |
| --- | --- | --- | --- |
| **Option 1**  **Keep the current situation.** | **Option 2**  **Ban all commercial whaling.** | **Option 3**  **Restrict whale-watching tours.** | **Option 4**  **Controlled whaling & whale-watching.** |
| Allow whale-watching tours to continue without any government involvement in management, and also allow commercial whaling for fin and minke whales to continue with 2000 permits for the next five years. | Return to the ban, refusing any future permits for commercial whaling of any species and allow nature to take its course with regards to whale population change and the impact on fishing stocks.  Whale-watching tours continue as now. | In order to reduce discomfort for whales, restrict the amount whale-watching to reduce the number of trips per day particularly during feeding. Also ensure boat engines are running quietly.  Whaling continues as now. | Allow whaling for companies with permits and set strict quotas, to maintain whale numbers. Control how many whale-watching tours occur to reduce the number of trips and avoid feeding times and breeding locations. |

**Task 3:**

* Make your decision. Using the information from the Whales of Iceland resource and your own research, choose which of the four options you feel would be most sustainable.
* Write a persuasive statement, including geographical fact as well as opinion, to justify your choice.
* You can use the VCOP structure support if needed
* You should explain what sustainability means, and explain how your choice is most beneficial to society, the economy and the environment long-term. You should also discuss why you rejected the other options. Consider different stakeholder viewpoints.
* Share your decision with others. Do you agree? What have you prioritised and why?
* Evaluate your decision. How could it be improved? What other factors could you consider? What other decision might be best if you could do something different?

