 National park case study

Perception of environments

Protection of environments

Key enquiry questions

* How do different views about the environment influence approaches to sustainability?
* How can people use places and environments more sustainably?

Content focus

Students:

* Examine the importance of natural vegetation and natural resources to the environment, animals and people.
* Learn about the ways people value environments, including Aboriginal and Torres Strait Islander Peoples.
* Identify sustainable practices and recognise that there are differing views on how sustainability can be achieved.

Outcomes

A student:

* examines features and characteristics of places and environments **GE2‑1**
* describes the ways people, places and environments interact **GE2‑2**
* examines differing perceptions about the management of places and environments **GE2‑3**
* acquires and communicates geographical information using geographical tools for inquiry **GE2‑4**

Outcomes and other syllabus material referenced in this document are from:

* [Geography K-10 Syllabus](http://syllabus.nesa.nsw.edu.au/hsie/geography-k10/) © NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales, 2015

Overview

The geographical inquiry process will investigate Kosciuszko National Park as a case study. Students investigate how various people value environments and how this influences the implementation of sustainable practices that protect environments.

The learning is shaped by two inquiries of differing length.

Teachers may need to adjust and scaffold learning activities as appropriate. Teachers may choose to have a single class inquiry on one national park that models and scaffolds the inquiry process and at the same time students work in pairs investigating another national park of their choice as an independent research project.

Assessment

Many of the activities require students to demonstrate their learning. These activities can be used to assess student progress at various stages throughout the inquiry process.

Inquiry 1

Perception of environments

Case study – the Australian Alps National Park

Kosciuszko National Park

Students create a poster or digital page that defines and explains the various values and perceptions of Kosciuszko National Park. Inquiry 2 investigates tourism and protection strategies for Kosciuszko National Park in greater depth.

Perception of environments

* investigate the ways people, including Aboriginal and Torres Strait Islander Peoples, value environments, for example: [(](http://achgk022)ACHGK022[,](http://achgk022) ACHGK023, ACHGK024) Aboriginal Torres Strait Islander histories
  + discussion of why people value environments differently eg cultural, agricultural, commercial and recreational values Sustainability work and enterprise
  + description of how custodial responsibility for Country/Place influences Aboriginal and Torres Strait Islander Peoples’ views of the environment Aboriginal Torres Strait Islander histories Sustainability literacy

Acquiring geographical information

How do people value and perceive Kosciuszko National Park?

* Where is Kosciuszko National Park?
* What are the features and uses of the national park?
* How was the land used before it became a national park?
* Why was the national park created? What are its significant values?
* How Aboriginal and Torres Strait Islander Peoples value Kosciuszko National Park?
* How do other people value Kosciuszko National Park?
* How can Kosciuszko National Park be protected?

Acquire data and information

Introduction

* As an introduction to the Australian Alps landscape, view the video clip [Touring Australia: Australian Alps](https://youtu.be/FsNpeDjhecY) by Australian Geographic (2014). Recall how the area is valued by a range of people, for example Aboriginal people, skiers, bush walkers, hikers, mountain bikers, abseilers, cavers, ‘horsemen’, scientists.

Features of Kosciuszko National Park

* Use an atlas or Google maps to locate the Australian Alps national parks, including Kosciuszko National Park.
* Use the interactive [Kosciuszko National Park map](http://www.nationalparks.nsw.gov.au/visit-a-park/parks/Kosciuszko-National-Park/Map) to estimate the width and length of the national park. Identify the location of north, south, east and west. Explore the tourist drives, noting distances and landscapes shown in the photograph galleries.
* Select a [downloadable map](http://www.nationalparks.nsw.gov.au/visit-a-park/parks/Kosciuszko-National-Park/Visitor-Info/#Maps-and-downloads), for example Southern Kosciuszko mountain bike trails. Use the legend to identify and locate the different features and visitor facilities, for example walking tracks, 4WD tracks, private property, historic buildings, sealed roads, unsealed roads, ski-tube.
* Research the differences between national parks and wilderness areas in terms of their use, access by people and the need for conservation of the area.
* Explore the [Kosciuszko National Park website](http://www.nationalparks.nsw.gov.au/visit-a-park/parks/Kosciuszko-National-Park) and other websites in student groups to research the unique natural features of Kosciuszko National Park. Use jigsaw strategies for information sharing. Examples of features for group research (one per group):
  + landforms and landscapes
  + flora and fauna, including Bogong moths
  + threatened species, for example corroboree frog, mountain pygmy possum
  + towns and resorts in Kosciuszko National Park
  + caves, including limestone caves, for example Yarrangobilly Caves
  + glacier lakes (also known as cirque lakes) and other ‘wetlands’, for example Blue Lake Ramsar
* View the [climate statistics for Mount Kosciuszko](http://www.bom.gov.au/climate/averages/tables/cw_071012.shtml). Select the plot icons on the far left to view line graphs of temperature and column graphs of precipitation.
* Undertake **fieldwork** to the national park if viable. Use fieldwork tools such as observations, photographs, field sketches, mapping and surveys to record the features of the national park, its uses and evidence of sustainable management practices.

