

Geography: Stage 2 (Years 3 and 4) Places are Similar and Different

Students explore the different climates of places and use this information to imagine what it would be like to live in different places.

Topic:	Climate of Places: Tropical, Temperate and Dry Places in Australia
Key inquiry questions:	<ul style="list-style-type: none">• How and why are places similar and different?
Content	
Climate of places Students: <ul style="list-style-type: none">• investigate the climates of different places, for example: (ACHGK017)<ul style="list-style-type: none">– discussion of how weather contributes to climate– comparison of climates in different places	

Content

Climate of places

Students:

- investigate the climates of different places, for example: (ACHGK017)
 - discussion of how weather contributes to climate
 - comparison of climates in different places

Student Learning Activities

Activity 1: Engagement and questioning – Australia's Tropical North

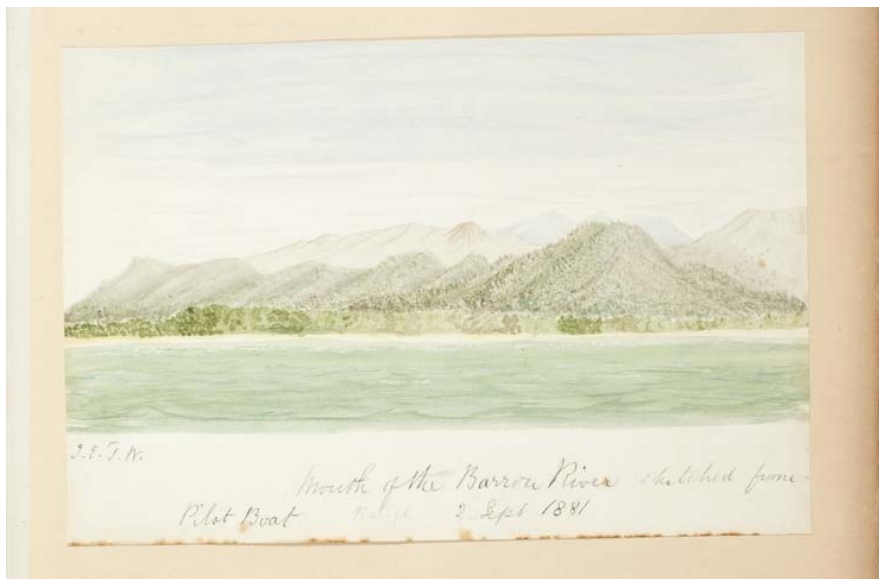
Engagement – students view Sources 1 and 2. Ask the students to imagine visiting the Barron River area and travelling by boat to the mountains in the sketch as the artist did. Students describe what they would see around them and the type of weather they may experience (temperature, humidity).

Use Google Earth or an atlas to locate the Barron River. Students compare the Barron River area to where they live.

Formulate inquiry questions, eg:

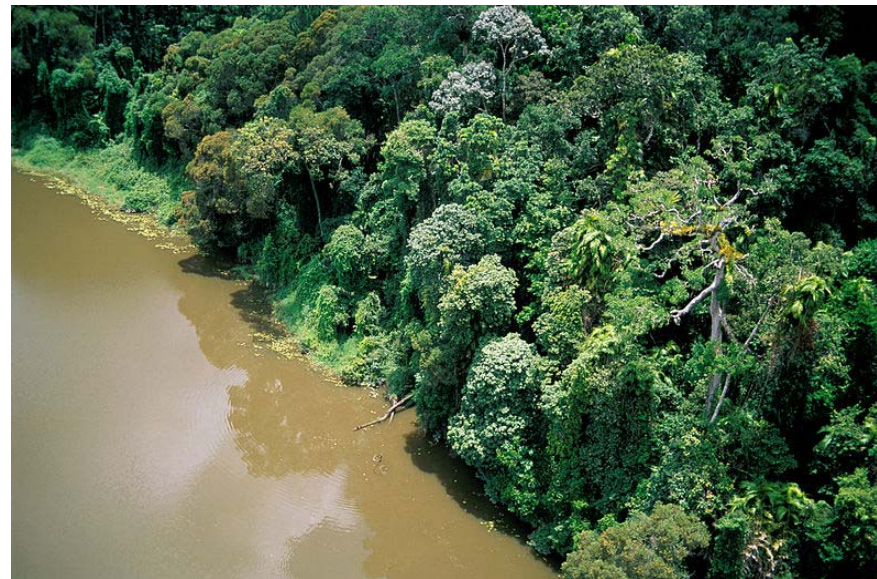
- How are climates similar and different in different places?
- How does location of different places affect the climate?
- What is the relationship between weather and climate?

