

# UNIT 5A GRANITE ISLAND, ENOUGH FOR ALL FOREVER?

## YEARS 9-10 GEOGRAPHY



This unit is designed to focus on the following aspects of the Australian Curriculum Geography for year 9 and year 10 students.

### Year 9 Level Description

This learning is intended to align with the Year 9 curriculum for Geography: 'Biomes and food security' and 'Geographies of interconnections'.

'Biomes and food security' focuses on investigating the role of the biotic environment and its role in food and fibre production. This unit examines the biomes of the world, their alteration and significance as a source of food and fibre, and the environmental challenges of and constraints on expanding food production in the future. These distinctive aspects of biomes, food production and food security are investigated using studies drawn from Australia and across the world.

#### Key inquiry questions

A framework for developing students' geographical knowledge, understanding and skills is provided through the inclusion of inquiry questions and specific inquiry skills, including the use and interpretation of maps, photographs and other representations of geographical data.

The key inquiry questions for Year 9 are:

- What are the causes and consequences of change in places and environments and how can this change be managed?
- What are the future implications of changes to places and environments?
- Why are interconnections and interdependencies important for the future of places and environments?

### Year 10 Level Description

There are two units of study in the Year 10 curriculum for Geography: 'Environmental change and management' and 'Geographies of human wellbeing'

'Environmental change and management' focuses on investigating environmental geography through an in-depth study of a specific environment. The unit begins with an overview of the environmental functions that support all life, the major challenges to their sustainability, and the environmental world views – including those of Aboriginal and Torres Strait Islander Peoples – that influence how people perceive and respond to these challenges. Students investigate a specific type of environment and environmental change in Australia and one other country. They apply human–environment systems thinking to understand the causes and consequences of the change and geographical concepts and methods to evaluate and select strategies to manage the change.

The key inquiry questions for Year 10 are:

- How can the spatial variation between places and changes in environments be explained?
- What management options exist for sustaining human and natural systems into the future?
- How do world views influence decisions on how to manage environmental and social change?

## Sample learning sequence 5 A

### Granite Island, Enough for all forever?

<p>Learning Intention:</p> <p>Students learn that humans change environments. Students investigate the delicate balance between preservation and progress, and the effect of human choices on communities and the environment. Students have the knowledge and understanding to reflect and react to local issues.</p>		<p>Evidence of learning.</p> <p>Collect samples either digitally, anecdotally or from student recording that match aspects of the AC content and achievement standards.</p>
<p>Hook</p> <p>Introduce the students to the idea of visiting Granite Island through photos, video or prepared talk.</p> <p>Tell your stories about Granite Island. Allow students to tell theirs and discuss that knowledge in depth. Explain to the students that this is a Geography excursion to learn more about sustainability and food security in South Australia.</p>	<p>Show students the footage of protestors at Victor harbor. E.g.: <a href="http://www.adelaidenow.com.au/news/south-australia/hundreds-gather-at-victor-harbor-to-protest-against-tuna-pen-development-near-granite-island/news-story/6b66d4240e068be6762b5e69c225431a">http://www.adelaidenow.com.au/news/south-australia/hundreds-gather-at-victor-harbor-to-protest-against-tuna-pen-development-near-granite-island/news-story/6b66d4240e068be6762b5e69c225431a</a></p> <p>Think pair share; students discuss what they have seen in a pair, after 3/5 minutes they share with another pair.</p> <p>Form four conversation stations</p> <p>A. Discuss any prior knowledge or experiences they have had of public demonstrations. B. Discuss any previous visits to Granite Island. C. Share any knowledge of fishing, sharks and oceans. D. Share what they know and understand of Aquaculture.</p> <p>Students rotate around the four stations, at the conclusion students return to their table and record three new things they have learnt and at least one thing they would like to know more about.</p> <p>Now show the following footage or similar of the results of the court investigation: <a href="http://www.adelaidenow.com.au/news/south-australia/oceanicvictor-aquarium-tourist-attraction-for-victor-harbor-wins-courtchallenge/news-story/64c55a9f5d40ce7ef6c89c068bd1c389">http://www.adelaidenow.com.au/news/south-australia/oceanicvictor-aquarium-tourist-attraction-for-victor-harbor-wins-courtchallenge/news-story/64c55a9f5d40ce7ef6c89c068bd1c389</a></p> <p>Then form the students into groups of three:</p> <p>Student A reads about the Tuna industry similar to the following: <a href="http://asbtia.com.au/industry/tuna-industry-background/">http://asbtia.com.au/industry/tuna-industry-background/</a></p> <p>Student B reads about current Japanese trends in Bluefin tuna farming <a href="http://www.abc.net.au/news/2015-04-08/bluefin-tuna-farmingjapan/6373310">http://www.abc.net.au/news/2015-04-08/bluefin-tuna-farmingjapan/6373310</a></p> <p>Student c reads about recent award in the industry e.g. <a href="http://asbtia.com.au/australian-southern-bluefin-tuna-fishery-andfarming-achieve-historic-international-sustainability-certification/">http://asbtia.com.au/australian-southern-bluefin-tuna-fishery-andfarming-achieve-historic-international-sustainability-certification/</a></p> <p>After discussion each group of three develops their own inquiry into the challenges to global fish production.</p>	<p>Develop and pose questions.</p> <p>Annotated diagrams that illustrate relationships.</p> <p>Causal explanation.</p>

