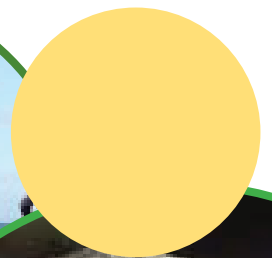


Bream Head Education Resource

AN INTRODUCTION



Bream Head
CONSERVATION TRUST



OUR PLACE, OUR VISION, OUR ACTION

*Working in partnership with iwi, the community, the Department of Conservation,
the Northland Regional Council and Whangarei District Council.*



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FOR FURTHER INFORMATION, CONTACT:

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ACKNOWLEDGEMENTS

The Bream Head Education Resource was produced by the Bream Head Conservation Trust, with support from the Northland Refinery Company, the Northland Regional Council and the Department of Conservation, Northland Conservancy.

Hi Mihi

WELCOME

The following Maori karakia captures the essence of ecological conservation as people supporting the work of nature. Its words are integral to the work of the Bream Head Conservation Trust in its restoration of the Bream Head Scenic reserve. Thanks go to Arrin Clark for this contribution.

“Whakarongo, whakarongo, whakarongo.
Whakarongo ra te taringa ki te hau taua e pupuhi mai nei.
Ko Tane e tu mai nei.
Ko Tawhirimatea e whiriwhiri ana i te rangi.
Ko Tangaroa whakamautai e rere atu ra, e rere mai nei.
Ko koutou nga kaitiaki o te Ao kikokiko.
Ko Ranginui te tuanui o tatou whare.
Ko Papatuanuku te paparahi o tatou whare.
Ko nga Maunga whakahi nga pou pou.
Ko Whangarei terenga paraoa te wahapu hohonu.
Ko tatou nga morehu o te Ao tawhito. Ka turuturu a tai.
Ka turuturu auta nga pou pou ki te rangi.
Whano, whano, hara mai te toki.
Haumi e, Hui e, Taiki e.”

“Listen, listen with caution, listen with intent.
Listen to the winds of turmoil that flow from the first debate.
'Tis Tane that stands.
'Tis Tawhirimatea that swirls through the heavens.
'Tis Tangaroa who holds the tides that depart and that return.
'Tis them who protect and nurture the world of skin.
'Tis Ranginui the roof of our house.
'Tis Papatuanuku the floor of our house.
'Tis the mountains, the posts that support our house.
'Tis Whangarei, the pathway of the whales, the harbour of depth.
'Tis us, the remnants of the old world, who remain.
Gather hither to the tide,
Gather hither inland,
Come forth and work your adze with purpose.
Call forth the essence of Haumie,
In collaboration,
And the ritual is complete.”



WELCOME TO THE BREAM HEAD RESOURCE

In the words of the late Sir Edmund Hillary, founding patron of the Bream Head Conservation Trust:

“A new century has dawned and with it the realisation that we now stand at the crossroads - the planet’s survival is in our hands, and each of us must contribute to the process of renewal and restoration. With your help, the forests of Bream Head will flourish again and be filled with bird song.”

Sir Ed was speaking about the Bream Head Conservation Trust’s vision of restoring the dawn chorus to the Bream Head Scenic Reserve - the stunning and ecologically significant tract of public land at the end of the Whangarei Heads Peninsula administered by the Department of Conservation.

He understood the importance of encouraging and empowering communities to care for their environment, and was especially pleased to assist the Trust in its ambitious aim to restore this iconic piece of Northland to its former glory. His message lives on in their hearts today.



The late Sir Edmund Hillary with children from Whangarei Heads School at the official opening of the Bream Head Conservation Trust at Bream Head Scenic Reserve.



Bream Head
CONSERVATION TRUST

With sponsorship from the New Zealand Refining Company, and the support of the Northland Regional Council, iwi and the Department of Conservation, the Bream Head Conservation Trust has recently taken another huge step toward further engaging the people of Bream Head in this goal. It is with great pleasure that the Trust presents to its community the Bream Head Education Resource.

This Resource provides information and tools for schools and community groups wanting to learn and take action IN, ABOUT and FOR the Bream Head Scenic Reserve. In so doing, they, too, can now play an even greater part in restoring a hearty dawn chorus to this beautiful part of New Zealand, and be involved in all that it takes to make that happen.