Source 1: Mouth of the Barron River, northern Queensland, 1881, drawing by J.E Tenison-Woods



<http://www.acmssearch.sl.nsw.gov.au/search/itemDetailPage.cgi?itemID=423858>

Source 2: Aerial view of tropical rainforest adjoining the Barron River near Cairns northern Queensland, 2000, CSIRO Science Image 4193

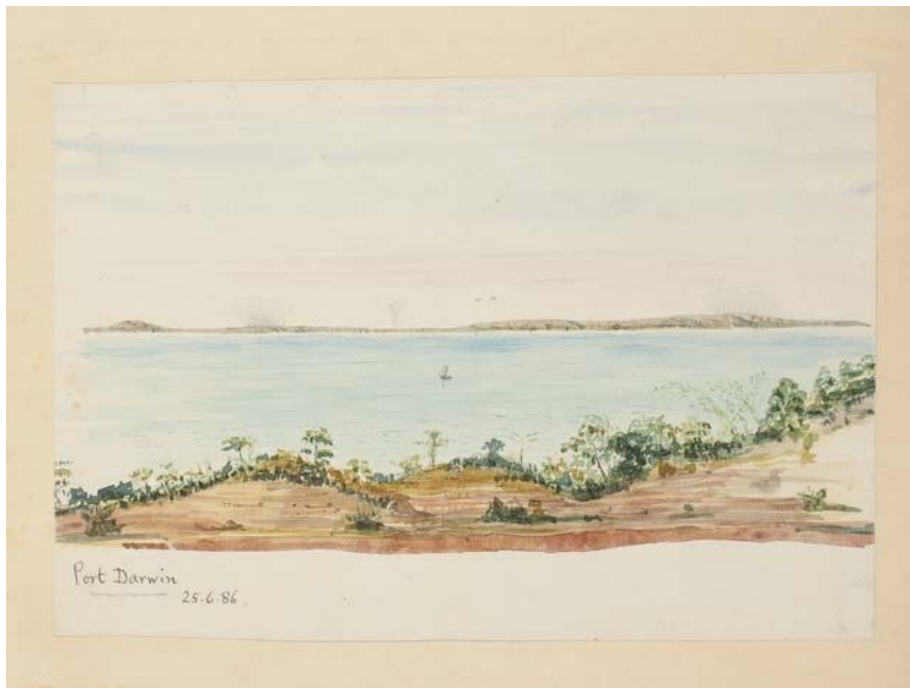


<http://www.scienceimage.csiro.au/image/4193>

Activity 2: Acquiring geographical information – Tropical, desert and temperate places

- On a map of Australia, students plot the capital cities, Barron River, Cairns, Bourke, Enngonia, Swansea (Tas) and Freycinet Peninsula. Students mark in the key climate zones http://www.bom.gov.au/iwk/climate_zones/map_1.shtml.
- Students analyse of Sources 1 to 8. They write their observations and inferences of each place in a comparison table.

Source 3: Port Darwin, Northern Territory, 1886, drawing by J.E Tenison-Woods



<http://www.acmssearch.sl.nsw.gov.au/search/itemDetailPaged.cgi?itemID=423858>

Source 4: Port Darwin, Northern Territory, 2014, photographed by G. Braiding



Source 5: In the Australian desert, c. 1870, watercolour painting



<http://www.acmssearch.sl.nsw.gov.au/search/itemDetailPaged.cgi?itemID=447400>

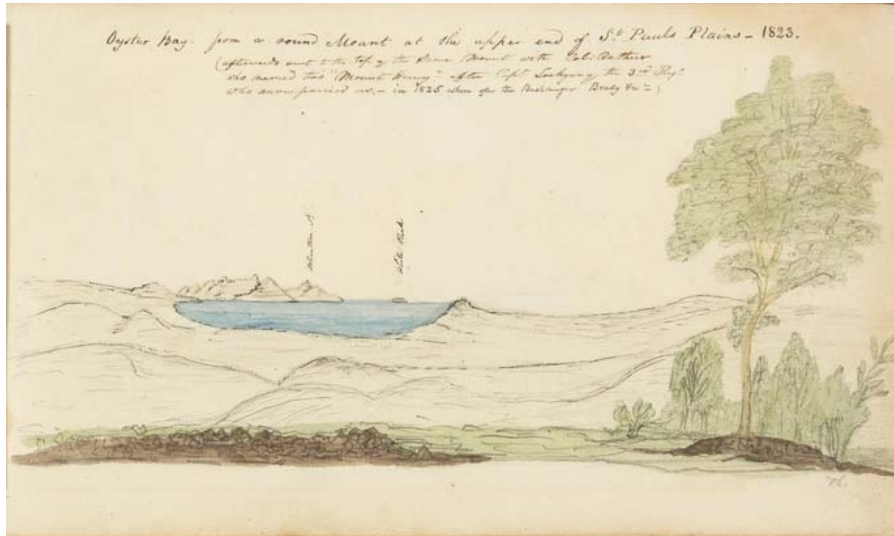
Source 6: Feeding cattle with sugar cane, Dunsandle Property, Enngonia, NSW, 2002, photographed by Darren Clark.



