

# Ship Cove and Motuara Island

## (outer Queen Charlotte Sound)

Themes that are developed at this site:

- Protected and unprotected environments
- Predator prey relationships
- Bush studies - plant adaptations
- History - Cook's favourite place

If you had the choice of the best day trip to be had anywhere in the country, this trip would certainly be one of the top contenders.

When Cook sailed these waters during his three voyages, he spent more time based in Ship Cove than any other place in the Pacific. It was clearly one of his favourite places and still is a beautiful place, with the bush coming down to near the water's edge. Many of the bigger trees were probably growing when Cook was here, 230 odd years ago. In contrast, Motuara Island, guarding the entrance to Queen Charlotte Sound, was completely cleared and farmed in the early 1900's. What grows there now is regenerating forest. Since introduced pests were eradicated in 1991, it has become a fantastic wildlife refuge. The contrast, particularly in bird life, between the two locations can be dramatic.

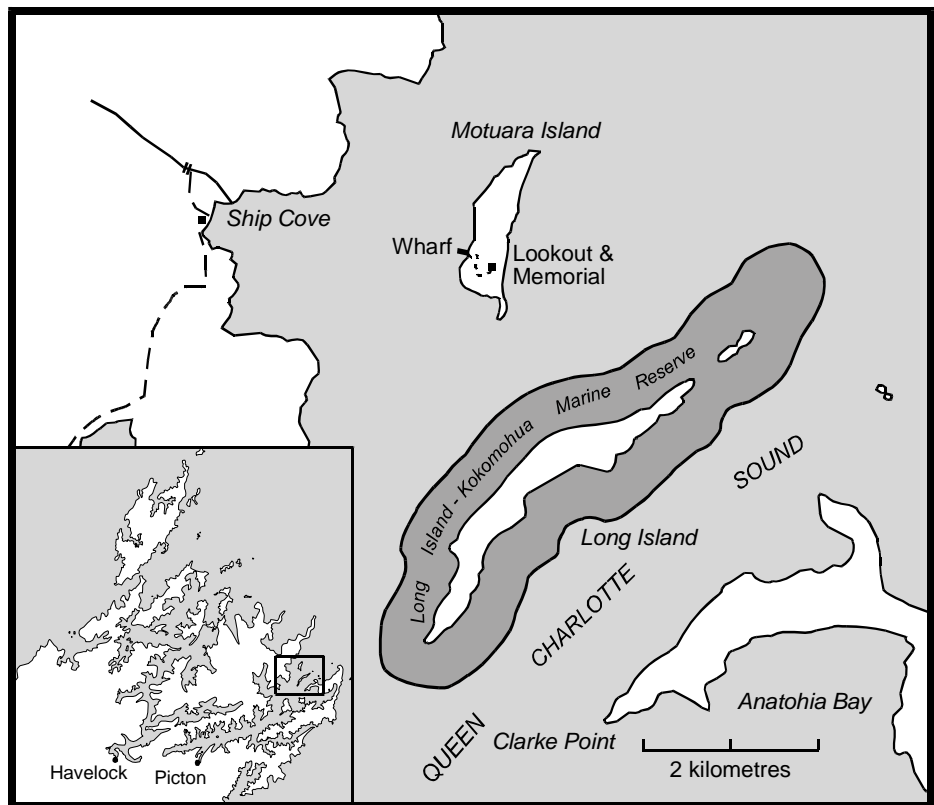
### HOW TO GET THERE

The only access to Motuara Island is by boat, and although Ship Cove is accessible via the Queen Charlotte Walkway, it is not practical for school trips. Charter boats are the only reasonable option and are available in Picton. It pays to shop around for boats. Smaller boats cost less, travel faster, but take fewer passengers. Most boats take between 30 – 50 minutes to get out to the sites from Picton or Waikawa. NB Charter boats in Havelock do not service Queen Charlotte Sound.

Ask to be taken to Ship Cove first, then to the island.