1. What is the Bream Head Education Resource?

The Bream Head Education Resource includes four key components:

- Introductory PowerPoint presentations
- New Zealand Curriculum links
- Teaching and Learning activities and Activity sheets
- Inquiry Learning Process template.

The Resource also includes a range of support materials:

- Bream Head photographs
- Online resource bank
- Te Reo Maori glossary
- Information links and community action ideas.

2. Our aims

MAIN OUTCOME:

The students in and around Bream Head, together with their wider communities, are contributing to the restoration of the Bream Head Scenic Reserve.

ASSOCIATED ACTIONS:

Students and their wider communities act to:

- champion the ecosystems of Bream Head
- investigate Bream Head's unique nature and history
- strengthen their relationship with the Bream Head Scenic Reserve
- share the message of Bream Head Scenic Reserve conservation and restoration



3. Key messages

- Bream Head is our responsibility, and we can all take action to care for it
- The Bream Head environment is dependent upon our actions for its recovery
- Look after Bream Head now for those who follow

4. Who is the Resource for?

The Bream Head Education Resource is designed to help schools and community groups that see the Bream Head Scenic Reserve as an integral and important part of their environment.

5. Why is the Bream Head Scenic Reserve an important focus for an education resource?

At the top of Brynderwyn hills, facing north, a magnificent sight greets us. Be it draped in mist or bathed in sunshine, the familiar silhouette of the Bream Head Scenic Reserve announces our arrival in Northland, and we could have no more stately welcome. Situated at the entrance to Whangarei Harbour, this iconic reserve is classified as an outstanding ecosystem supporting a diversity of species. It contains unique and stunning archaeological, historical and landscape features and the largest remaining intact stand of coastal broadleaf and pohutukawa forest in Northland.

Locals and visitors alike use this area for a large variety of recreational purposes. But, many are unaware of what is going on behind Bream Head's stunning white sanded beaches and lush native forest. In partnership with Whangarei District Council and Department of Conservation, The Bream Head Conservation Trust has been working for nearly a decade to restore the ecology of the Bream Head Scenic Reserve, preserve its historical and archaeological features and enhance its recreational and educational potential.

The Bream Head Conservation Trust welcomes your involvement and support in its work to restore this corner of New Zealand's natural heritage. By working and learning together using this Resource, we help create a better Bream Head for all to enjoy, thereby bringing greater environmental, social and economic benefits to all of Northland.

6. How do we use the Resource?

Step 1: Read the Introduction

Step 2: Review the teaching section of the Resource

1. Curriculum links
2. Inquiry Learning process
3. Teaching and Learning Activities

Step 3: Explore the key components of the Resource and/or take a look at other general support materials:

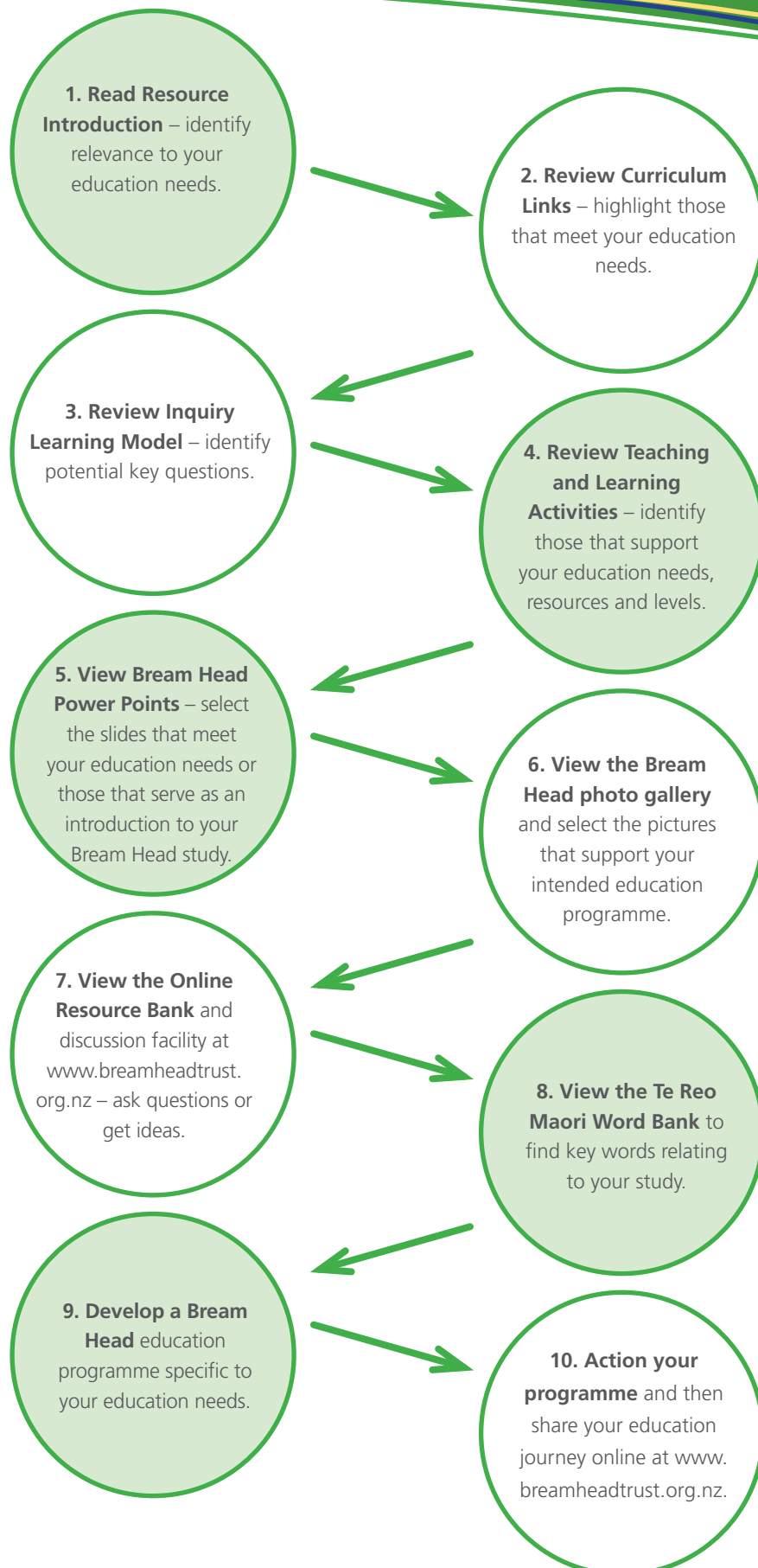
1. Bream Head power point introductions
2. Bream Head photographs
3. Online Resource bank and discussion facility
4. Te Reo Maori glossary

Step 4: Teach your way to restoring the Bream Head Scenic Reserve

Step 5: Share your success stories.



FLOW CHART



7. How does this Resource connect to The New Zealand Curriculum and other important links?

This Resource is built on the following important links:

- A. The New Zealand Curriculum
- B. Te Marautanga o Aotearoa
- C. Education for Sustainability
- D. Ministry of Education Guidelines for Environmental Education in New Zealand Schools
- E. Bream Head Conservation Trust aims
- F. New Zealand Refining Company aims
- G. Department of Conservation Conservation Management Strategy
- H. The Northland Regional Council's Coast and Us Education Resource

A note for community group educators: *Although these connections are designed for schools, they may also assist community group educators wanting to add to their programme delivery by learning more about how schools operate.*

A. The National New Zealand Curriculum

The National New Zealand Curriculum sets the direction for student learning and provides guidance for schools.

VISION:

Young people who are confident, connected and actively involved in lifelong learning and action.

SELECTED PRINCIPLES FOR THE BREAM HEAD EDUCATION RESOURCE:

Community engagement – the curriculum has meaning for students, connects with their wider lives and engages the support of their families, whanau and communities.

Future focus – the curriculum encourages students to look to the future by exploring such significant future-focused issues as sustainability.

SELECTED VALUES FOR THE BREAM HEAD EDUCATION RESOURCE:

Ecological sustainability – includes care for the environment

Community and participation - for the common good

Integrity – includes responsibility, accountability and acting ethically

Respect – for the environment

Innovation, inquiry and curiosity – thinking critically, creatively and reflectively

Diversity – respect and understanding of the beliefs and values of others

SELECTED KEY COMPETENCIES FOR THE BREAM HEAD EDUCATION RESOURCE:

Participating and contributing – being actively involved in communities

Thinking – making sense of information, experiences and ideas

Managing self – a 'can-do' attitude leading to setting goals, making plans and managing projects

Relating to others – interacting with a range of people in a variety of contexts

Using language, symbols and texts – communicating information, experiences and ideas