<http://acmssearch.sl.nsw.gov.au/search/itemDetailPaged.cgi?itemID=447439>

In Copyright - restrictions apply. Mitchell Library, State Library of New South Wales, courtesy Darren Clark.

Source 7: Oyster Bay from or around mountain at the upper end of St Pauls Plains, Tasmania, 1823, drawn by Thomas Scott



<http://www.acmssearch.sl.nsw.gov.au/search/itemDetailPaged.cgi?itemID=423959>

Source 8: Oyster Bay on the Freycinet Peninsula, Tasmania, 2004, photographed by Jörn Brauns (Public Domain)



https://en.wikipedia.org/wiki/Great_Oyster_Bay#/media/File: Blick ueber Great Oyster Bay zur Freycinet Peninsula.jpg

Transcript Source 7 - *Afterwards went to the top of the same mount with Col. Arthur who named this 'Mount Henry' after Capt. Lockyer of the 3rd Regt. who accompanied us - in 1825 when after the Bushranger Brady &c.*

COMPARISON TABLE – LOCATION AND PLACES			
	Place: Darwin	Place: Enngonia	Place: Freycinet Peninsula
	Climate zone: Tropical	Climate zone: Desert	Climate zone: Temperate
Where in Australia is this place located?			
Nearest major city or town			
Observe Describe what you see in each image. Indicate if it is a sketch, painting or photo.			
Infer What would it be like to live in this place?			
What can you learn about the place from each image?			

Activity 3: Representing geographical information – Plotting climate data

- a. Explain that climate is the average weather pattern in a place over many years. Demonstrate how to interpret the Bureau of Meteorology Climate Data Online site <http://www.bom.gov.au/climate/data/index.shtml>. Use the Cairns data as an example.
- b. Students extract climate data for their two places and complete the average temperature and rainfall tables.
- Barron River, Qld (Cairns) http://www.bom.gov.au/climate/averages/tables/cw_031011.shtml
 - Darwin, NT http://www.bom.gov.au/climate/averages/tables/cw_014015.shtml
 - Enngonia, NSW (Bourke) http://www.bom.gov.au/climate/averages/tables/cw_048245.shtml
 - Oyster Bay, Tasmania (Swansea), http://www.bom.gov.au/climate/averages/tables/cw_092038.shtml
- c. As a demonstration, use the plotting tool to show graphs for the data and comparison graphs for two places. Students create a column graph to represent their average rainfall and temperature data.

AVERAGE MONTHLY RAINFALL

Place	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
1.													
2.													

AVERAGE MONTHLY TEMPERATURE

Place	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1.												
2.												

Activity 5: Analysing geographical information – Interpreting climate data		
COMPARISON TABLE – CLIMATE		
	Place 1:	Place 2:
	Climate zone:	Climate zone:
Hottest month		
Average temperature in the hottest month		
Coldest month		
Average temperature in the coldest month		
Wettest month		
Average rainfall in the wettest month		
Driest month		
Average rainfall in the driest month		
Average annual rainfall		
Analyse your data and make statements about the similarities and differences.		

Activity 6: Communicating – Relocating advice

What would it be like to relocate to Darwin or Cairns or Enngonia or Oyster Bay?

Students imagine that they have to move house to one of the two places they investigated. They compose a text explaining the reasons why they have chosen one place over the other, making reference to the data in their comparison tables they have constructed.

Additionally, students create a mock travel advice blog post or webpage advising prospective residents on what to expect about the climate and features of one of the two places they investigated. They include advice on what weather to expect throughout the year, key climate data and what clothes and equipment are needed for the various seasons.

Background notes for teachers

The focus on the activities listed is on the climate of different places. The activities can be expanded to include research into the settlement patterns and demographics of the places and the lives of the people who live there as described in the topic:

Similarities and differences between places.