Timing is important - a suggested itinerary could be:

09.00 am - 10.00 am	Travel to Ship Cove
10.00 am - 12.00 pm	Ship Cove
12.00 pm - 12.30 pm	Lunch
12.30 pm - 01.00 pm	Travel to Motuara
01.00 pm - 02.30 pm	Motuara Island
02.30 pm - 03.30 pm	Return to Picton

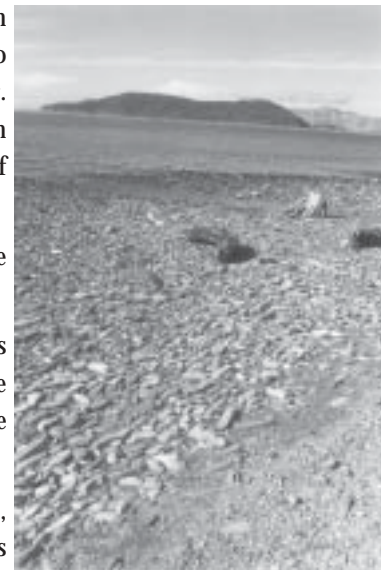


## FACILITIES CHECKLIST



Ship Cove.

- Neither site is well suited to wheelchairs.
- There are toilets at Ship Cove (and probably on board the boat) but none at Motuara Island.
- Water is available at Ship Cove, but boiling or treatment is recommended. Bring drink bottles.
- Picnic tables and large expanses of mown grass are provided at Ship Cove, however there are no rubbish bins, please take out what you bring in. There is also a shelter at Ship Cove in case of bad weather. Motuara Island has no picnic areas, toilets, rubbish bins or shelter. There is a good track to the top of the island.
- There are various sites in the Queen Charlotte Sound, but require boat access.
- There are two tracks at Ship Cove. The main track is the northern starting point for the Queen Charlotte Track. The other track is a pleasant 20 – 30 minute walk to a waterfall through some lovely bush.
- There is currently little interpretation at Ship Cove, but on the track up Motuara Island there are a series of panels. There is a viewing lookout on the top of the Motuara Island.



Motuara Island.

## H A Z A R D S

- Both places have jetties for landing. Follow the instructions given by the boat's skipper regarding getting on and off the vessel and while onboard. Have warm clothing available on the boat.
- On Motuara Island there are tempting smaller side trails used by researchers. Keep to the main track.
- Have 'what to do if you get lost' procedures sorted out.
- Before landing at Motuara Island carefully search all bags for mice, especially if you have just come from Ship Cove. Although mice are unlikely to be found, it only takes one to wreck the island's wildlife.
- Do not feed the wildlife. Wild birds need wild foods. Scrape some leaf litter away to expose some soil invertebrates then stand back and watch.
- Wasps may be present.
- Medical help is not readily available here, plan accordingly.

## HISTORY AND NATURAL HISTORY

The outer Sounds were significant areas for the Maori. At the southern tip of Motuara Island is smaller Hippy Island which was the site of a pre European Maori Pa.

Ship Cove was where Maori first met Pakeha on a sustained basis. This contact was to change the Maori way of life forever.

Motuara Island is where in 1770, Cook proclaimed British sovereignty over the South Island.

THIS CAIRN WAS ERECTED BY THE CAPTAIN COOK MEMORIAL COMMITTEE TO MARK THE SPOT AT OR NEAR WHICH ON WEDNESDAY, 31ST JANUARY 1770, THE FAMOUS CIRCUMNAVIGATOR, IN THE PRESENCE OF THE NATIVE CHIEF OF THE ISLAND, RAISED THE BRITISH FLAG, TOOK POSSESSION OF THE MAINLAND IN THE NAME OF KING GEORGE III, AND NAMED THE INLET QUEEN CHARLOTTE SOUND AFTER THE KING'S CONSORT.

JANUARY 31, 1920.

For Cook, the ready access to open water, shelter, opportunities for provisioning and a pleasant climate were probably important when choosing this part of the Sound as his base. It was at Ship Cove that James Cook and his crew released goats and pigs and probably unknowingly released ship rats. Although the pigs and goats were useful to the subsequent occupiers of the land, these introduced animals cause devastation to the native bush today. The Cook expedition also cleared land so they could graze their cow. Today the forest surrounding Ship Cove, including lovely stands of tawa, is a reserve.

Motuara Island was burned off around the beginning of the 20<sup>th</sup> Century and was used to graze sheep and later used as an experimental Angora goat farm. In 1910 a Mr T. Turner was living on the Island as a ranger to catch poachers shooting pigeons at Ship Cove. Although no replanting programmes have ever been carried out, the island has regenerated over the last 70 years to the low forest you see today. All introduced pests were removed in the early 1990's and the island is now home to a variety of native species, which have struggled to survive, or died out on the mainland. These include saddleback (tieke), NZ robin (toutouwai), bellbird (korimako), tui, grey warbler (riroriro), NZ pigeon (kereru), silver eye (tauhou), fantail (piwakawaka), Maud Island frog and the Marlborough green gecko.

