VELS Thinking Starter

The largest creature to ever live is found on Rye back beach – what can we learn?

Segment: ***'i sea, i care'*** **TV – Blue Whale Stranding (1min 33sec)**

Find at: http://www.dolphinresearch.org.au/edudownloads.php

Recommended Audience: (Grade 3 upwards).

TEACHER'S BACKGROUND INFORMATION

A blue whale (the largest creature to ever live) stranded on Rye Back Beach in April 2009, posing many questions to the researchers of the Dolphin Research Institute. The whale was 22 metres long and would have weighed over 50 tonnes.

Blue Whales are the largest creature to ever live and grow to 33m and over 100 tonnes. They feed on about 4 tonnes of krill each day. At 22m, the whale in the clip could be an adolescent true blue whale, or an adult pigmy blue whale. Until the genetics are analysed we won't know. They come to Victoria to feed on the rich food chain off Western Victoria, which is fed by the nutrient rich Bonney Upwelling on the edge of the continental shelf. We have also had them feeding within a few kilometres of Port Phillip Heads. Victoria is one of the few places in the world where we know Blue Whales feed.

Whales are at the top of a simple food chain.
Sun's energy → phytoplankton → zooplankton → whale
Once the whale dies it becomes food for other marine organisms
Whale carcass → sharks, sea- birds, crabs, lampreys

Whale numbers are not well-understood, but are increasing since an international moratorium on whaling in the 1970's. As whale numbers increase shipping lanes need to be modified to take into account whale migration paths. One third of the whale species in the world can be found off Victoria

Whales have always stranded on beaches and were used as a food source for many cultures (including Australia). Whales strand for a number of reasons. They can be injured or sick, or could have died at sea and simply washed up. There can also be human causes. It is possible that the animal in the clip was struck by a ship (note the apparent damage at the base of its tail.

It is truly amazing that each summer Victoria is visited by the largest creatures to ever live. We live in a truly remarkable place.

This footage provides a real, local focus to stimulate a number of learning conversations and experiences. See VELS Learning Ideas Matrix below. We would welcome your ideas for new segments and suggestions to add to our Learning Ideas Matrix.

Websites:
Society for Marine Mammals – site maintained by researchers
http://www.marinemammalscience.org/index.php?option=com_content&view=article&id=494&Itemid=311
Pete Gill – Victorian blue whale researcher
http://bluewhalestudy.org/home.html

DOLPHIN RESEARCH INSTITUTE
i sea, i care

Thinking Starters are an initiative of the Dolphin Research Institute.

Each starter comes with a video segment and a 2 page resource sheet, packed with ideas to stimulate classroom activities across the curriculum, within the VELS framework.

Check out our other Thinking Starter:

Catchments/Litter traps

Ideas for other themes include:

- The day in the life of a marine scientist.
- World's greatest Journeys: to the North Pole and back!
- Climate change and our bays.
- Marine Invertebrates - It's a Bug's Life.
- A day in the life of a crab at Balnarring beach!
- Dolphin CSI

VELS Learning Ideas Matrix

Physical, Personal and Social Learning	Discipline-based learning	Interdisciplinary learning
Level 4 Civics and Citizenship • What role does the Australian government play in protecting whales? Whaling? http://www.environment.gov.au/coasts/species/cetaceans/education/index.html **Level 4 Interpersonal Development** • Work in a team to sort whales: Toothed/ Baleen whales, longer/shorter than 14 m. Evaluate your team's effort. http://en.wikipedia.org/wiki/List_of_cetaceans	**Level 3 Science** • Why is this creature a mammal? What adaptations does it have for survival in the marine environment? http://www.orcafree.org/how_anatomy.html **Level 4 Science** • Whales are mammals – like us. Compare and contrast the internal and external body structures whales and humans to show that we are both mammals. http://www.acsonline.org/factpack/whlparts.html http://seaworld.myfun.com.au/~/media/Files/Sea%20World/Excursions/Whales/Whales%20Booklet%201.ashx **Level 4 English** • Write a story about the life of a blue whale. **Level 5 English** • Write an argumentative essay that explores the issues of hunting whales. Is it always wrong? http://www.brighthub.com/education/languages/articles/10037.aspx **Level 4 Mathematics** • How many Grade 5/6 children laid end to end would make a 22 and 33m blue whale? • How many grade 5/6 children would it take to equal the weight of a 100 tonne whale? How does this compare with other whales? http://www.seaworld.org/just-for-teachers/classroom-activities/k-3/pdf/How%20Big%20is%20a%20Blue.pdf **Level 5 Humanities (Geography)** • Why are these whales found off Victoria's coast? (Hint: what and where is the Bonney Upwelling?) http://bluewhalestudy.org/index.php/bws/bw_info/habitat	**Level 5 Communication** • How do baleen whales eat? Prepare a science report using specialised language. http://animals.howstuffworks.com/mammals/baleen-whale2.htm **Level 6 Thinking Processes** • Analyse the different positions of Australia and Japan to hunting whales. http://www.foreignminister.gov.au/releases/2010/fa-s100528.html

Keywords: Dolphin Research Institute, whales, blue whale, pygmy blue whale, whaling, toothed whale, baleen, Bonney Upwelling, whale migration, whale anatomy, plankton, krill, mammal, food-chain.