There is a strong focus on using geographical tools in this unit: maps, data tables, column graphs, simple statistics, satellite images, photographs, illustrations and web tools.

Sources 1 and 7 provide examples of field sketches. Before photography was available, field sketches and maps were the main way of recording and communicating observations. When comparing each sketch to the related photograph in the sources it can be seen that the sketches are accurate visual representations. There are numerous colonial sketchbooks held in the collection of the State Library of New South Wales.

Field sketches and line drawings continue to be an effective way of recording observations during geography fieldwork.

NSW Syllabus for the Australian Curriculum Geography K–6		
Outcomes	Geographical Inquiry Skills	Geographical Concepts
<p>GE2-1 examines features and characteristics of places and environments</p> <p>GE2-4 acquires and communicates geographical information using geographical tools for inquiry</p>	<p>Acquiring geographical information</p> <ul style="list-style-type: none"> develop geographical questions to investigate (ACHGS019, ACHGS026) collect and record relevant geographical data and information, for example, by observing, by interviewing, conducting surveys, or using maps, visual representations, the media or the internet (ACHGS020, ACHGS027) <p>Processing geographical information</p> <ul style="list-style-type: none"> represent data by constructing tables, graphs and maps (ACHGS021, ACHGS028) represent information by constructing large-scale maps that conform to cartographic conventions, using spatial technologies as appropriate (ACHGS022, ACHGS029) interpret geographical data to identify distributions and patterns and draw conclusions (ACHGS023, ACHGS030) <p>Communicating geographical information</p>	<p>Place: the significance of places and what they are like eg natural and human features and characteristics of different places and their similarities and differences; how people's perceptions about places influence their responses and actions to protect them.</p> <p>Space: the significance of location and spatial distribution, and ways people organise and manage spaces that we live in eg settlement patterns within Australia, neighbouring countries and other countries.</p> <p>Environment: the significance of the environment in human life, and the important interrelationships between humans and the environment eg how climate and environment influence settlement patterns; interconnections between people and environments; differing ways people can use environments sustainably.</p> <p>Interconnection: no object of geographical study can be viewed in isolation eg interconnections between people, places and environments; influence of people's</p>

	<ul style="list-style-type: none"> • present findings in a range of communication forms, for example, written, oral, digital, graphic, tabular and visual, and use geographical terminology (ACHGS024, ACHGS031) • reflect on their learning to propose individual action in response to a contemporary geographical challenge and identify the expected effects of the proposal (ACHGS025, ACHGS032) 	<p>values on the management and protection of places and environments and the custodial responsibilities of Aboriginal and Torres Strait Islander Peoples.</p> <p>Scale: the way that geographical phenomena and problems can be examined at different spatial levels eg types of settlement across a range of scales; the influence of climate across a range of scales.</p> <p>Sustainability: the capacity of the environment to continue to support our lives and the lives of other living creatures into the future eg ways in which people, including Aboriginal and Torres Strait Islander Peoples, use and protect natural resources; differing views about environmental sustainability; sustainable management of waste.</p>
Learning across the curriculum		
<ul style="list-style-type: none"> • Information and communication technology capability • Critical and creative thinking • Literacy • Numeracy • Difference and diversity • Work and enterprise 		

Resources

Picture books

Why I Love Australia by Bronwyn Bancroft

My Home in Broome by Tamzyne Richardson and Bronwyn Houston with friends

A Year on Our Farm by Penny Matthews and Andrew McLean

Where the Forest Meets the Sea by Jeannie Baker

The Story of Rosie Dock by Jeannie Baker

Videos

The Daintree, Where Forest and Reef Meet <http://splash.abc.net.au/home#!/media/1423341/the-daintree-where-rainforest-and-reef-meet>

Kingdom of the Crocodile <http://splash.abc.net.au/home#!/media/1423011/kingdom-of-the-crocodile>

A Haven in the Harsh Desert Heat <http://splash.abc.net.au/home#!/media/1436032/a-haven-in-the-harsh-desert-heat>

Tasmania's Wilderness Wonders <http://splash.abc.net.au/home#!/media/1668062/tasmania-s-wilderness-trek-into-cradle-mountain-and-lake-st-clair>

Web resources

Australian climates – relationship between climate and weather

http://www.bom.gov.au/climate/map/climate_classifications/IDCJCM0000_au_climate.shtml

Climate data online <http://www.bom.gov.au/climate/data/>

Relocating.com.au – Darwin http://www.relocating.com.au/moving_guides/Darwin.html