SELECTED LEARNING AREAS:

Science – Living World, Planet Earth and Beyond

Social Sciences – Levels 1 – 5: Understanding group participation, roles and responsibilities; The importance of the past; The significance of places and the expression of culture

Level 6: Geography – Understand how people interact with natural and cultural environments and that this interaction has consequences

Level 7: Geography – Understand how people’s perceptions of and interactions with natural and cultural environments differ and have changed over time

Level 8: Geography – Understand how interacting processes shape natural and cultural environments

Mathematics and Statistics – Geometry and Measurement; Statistics

English – Listening Reading and Viewing; Speaking, Writing and Presenting

Technology – Technological Practice, Technological Knowledge and Nature of Technology

Health and Physical Education – Relationships with Other People; Healthy Communities and Environments

The Arts – Communicating and Interpreting (Visual Arts)

For further information on the New Zealand Curriculum, go to www.nzcurriculum.tki.org.nz

B. Te Marautanga o Aotearoa

Te Marautanga o Aotearoa is the partner document of The New Zealand Curriculum. It has been developed for Māori medium settings levels 1 and 2, however all New Zealand schools can utilise this document. It was developed based on Māori philosophies and principles and describes the essential knowledge, skills, values and attitudes appropriate to Maori-medium schools.

This Resource supports these overarching principles of Te Marautanga o Aotearoa:

The Learner is the Centre of Teaching and Learning: Affirm the learner; support the learner’s physical, moral, mental and emotional wellbeing; provide experiences that enable learners to reach their potential across each learning area; strive to develop the knowledge, skills and attitudes which enable competent learners.

The Learner has a High Level of Personal Awareness: Promote whānau and iwi; provide experiences that bring together customary practices of iwi and communities; help learners to be successful in the Maori world and the wider world; fulfil the expectations, aspirations and hopes of their communities; provide experiences and knowledge that will enable the learner to competently enter the wider world.

The Learner Achieves Their Potential: Engage the learner; develop the desired competencies, attitudes and values; enable the learner to achieve learning outcomes appropriate to their level of ability; are inclusive and responsive to the learning needs and ways of learning of each individual learner.

School, Whānau, Hapū, Iwi and Community Will Work Together: Ease the pathway for whānau to participate in all school teaching and learning programmes; include experiences outside of the school which are relevant to the whānau and community; nurture the language and customs of whānau, hapū and iwi.

Environmental Health is Personal Health: A sustainable environment; learning pathways which enable the learner to engage purposefully with the environment; holistic teaching programmes; learner engagement with their environment.

Learning Areas	Level 1	Level 4	Level 6
Te Reo Māori	Language functions, language knowledge, language strategies.	Language functions, language knowledge, language strategies.	Language functions, language knowledge, language strategies.
Pāngarau	Measurement and Geometry (measurement, shape, position and direction), Statistics (statistical investigation).	Measurement and Geometry (measurement), Statistics (statistical investigation).	Measurement and Geometry (measurement), Statistics (statistical investigation).
Hauora	Relationships to Earth and Sky (natural environments); Relationships with whānau, hapū, iwi and the wider world.	Relationships to Earth and Sky (natural environments).	Relationships to Earth and Sky (natural environments).
Tikanga-ā-Iwi	Place and Environment	Place and Environment; The Changing World.	Geography: natural/cultural environments; people interact with their environments. History: cause and consequences of past events; different perspectives about these past events.
Pūtaiao	The Natural World: The Organism. The Biological Environment.	The Natural World: The Organism.	The Natural World: The Organism. The Biological Environment.
Hangarau	Concepts of Hangarau	Concepts of Hangarau	Concepts of Hangarau

For further information on Te Marautanga o Aotearoa, go to www.nzcurriculum.tki.org.nz/Curriculum-documents/Te-Marautanga-o-Aotearoa



C. Education for Sustainability (EFS)

Education for Sustainability can be taught at all class levels and across all learning areas. EFS offers particular opportunities for secondary students through a range of NCEA achievement standards.

It is about learning to think and act in ways that will safeguard the future wellbeing of people and our planet.

This Resource aims to equip educators and their students with tools for supporting, initiating and growing sustainability efforts in their communities. A list of achievement standards for levels 2 and 3 may be found in the Curriculum Links section of this Resource.

