

WHAT CAN WE STUDY ON RANGITOTO?

Your visit to Rangitoto linked to the curriculum

GENERAL SKILLS

SCIENCE

SKILLS

- Investigation
- Experiencing phenomena
- Problem solving

ATTITUDES

- Curiosity
- Honesty in recording
- Flexibility
- Persistence

SOCIAL STUDIES

PROCESSES

- Collect, process and communicate information
- Values exploration

PRIMARY AND INTERMEDIATE TOPICS

SCIENCE

LIVING WORLD

- Bees and pollen
- Birds, especially Black-backed gull
- Bugs, insects and spiders
- Caring for places
- Down by the sea, including shellfish, crabs, seaweed
- Fishing
- Food webs in native forest
- Introduced plants and animals
- Leaves and seeds
- Medicinal plants
- Native forests
- Plants and change – plant succession
- Plant reproduction
- Plants, trees and ferns, especially native

PHYSICAL WORLD

- Floating and sinking
- Wind and water

PLANET EARTH

- A visit to the beach
- Building materials
- Conservation
- Change in a natural environment
- Clouds
- Geological history
- Landscape features – islands, volcanic cones
- Maori legends
- Plate tectonics
- Rocks
- Sea level change
- Soil
- Tidal patterns
- Volcanoes
- Water and recreation
- Water cycle
- Wind

PRIMARY AND INTERMEDIATE TOPICS *continued...*

SOCIAL STUDIES

UNITS

- Conservation
- Crime and consequences – visiting the construction done by convicts
- Landmarks
- Maori culture
- Natural landscapes, volcanoes, islands
- NZ history
- Our place: Auckland
- Rocks
- Tourism
- Transport
- Water safety

IDENTITY, CULTURE AND ORGANISATION

- Community activities and features of historic bach communities
- Culture of bach communities
- Government decisions about buildings affect bach holders, visitors
- Interaction of historic bach communities with other communities
- Maori life on Motutapu
- Myths and legends associated with Rangitoto
- Roles people hold on Rangitoto
- Roles held in the self-sufficient bach communities
- Rules on Rangitoto, why these rules are needed, what happens when the rules are broken

PLACE AND ENVIRONMENT

- Activities on Rangitoto
- How people change/damage/enhance Rangitoto
- Influence of physical location and natural features on people's activities
- Meaning of the name Rangitoto
- Natural features of Rangitoto
- People living in isolated places
- Poetry, diary entries, art showing Rangitoto and recording people's visits
- Rangitoto as an important place, to Aucklanders, for conservation, to bach holders, and what factors influence this
- Views different groups hold about Rangitoto
- Why some features resulting from past interactions between people and the environment endure while others disappear

CONTINUITY AND CHANGE

- Historic baches show differences between 1930s and today
- How people's actions influenced the lives of others, especially with regard to historic baches

THE ECONOMIC WORLD

- Perspectives on the resources at different times, by different groups
- Resources available on Rangitoto and how they are managed/conserved
- What work is done by people on Rangitoto

SECONDARY STUDIES

BIOLOGY

- Adaptations
- Ecosystems

GEOGRAPHY

- Extreme natural events
- Interaction between people and environments
- Volcanic landscapes

SECONDARY STUDIES *continued...*

SCIENCE

LIVING WORLD

- Adaptive features to survival, especially on rocky shore
- Ants and division of labour in a colony
- Bugs and beetles
- Ecosystems and energy pyramids, carbon transfer
- Factors that affect a living process
- Fishing
- Food chains
- Impact of people on natural environment
- Introduced plants and animals
- Medicinal plants
- Native forests
- Plant classification
- Plant reproduction
- Plant survival
- Producers, consumers, decomposers
- Seed dispersal, fern spores
- Special characteristics of native plants and animals
- Variation within species and adaptation

PHYSICAL WORLD

- Earth's moving crust
- Weather and climate

PLANET EARTH

- Building materials, roading materials
- Conservation
- Cross section of a geological feature
- Formation of natural features
- Geological history
- Maori legends
- Mapping skills, including topographical maps, geological maps
- Natural resource extraction
- Plate tectonics
- Rocks, rock cycle
- Satellite imaging
- Sea level change
- Soils
- Volcanoes

SOCIAL STUDIES

UNITS

- Conservation
- Landmarks
- Maori culture
- Marketing of New Zealand
- Natural landscapes, volcanoes, islands
- NZ history
- Our place: Auckland
- Rocks
- Tourism

IDENTITY, CULTURE AND ORGANISATION

- Adaptation and change in the bach communities
- Government decisions about buildings affect bach holders, visitors
- How changes have strengthened the identity of bach holders
- Perspectives on regulations regarding Rangitoto, especially building regulations, conservation
- Reforms and changes to rules affect people's rights, roles and responsibilities
- Social organisation in the self-sufficient bach communities

