

**Activity** 

Episode 14 27<sup>th</sup> May 2014

# Macquarie Success

# **Key Learning**

Students will investigate important aspects of Macquarie Island to create a profile. They will also research what life is like on the island.

# The Australian Curriculum

Science / Science as a Human Endeavour / Use and influence of science

Science and technology contribute to finding solutions to a range of contemporary issues; these solutions may impact on other areas of society and involve ethical considerations (ACSHE120)



Science / Science Understanding/Biological sciences

Interactions between organisms can be described in terms of food chains and food webs; human activity can affect these interactions (ACSSU112) Year 7









# **Discussion Questions**

- 1. Where is Macquarie Island? Locate it on a map.
- 2. Describe the weather on Macquarie Island.
- 3. Which animals were introduced to Macquarie Island?
- 4. What impact did the animals have on the island?
- 5. Why is Macquarie Island unique?
- 6. How have authorities removed the pests from the island?
- 7. How much has the pest removal program cost?
- 8. Describe the role dogs have played in removing the pests.
- 9. What jobs do the dogs do after working on Macquarie Island?
- 10. What do you understand more clearly since watching the BtN story?

# **Activities**

# Key Words

Ask students to find out the meanings of the following key words that relate to Macquarie Island.

subantarctic	introduced	feral
species	isthmus	expeditioner
quarantine	World Heritage	diversity



#### Where is Macquarie Island?

Students will locate Macquarie Island on a map. This could be done as a class on an interactive whiteboard or an individual task. Discuss the location of Macquarie Island in relation to Tasmania and Antarctica. Ask them to make some predictions about the climate and conditions on the island.

If students have access to Google Earth, ask them locate Macquarie Island and record their observations. Ask student to find the latitude and longitude of the island.

#### Profile of Macquarie Island

Students will investigate important aspects of Macquarie Island to create a profile of the island. Some key areas to research could include:

### Macquarie Island research

- Where is Macquarie Island? Locate it on a map.
- Why is Macquarie Island of interest to scientists?
- World heritage status. What world heritage values does Macquarie Island have?
- The climate on Macquarie Island. Draw a climate graph showing average monthly temperatures, rainfall, wind speed and sunshine.
- Special geological features of Macquarie Island.
- How have native flora and fauna been affected by the introduction of animal and plant species? What progress has been made eradicating feral species?
- Importance of Macquarie Island in the survival of animals in the Southern Ocean.
  Which birds breed on the Island?
- Macquarie Island Station is a permanent Australian subantarctic research base on Macquarie Island. What is the history of the station and what research does it conduct?

Use the Macquarie Island interactive map <a href="http://www.abc.net.au/nature/island/ep1/map/default.htm">http://www.abc.net.au/nature/island/ep1/map/default.htm</a> to learn about the island and help with your profile research.





#### Life on Macquarie Island

Macquarie Island is home to about 40 expeditioners over summer and about 16 over winter. Students will investigate what living conditions are like on the island and write a diary or journal entry that tells first-hand what it's like living on the island. Explain to students that a diary or journal often expresses opinions and feeling and should be written in the first person. Encourage students to look at photographs to help them imagine what living on the island would be like.

Here are some websites that will help students with their research <a href="http://www.antarctica.gov.au/living-and-working/stations/macquarie-island/living-http://www.abc.net.au/nature/island/ep1/behind.htm">http://www.abc.net.au/nature/island/ep1/behind.htm</a>

# Related Research Links

Behind the News – Macquarie Island http://www.abc.net.au/btn/story/s3220149.htm

ABC Landline - Cold Comfort

http://www.abc.net.au/landline/content/2014/s4006605.htm?source=rss

ABC News – Macquarie Island declared pest free after 7 year eradication program <a href="http://www.abc.net.au/news/2014-04-07/macquarie-island-declared-pest-free-after-eradication-program/5373336">http://www.abc.net.au/news/2014-04-07/macquarie-island-declared-pest-free-after-eradication-program/5373336</a>

ABC Island Life – Macquarie Island http://www.abc.net.au/nature/island/ep1/default.htm

Australian Antarctic Division – Macquarie Island <a href="http://www.antarctica.gov.au/living-and-working/stations/macquarie-island">http://www.antarctica.gov.au/living-and-working/stations/macquarie-island</a>

Department of Environment - Macquarie Island <a href="http://www.environment.gov.au/coasts/discovery/teachers/pubs/macquarie-island.pdf">http://www.environment.gov.au/coasts/discovery/teachers/pubs/macquarie-island.pdf</a>

Parks Tasmania – Shipwrecks, Sealers and Scientists on Macquarie Island http://www.parks.tas.gov.au/fahan\_mi\_shipwrecks/main.htm