LEVEL 2:

2.1 (AS 90810) – Plan, implement and evaluate a personal action that will contribute towards a sustainable future

2.1 (AS 90811) - Describe the consequences of human activity within a biophysical environment in relation to a sustainable future

2.1 (AS 90812) - Describe world views, their expression through practices and activities and the consequences for a sustainable future

2.1 (AS 90813) - Describe values and associated behaviours in relation to a sustainable future

2.1 (AS 90814) - Describe aspects of sustainability in relation to a sustainable future

2.1 (AS 90815) - Work cooperatively to develop and present a strategy or design for sustainability in response to a future scenario

LEVEL 3:

3.1 (AS 90828) - Evaluate a planned personal action that contributes toward a sustainable future

3.1 (AS 90829) - Investigate the interrelationship between humans and a biophysical environment in relation to a sustainable future

3.1 (AS 90830) - Compare and contrast initiatives in relation to a sustainable future

3.1 (AS 90831) - Describe policies and practices, their development and contribution to a sustainable future

3.1 (AS 90832) - Develop and justify a strategy for an organisation that will contribute to a sustainable future

For further information on Education for Sustainability, go to www.efs.tki.org.nz

D. Ministry of Education Guidelines to Environmental Education in New Zealand Schools

The development of the current curriculum documents for education for sustainability in New Zealand - the New Zealand Curriculum, Te Marautanga o Aotearoa, and the EFS Teaching and Learning Guidelines – was informed by the Ministry of Education Guidelines for Environmental Education in New Zealand Schools. These Guidelines provide useful information for planning education for sustainability teaching and learning programmes.

AIMS

Awareness and sensitivity to the Bream Head environment and related issues

Knowledge and understanding of the Bream Head environment and the impact of people on it

Attitudes and values that reflect feelings of concern for the Bream Head environment

Skills involved in identifying, investigating and problem solving associated Bream Head environmental issues

A sense of responsibility through **participation and action** as individuals or members of groups, whanau or iwi in addressing Bream Head's environmental issues

KEY CONCEPTS

Interdependence – the relationship between all living things (including people) and their environment

Sustainability - long-term maintenance of ecosystems for future generations

Biodiversity – the variety and abundance of life

Personal and social responsibility for action – people taking positive action to help care for Bream Head.

KEY DIMENSIONS

Education in the environment – experiences in the Bream Head environment

Education about the environment – knowing about and understanding the Bream Head environment

Education for the environment – seeking ways in which people can minimise their impact on the Bream Head environment.

Each activity in this Resource is highlighted with one or more of the following icons, enabling educators to ensure they are engaging in each of the important **About, In and For** focuses of Environmental Education, to ensure a balanced programme.

in

This icon indicates an activity **IN** the Bream Head environment, e.g. snorkelling at the marine reserve.

about

This icon indicates an activity **ABOUT** the Bream Head environment, e.g. researching Maori legends surrounding Bream Head.

for

This icon indicates activities for taking action **FOR** the Bream Head environment, e.g. tree planting.



Community Action

The kaka is the symbol for the Bream Head Conservation Trust. This icon indicates actions and ways in which people can take action to care for and restore Bream Head.

For further information on Ministry of Education Guidelines to Environmental Education in New Zealand Schools go to www.efs.tki.org.nz

E. The Bream Head Conservation Trust aims

The Trust was set up in 2002 as a Charitable Trust and working partnership between the local community, the Whangarei District Council, Iwi, and the Department of Conservation, to manage the ecological restoration of the Bream Head Scenic Reserve.

The Trust Aims to:

- Restore and maintain the ecological environment of the Reserve as it existed in former times and in ways which will help people to enjoy its richness and diversity.
- Preserve archaeological and historical sites within the Reserve.
- Enhance the recreational and educational potential of the Reserve in ways that are compatible with its conservation values.

For more information on the Bream Head Conservation Trust, go to www.breamheadtrust.org.nz

F. The New Zealand Refining Company Environmental Aims

In its sponsorship of the Bream Head Conservation Trust and the Bream Head Education Resource, The New Zealand Refining Company is committed to reducing potential harm to the environment as well as enhancing the natural surroundings in which it operates.

In its financial support of the Bream Head Education Resource, The New Zealand Refining Company furthers these commitments, as well as its policy of being a sensitive corporate citizen and neighbour.