Values and perceptions

* Read the [Australian Alps fact sheet](http://www.environment.gov.au/system/files/pages/5049d4dd-060e-40fb-8dbf-eaa5496cd18d/files/national-heritage-alps.pdf) and [The Australian Alps: National Heritage List brochure](http://www.environment.gov.au/system/files/pages/5049d4dd-060e-40fb-8dbf-eaa5496cd18d/files/australian-alps-values.pdf) for information on the values of the Australian Alps national parks. Analyse these texts as visual texts in communicating information on the major values of the parks – unique natural environment; longstanding human interaction; and scientific significance. What techniques are used to communicate the three major values?
* Read the web pages [Aboriginal people of Monaro](https://www.cooma.nsw.gov.au/DocumentCenter/Home/View/376) and [Indigenous people and the Snowy](http://archive.maas.museum/hsc/snowy/impact.html) to develop a snapshot of the Aboriginal groups who lived with the land in the Kosciuszko area. The high country was used as a meeting place for the different Aboriginal groups during the summer months. Aboriginal tribes that have been identified as accessing the area include – Wolgal (Wolgulu/Walgalu), Waradgery (Wiradjuri), Ngarigo, Ngunawal, Jaimathang (Yaimathang).
* Use the web page [The Snowy of the 19th century](http://archive.maas.museum/hsc/snowy/impact.html) to gather at least three key points about how European settlement impacted upon the environment in the Snowy Mountains.
* Read the blog post [Horses in the High Country](http://pateblog.nma.gov.au/2014/07/04/horses-in-the-high-country/), National Museum Australia, 2014. Identify the key issue and the point of view of the author. Undertake research to collect information on alternative points of view on the issue. Identify persuasive strategies used in communicating opinions on the issue.

Processing geographical information

Students use geographical tools to represent, organise and analyse the data and information, for example:

Features of Kosciuszko National Park

* Locate Kosciuszko National Park on a map of Australia. Colour and label the alpine parks in the ACT, NSW and Australia.
* Create an illustrated table that summarises the unique natural features of the national park.
* Display large photographs of the natural features of the park.
* Compare and interpret climate graphs. Discuss the impact of climate on the environment and the impact of climate on people’s interactions with the environment.
* Create a Venn diagram to explain the similarities and differences between a national park and wilderness area.
* Locate Kosciuszko National Park on a map of Australia. Colour and label the alpine parks in the ACT, NSW and Australia.
* Create an illustrated table that summarises the unique natural features of the national park.
* Display large photographs of the natural features of the park.
* Compare and interpret climate graphs. Discuss the impact of climate on the environment and the impact of climate on people’s interactions with the environment.
* Create a Venn diagram to explain the similarities and differences between a national park and wilderness area.

Values and perceptions

* Hold a class discussion exploring strategic questions to develop students’ understanding of places of significance to Aboriginal people (for example the Ginini area, Mt Gingera, waterholes, caves); reasons for visiting the high country (for example Bogong moth harvesting and feasting); social and spiritual aspects of life that were part of these gatherings (for example ceremonies, initiations, marriages); eurocentric points of view and the reasons for this (i.e. the dispersion of Aboriginal people, lack of accurate records).
* Create a class cause and effect chart to explain the impacts on the environment of early European settlement.
* Construct a table to collate and sort information that summarises past and present human interactions and perceptions of the national park, e.g Aboriginal people (spiritual connections, social gatherings for Bogong moth feasting); European settlers (summer cattle grazing); recreational visitors (skiing as recreation; scientists (biodiversity, protecting threatened species).
* Jointly construct a plus minus interesting chart in response to the question–‘What do you think should be done about wild horses in the national park?’ Use the question as the basis for an informal class discussion or debate.

Communicating geographical information

Communicate

Students create a poster or digital page that shows at a glance the various perceptions of Kosciuszko National Park. It is recommended students use either a placemat proformaor pinwheel chart format if publishing on paper. Alternatively they could create an interactive digital page with pop-ups or linked pages, for example a PowerPoint slide with interactive features embedded.

Explanations of the background to and reasons for each perception should be included either as supplementary information or in pop-ups or linked pages if a digital page.

Respond

Create **word clouds** to represent personal perceptions of Kosciuszko National Park.

Resources

Department of the Environment, [National Heritage Places - Australian Alps National Parks and Reserves](http://www.environment.gov.au/heritage/places/national/australia-alps)[NSW National Parks and Wildlife Service](http://www.nationalparks.nsw.gov.au/)NSW National Parks and Wildlife Service [YouTube channel](https://www.youtube.com/channel/UCW-D0XhMQEb1aIWEQPoJ3Xw)

Inquiry 2

Tourism and nation parks

Case study

Kosciuszko National Park

Students investigate a recreational activity undertaken in the Kosciuszko area. Students write either a newspaper report, letter to the editor or a media release on the effect of this activity on the environment.