Investigate, research and go deeper	<p>Visit Day</p> <p>Students take their questions/wonderings. They explore the area, they have opportunities to observe fish, develop and pose questions, interact with the fish to gather information and data.</p> <p>They also interact with the guides, teachers and their peers to answer questions. They have time to complete their own inquiries.</p>	<p>Develop, pose and answer questions.</p> <p>Gather and store information and data.</p> <p>Critically analyse/interpret and synthesize information.</p>
Explain	<p>Distribute readings of aquaculture.</p> <p>Individually or in groups or pairs the students prepare a media release entitled "Enough for all for ever", the piece should consist of no more than 5 video scenes, 5 slides or one page of news print.</p>	Inquiry report.
Extend and stretch	<p>Students prepare and present a Persuasive piece on "Communities play a key role in improving human and environmental wellbeing internationally".</p>	<p>Persuasive report.</p> <p>Student reflections.</p> <p>Response to learning.</p>
Reflect, respond and evaluate	<p>Students use the photos and videos taken at the visit to create a book (either digitally or manually) to reflect on their learning and prepare a piece for the website that addresses the change and management of marine environments in South Australia.</p>	<p>Recount.</p> <p>Information report orally, digitally or written.</p>

Resources to support teaching and learning unit 5 A:

Digital resources:

<http://www.adelaidenow.com.au/news/south-australia/the-granite-island-of-south-australias-past/news-story/6d8c3e3421ed1e9f3be31d0cb6e1c8a9>

#### **UNIT 5A aims to address the following areas of the Year 9 Achievement Standard**

By the end of Year 9, students explain how geographical processes change the characteristics of places. They analyse interconnections between people, places and environments and explain how these interconnections influence people, and change places and environments. . Students analyse alternative strategies to a geographical challenge using environmental, social and economic criteria.

Students use initial research to identify geographically significant questions to frame an inquiry. They evaluate a range of primary and secondary sources to select and collect relevant and reliable geographical information and data.

They record and represent multi-variable data in a range of appropriate digital and non-digital forms, including a range of maps that comply with cartographic conventions. Students synthesise data and information to draw reasoned conclusions. They present findings, arguments and explanations using relevant geographical terminology and digital representations in a range of appropriate communication forms. Students propose action in response to a geographical challenge, taking account of environmental, economic and social factors.

#### **UNIT 5A aims to address the following areas of the Year 10 Achievement Standard**

By the end of Year 10, Students identify, analyse and explain significant interconnections between people, places and environments and explain changes that result from these interconnections and their consequences. They predict changes in the characteristics of places and environments over time, across space and at different scales and explain the predicted consequences of change. They evaluate alternative views on a geographical challenge and alternative strategies to address this challenge using environmental, economic, political and social criteria to draw a reasoned conclusion.

Students use initial research to develop and modify geographically significant questions to frame an inquiry. They critically evaluate a range of primary and secondary sources to select and collect relevant, reliable and unbiased geographical information and data. They analyse and synthesise data and other information to draw reasoned conclusions, taking into account alternative perspectives. Students present findings, arguments and explanations using relevant geographical terminology and graphic representations and digital technologies in a range of selected and appropriate communication forms. They evaluate their findings and propose action in response to a contemporary geographical challenge, taking account of environmental, economic, political and social considerations.