The company's Environmental Objectives are to:

- Reduce our environmental footprint beyond that required by law seeking to minimise our environmental impact.
- Ensure effects on our neighbours from visible process smoke, noise, and offensive odours are rare.
- Maintain our air quality well within strict international environmental guidelines.
- Ensure our greenhouse gas emissions intensity and energy efficiency are the best they can be.
- Appropriately manage all current and legacy waste.
- Keep our harbour clean, safe to enjoy, and to take food from.
- Ensure anything that leaves our site/operation is under our control.
- Keep our site clean and tidy.
- Help our community reach its environmental aspirations.

The Bream Head Education Resource links strongly with the New Zealand Refining Company's Environmental Objectives of ensuring its negative effects on neighbours are rare, maintaining acceptable air quality, keeping the harbour clean and helping the community reach its environmental aspirations.

For further information on the New Zealand Refining Company's Environmental Objectives, go to www.nzrc.co.nz/environment--community.aspx



G. The Department of Conservation's Conservation Management Strategy (CMS)

The Department of Conservation administers the Bream Head Scenic Reserve. Its Conservation Management Strategy for Northland is a 10-year regional strategy that provides an overview of conservation issues and gives direction for the management of Northland's public conservation land and waters, and species for which the Department of Conservation has responsibility.

The purpose of this document is to implement general policies and establish objectives for the integrated management of Northland's natural and historic resources, and for recreation, tourism, and any other conservation purposes.

Northland's Department of Conservation Management Strategy is based on the following vision, which links directly to the Bream Head Education Resource:

- A natural environment which has been restored and protected so the diversity, viability and health of indigenous plant and animal species and populations is secured.
- A community which recognises that its long term survival, development, and spiritual well being are dependent on the biodiversity of other life forms and the maintenance of a healthy environment.
- A community dedicated to an approach to conservation which recognises and respects the special spiritual, traditional and cultural relationships of the tangata whenua to the land and sea, and their rights under the Treaty of Waitangi/Te Tiriti o Waitangi.
- A community that is aware and proud of the unique natural, spiritual and historic treasures of the region, and is actively involved in practical management and advocacy for their protection.
- Visitors who enjoy and gain a deeper understanding of the natural and historic treasures of the region during their stay and who support the conservation work of the community and the Department.
- A Department that is dedicated, efficient and effective in its management of the conservation resources in its trust, and in its advocacy for conservation, generally.

For further information on the Department of Conservation's Northland CMS, go to www.doc.govt.nz/publications/about-doc/role/policies-and-plans/conservationmanagement-strategies/northland/

H. The Northland Regional Council's Coast and Us Education Resource

The Bream Head Education Resource is based on a template used by The Northland Regional Council for its Coast and Us Education Resource. The Trust thanks the Council for its generous support.

For further information on the Northland Regional Council, go to www.nrc.govt.nz

What teaching and learning approaches does the Resource use?

This Resource promotes student-centred teaching and learning, such as:

- Inquiry learning
- Action planning
- Co-operative learning
- Experiential learning



Where can we get a copy?

Online:

This Resource can be found at:

- Bream Head Conservation Trust website | www.breamheadtrust.org.nz
- Northland Regional Council website | www.nrc.govt.nz
- New Zealand Refining Company website | www.nrc.co.nz
- Department of Conservation website | www.doc.govt.nz

Hardcopy:

Contact the Bream Head Conservation Trust (details on page one of this booklet) for:

- CD of the Resource.
- Hard copy of a Resource kit with supplementary brochures and information.

Who can help us?

Bream Head Conservation Trust contacts:

Bream Head Ranger, Pete Mitchell

Northland Regional Council contacts:

Dune systems/ Coast Care – Laura Shaft

Department of Conservation contacts:

Archaeology – Maria Butcher

Botanists – Nigel Miller, Wendy Holland, Andrew Townsend

Marine – Paul Buisson, Vince Kerr

Freshwater - Amy Macdonald

Recreation – Shaughan Anderson

NZ Refining Company contacts:

Greg McNeill, Communications Manager

Bream Head Education Resource writers:

Sue Halliwell – (09) 4360966

Claire Pearson – (09) 4340571

Copying and adapting information to suit individual needs:

Online and hard copy resources may be downloaded from the website or photocopied at no cost to the user. The online resources are in pdf format, so to adapt them for your own needs, simply select the text you wish to copy, paste it into a Word document and adjust it from there.

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