The Sound has a resident pod of about 20 – 30 Hector's dolphin – thought to be the rarest marine dolphin in the world. You are almost certain to see little blue penguins (korora), the small fluttering shearwaters, shags and gannets. Seals also live in the Sound.

## ACTIVITIES

### ***Pre-trip classroom preparation***

The class could use this trip as part of a study of James Cook and his voyages, or as part of a unit on native wildlife and their management. There is scope for map reading, plotting the trip on a map prior to, or during, the day.

Talk to the children about what it was like for native birds suddenly meeting the introduced mammals for the first time. Many New Zealand birds nest close to the ground, and some nest underground. When a pig, cat or dog comes along, then what happens? Can you blame the introduced animals? Can you teach the NZ birds? Learning to recognize native birds and their song would be good preparation for the trip.

### ***Things to bring***

- Paper and pencils.
- Binoculars.
- Plant identification books.
- Some string to define 1 metre squares for seedling counts.
- Coloured markers.
- A handful of soft feathers for nesting robins!

## STARTER ACTIVITY

### ***What can you hear? (from Joseph Cornell, SNWC)***

It is easier to concentrate on the sounds around you when you have your eyes closed. A good way to do this is to get the group to clench their fists, then close their eyes. Each time they hear a noise (of any sort), ask them to put one finger up. There are no right or wrong answers. Allow about 30 seconds for this activity then open the eyes and discuss some of the sounds that were heard, try again for another 30 seconds.

Most people will hear more the second time through.

## IN THE ENVIRONMENT

**These activities are all best played at Ship Cove where there is space.**

### **A. Meet the trees (from David Moss)**

(As the leader for this activity you will need to know a little about what possums like to eat. They generally like soft-leaved plants (like five finger, native mistletoes, rata or supplejack), but not hard-leaved plants (like young lancewood, beech, and treeferns). Peppery leaves [pepper tree] or ones with spikes like [bush lawyer] are avoided.)

Ask a group of 5-10 people to stand in a circle and each person needs to come up with the name of a tree or plant that they know. It is best if they can all choose different ones. Once everybody has chosen a plant name, work your way around the group introducing your self as a possum, e.g. *"Hello there, I'm a possum, what is your name?"*. Suggest what a possum might like to do with the plant in question, e.g. *"Pepperwood, blegh, too hot, no thank you, you are much too peppery"*, *"Mistletoe, Mmmm, lets have a party and I'll invite all my friends to come and eat you!"*.

Try to find some of these trees in the bush and look for signs of possum browsing. Try to remember how the bush looks to compare it with Motuara Island.

### **B. Kiwi nest (adapted from Myers)**

This activity highlights the problems nesting birds have at Ship Cove compared with Motuara Island.

Take the class into the trees just far enough for every one to find their own tree or bush, and where everyone can be seen. Choose someone towards the centre of the group to be the kiwi on its nest and place something like a handkerchief at the "kiwi's" feet to represent the egg. The rest of the class are ferrets, rats, stoats or pigs and they are going to have to try and steal the egg and get back to their tree **WITHOUT MAKING A SOUND!**

The "kiwi" must stand there with its eyes closed or blindfolded, listening. If they hear anything that sounds like someone sneaking up, they must point to where the sound came from and that person must immediately return to their tree.

Other undetected predators can keep trying to steal the 'egg' and take it back to their own tree. It helps to make it clear that this is an exercise in sneaking up, **not** a race to see who can grab the egg and get away again before being pointed to! It helps to have a referee who knows the group so names can be called to bring some of the more enthusiastic players into line! Distracting rustling is not allowed!

Once the egg has been stolen and taken back to the predators 'home tree' the kiwi can try and guess who now has the 'egg'.

### **C. The possum's choice (adapted from Myers)**

This game is best played on grass where all the coloured 'markers' will be found.

From this activity we learn about camouflage, selective feeding, plant adaptations and some possum problems. You will need some small coloured 'markers' with as wide a variety of colours as possible. Allow about 3 to 4 markers per person taking part.

Sprinkle the markers out on the grass within a defined area (preferably without the students seeing!). Gather the class about 10 metres from the area.



And explain that there are coloured markers representing food. One at a time they will be asked to run out, and return with no more than three markers.

As they return place the markers onto a piece of paper *in the order in which they were found*. As the markers are returned you should see a pattern of predominantly bright colours being found first and the last ones to come in will be the less bright colours.