PLACE AND ENVIRONMENT

- Changes to maps of Rangitoto over time
- Differences in views of the use of Rangitoto and how these have been resolved
- Effects of population change on Rangitoto
- Implications of changes to people and the island environment
- Influence of technology on Rangitoto
- Poetry, diary entries, art showing Rangitoto and recording people's visits
- Rangitoto as an important place, to Aucklanders, for conservation, to bach holders, and what factors influence this
- Regulations on the use of Rangitoto

CONTINUITY AND CHANGE

- History of Rangitoto through different sources – legends, poetry, diary entries, art
- How people's actions influenced the lives of others, especially with regard to historic baches

THE ECONOMIC WORLD

- Resources on Rangitoto are valued differently by different groups

ACHIEVEMENT STANDARDS – INTERNAL

INTERNALLY ASSESSED

BIOLOGY

> LEVEL 1

90161 Biology 1.1

Carry out a practical biological investigation with direction, e.g. a pattern seeking investigation.

90164 Biology 1.4

Describe ecological characteristics found in two biological communities, eg. a forest environment, rocky shore, insect communities.

90165 Biology 1.5

Describe the control of all introduced species that affect native species, e.g. possums, wallabies, introduced plants.

> LEVEL 2

90457 Biology 2.1

Carry out a practical biological investigation with supervision.

90769 Biology 2.2

Research the interaction between humans and an aspect of biology, e.g. ecosystem change due to humans such as Wilson's Park, possum control.

90460 Biology 2.4

Investigate an interrelationship or pattern in an ecological population or community, e.g. collecting field data about a plant or animal species on a shore or in a forest.

> LEVEL 3

90713 Biology 3.1

Carry out a practical investigation into an aspect of an organism's ecological niche with guidance, e.g. investigating an interaction or relationship.

GEOGRAPHY

> LEVEL 1

90206 Geography 1.5

Carry out and present directed geographic research, e.g. changes in management and use of Rangitoto by people, elimination of pests, ecosystems.

90207 Geography 1.6

Describe a contemporary geographic issue and evaluate courses of action, e.g. changes in management and use of Rangitoto by people, elimination of pests, changes to ecosystems.

> LEVEL 2

90335 Geography 2.5

Carry out and present guided geographic research, e.g. changes in management and use of Rangitoto by people, elimination of pests, ecosystems.

90336 Geography 2.6

Explain a contemporary geographic issue and evaluate courses of action, e.g. changes in management and use of Rangitoto by people, elimination of pests, changes to ecosystems.

> LEVEL 3

90705 Geography 3.5

Carry out and present geographic research with consultation, e.g. focus on changes in management and use of Rangitoto by people, elimination of pests, ecosystems.

90706 Geography 3.6

Analyse a contemporary geographic issue and evaluate courses of action, eg. focus on changes in management and use of Rangitoto by people, elimination of pests, changes to ecosystems.

SCIENCE

> LEVEL 1

90186 SCIENCE 1.1

Carry out a practical scientific investigation with direction, e.g. pattern finding.

> LEVEL 2

90312 SCIENCE 2.1

Carry out a practical scientific investigation with supervision, e.g. pattern finding in distribution of molluscs, distribution of plants

90771 SCIENCE 2.2

Research information to present a scientific report, e.g. pest control, plate tectonics.

> LEVEL 3

90727 Science 3.1

Carry out a practical scientific investigation with guidance, e.g. pattern finding in stratification/zonation in a biological community, distribution of molluscs, sea level or tidal change, soil composition, plant succession, microclimates and plant distribution.

SOCIAL STUDIES

> LEVEL 1

90217 SOCIAL STUDIES 1.3

Conduct a social studies inquiry to communicate conceptual understandings about society, e.g. historical bach communities and changes in management and use of Rangitoto by people.

90218 Social Studies 1.4

Explain differing values positions, e.g. changes in management and use of Rangitoto by people and perspectives such as Maori, lease holders, conservationists, government.

> LEVEL 2

90273 Social Studies 2.3

Conduct an advanced social studies inquiry, e.g. conflicts over use, especially between lease holders and government/conservationists.

90274 Social Studies 2.4

Describe responses to values position(s), e.g. changes in management and use of Rangitoto by people and perspectives such as Maori, lease holders, conservationists, government.

> LEVEL 3

90691 Social Studies 3.3

Conduct an advanced social studies inquiry independently, e.g. conservation, changes in management and use of Rangitoto by people.

90692 Social Studies 3.4

Explain a values system, e.g. conservation, historical bach communities.

EXTERNALLY ASSESSED

GEOGRAPHY

Rangitoto could provide case study materials or background hands-on experience.

LEVEL 1

AS 90202 Geography 1.1

Describe an extreme natural event and the human response, focus on volcanism.

LEVEL 2

AS 90331 Geography 2.1

Explain a natural landscape, focus on Rangitoto or a volcanic landscape.

LEVEL 3

AS 90701 Geography 3.1

Analyse natural processes in the context of a geographic environment, focus on Rangitoto or a volcanic landscape.