Protection of environments

Students:

* investigate sustainable practices that protect environments, including those of Aboriginal and Torres Strait Islander Peoples, for example: [(](http://achgk022)ACHGK023, ACHGK024, ACHGK[025)](http://achgk022) Aboriginal Torres Strait Islander histories Sustainability
  + examination of how environments can be used sustainably eg sustainable agricultural, commercial, recreational practices Description: S-ICON-Sustainability
  + discussion of ways waste can be managed sustainably visual representations Sustainability Civics and citizenship
  + examination of how the practices of Aboriginal and Torres Strait Islander Peoples support the sustainable use of environments eg use of resources Aboriginal Torres Strait Islander histories Sustainability Creative and critical thinking

Perception of environments

Students:

* investigate the ways people, including Aboriginal and Torres Strait Islander Peoples, value environments, for example: [(](http://achgk022)ACHGK022[,](http://achgk022) ACHGK023, ACHGK024) Aboriginal Torres Strait Islander histories
  + discussion of why people value environments differently eg cultural, agricultural, commercial and recreational values Sustainability work and enterprise
  + description of how custodial responsibility for Country/Place influences Aboriginal and Torres Strait Islander Peoples’ views of the environment Description: AHC-ICON-Aboriginal Torres Strait Islander histories Description: S-ICON-Sustainability literacy

Acquiring geographical information

Question – what sustainable practices protect Kosciuszko National Park from the impacts of tourism?

* Why is the environment in the national park significant?
* What are the recreational uses of the national park?
* Who uses the national park for recreation and what are their perceptions of it?
* How do sustainable practices protect Kosciuszko National Park?

Acquiring data and information

* Watch the three short video clips—winter sports, Snowy Mountains, Kosciuszko National Park on the [NSW National Parks YouTube collection: Mountains, snow, caves](https://www.youtube.com/playlist?list=PLr1pR0nhb4Efw9pcBQo01xQ0KoLlFgN8K).
* Identify other recreational activities in the national park from the [Kosciuszko National Park website](http://www.nationalparks.nsw.gov.au/visit-a-park/parks/Kosciuszko-National-Park) and [VisitNSW Kosciuszko website](http://www.visitnsw.com/destinations/snowy-mountains/kosciuszko-national-park).
* Each student gathers information on one recreational use of Kosciuszko National Park in order to evaluate the effect of the activity on the environment. They research background information on the activity, for example time of year, resources needed, people involved, and reasons for the activity. Activities could include:
  + snow sports
  + horse riding
  + camping
  + bush walking
  + mountain biking
  + canoeing/kayaking
  + fishing
  + abseiling
  + caving
  + using mountain huts
* Use media reports and other sources to research the effect of the recreational activity on the environment.
* Reference the ‘Caring for your Park’ tips on the [downloadable park use maps](http://www.nationalparks.nsw.gov.au/visit-a-park/parks/Kosciuszko-National-Park/Visitor-Info/#Maps-and-downloads) to research ways people can reduce or minimise the effect of the activity on the environment.
* Use media reports and blog posts to identify perceptions of recreational users of the park.
* Reference extracts from the [Managing Kosciuszko National Park for the Future](http://www.environment.nsw.gov.au/resources/planmanagement/final/130067KNPImp1112.pdf) report on strategies and actions the NSW National Parks and Wildlife Service are undertaking to protect the park.

Processing geographical information

Communicate

Students use this information to write a blog post, newspaper report or letter to the editor. Their writing needs to include:

* The location and some background information on the recreational activity.
* The effect of the recreational activity on the environment.
* Ways people can reduce or minimise the effect of the activity on the environment.
* Ways the activity is managed by the national park.

Respond

Students include a personal opinion, with reasons, on sustainability practices that protect Kosciuszko National Park.

Students state how they can care for a local park when they visit it.

Resources

NSW National Parks and Wildlife Service, [Managing Kosciuszko National Park for the Future](http://www.environment.nsw.gov.au/resources/planmanagement/final/130067KNPImp1112.pdf), Annual Report 2011-12NSW National Parks and Wildlife Service [YouTube channel](https://www.youtube.com/channel/UCW-D0XhMQEb1aIWEQPoJ3Xw)

| Geographical concepts | Geographical inquiry skills | Geographical tools |
| --- | --- | --- |
| 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.  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.  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.  Interconnection – no object of geographical study can be viewed in isolation eg interconnections between people, places and environments; influence of people’s values on the management and protection of places and environments and the custodial responsibilities of Aboriginal and Torres Strait Islander Peoples.  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.  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. | Acquiring geographical information   * 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)   Processing geographical information   * 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)   Communicating geographical information   * 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) | Maps – Maps   * large-scale maps, world map, globe, sketch maps * maps to identify location, direction, distance, map references, spatial distributions and patterns   Fieldwork – Fieldwork   * observing, measuring, collecting and recording data, conducting surveys or interviews * fieldwork instruments such as measuring devices, maps, photographs   Graphs and statistics – Graphs and statistics   * tally charts, pictographs, data tables, column graphs, simple statistics   Spatial technologies – Spatial technologies   * virtual maps, satellite images, global positioning systems (GPS)   Visual representations – Visual representations   * photographs, illustrations, diagrams, story books, multimedia, web tools |