Possoms feed the same way when they feed in the bush. They selectively take certain plants, and will often eat them exclusively, until there are no more to eat. Then they will move to a different species and repeat the process. Successive types of plant may be eaten to extinction. The result is that some species are eaten out of the bush while others are not.

## ABOUT THE ENVIRONMENT

At both Ship Cove and Motuara Island organise the group to record bird and plant data to be compared between the sites. You may want to do the comparison on the day or back in the classroom.

### **A. Plants**

Which place has more regenerating plants?

Using metre squares, count the number of plants smaller than 10cm in height in three different places and record your results.

Things to think about or discuss; how much does the direction of the sun make to the plants growing in each place? Is the soil damper in one place? Can you see any sign of possum at Ship Cove?

Differences may be due to the forest at Ship Cove being taller and older than on the island. With the older forest comes more shelter, less sunlight and damper forest floor. Where forest is regenerating like it is on Motuara Island competition is potentially greater, as each plant is trying to grow as fast as possible. Possoms prefer to eat in the tops of trees so don't tend to eat small plants as much.

Choose one plant you don't know. Identify it and draw a picture of its leaf.

### **B. Birds**

Which site has the best bird life?

One of the first things you may notice on Motuara Island is the smell. What is it? (Little blue penguins (korora) – you will see the nesting boxes on the side of the track as you climb up the track.) Check under the wharf to see if anyone's home!

Divide the group into two. While one group counts the number of birds seen in 5 minutes, the others count the number of birds heard in the same time. Swap the observers roles and repeat the 5 minute count. The sounds and sightings need not be identified although that may be useful. If your class has been taught some birds. Try using the master sheet to record your data.

Try and draw some of the birds that you see. What sorts of things would these birds feed on? (Most native bush birds are insectivorous, some eat nectar when they can get it and some, like pigeons, are fruit and leaf eaters.)

### **C. Life on an island**

What makes an island a good place for a bird or plant to live? Try and list some of the advantages and the disadvantages of island life. Here are some things to think about; food, water, shelter (habitat), and other birds or plants of the same type to breed with, predation and disturbances.

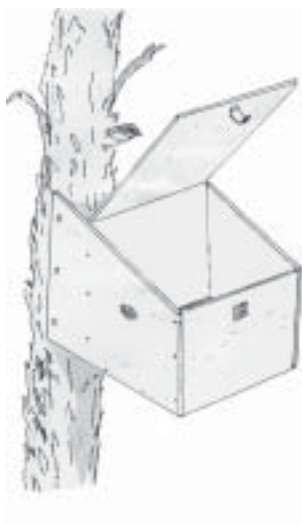
## FOR THE ENVIRONMENT

### **A. Write a letter to Cook**

This activity highlights the changes and impact humans have had in the last 150 years.

If you could write a letter to Captain James Cook, what would you tell him about his favourite place as it is today? Think about what you would tell him about the animals he left behind to breed? Would he like New Zealand as a place to live? What would he think of the boat you travelled in? Where would he have built his house? Tell him what the best thing about the trip to Motuara and Ship Cove was.

### **B. Design your own nesting boxes**



On Motuara Island you will have seen the nesting boxes for penguins. Near the track you will have also seen boxes put up to help the saddlebacks nest. Other native bush birds such as rifleman, parakeet (kakariki) and morepork (ruru) will also use nesting boxes. Try and design a box that birds might like to use. If you have a patch of bush or park near your school you could build your own boxes to encourage breeding. (One tip to help prevent predators climbing into the hole to eat the birds inside is to make the hole elliptical rather than round. An elliptical entrance can be quite large but still smaller than a predator's head.)

Introduced birds such as starlings and sparrows will use boxes, as will possums - if they can get into them!

During the breeding season between late August and December a soft feather is a very desirable item for nest-building birds. Take a handful with you if visiting the island at this time of year.

## NEARBY SITES

Landing is permitted on nearby Long Island, which has a Marine Reserve surrounding the island. Marine Reserves protect the fish living in that area from all fishing. Since being protected the blue cod around Long Island are becoming quite bold and will swim right up to humans diving in their patch!

## REFERENCE MATERIAL

A Department of Conservation Brochure is available on the Marlborough Sounds. The Marlborough Sounds Guidebook is currently out of print.

“Help protect our islands” Nelson/Marlborough Conservancy Fact Sheet No.77 is available free from the Department of Conservation.

A brochure on the marine reserve is also available free.

## FURTHER INFORMATION

### **Department of Conservation**

Sounds Area Office  
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P O Box 161  
Picton  
Phone 03-520-3002  
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### **Picton Information Centre**

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