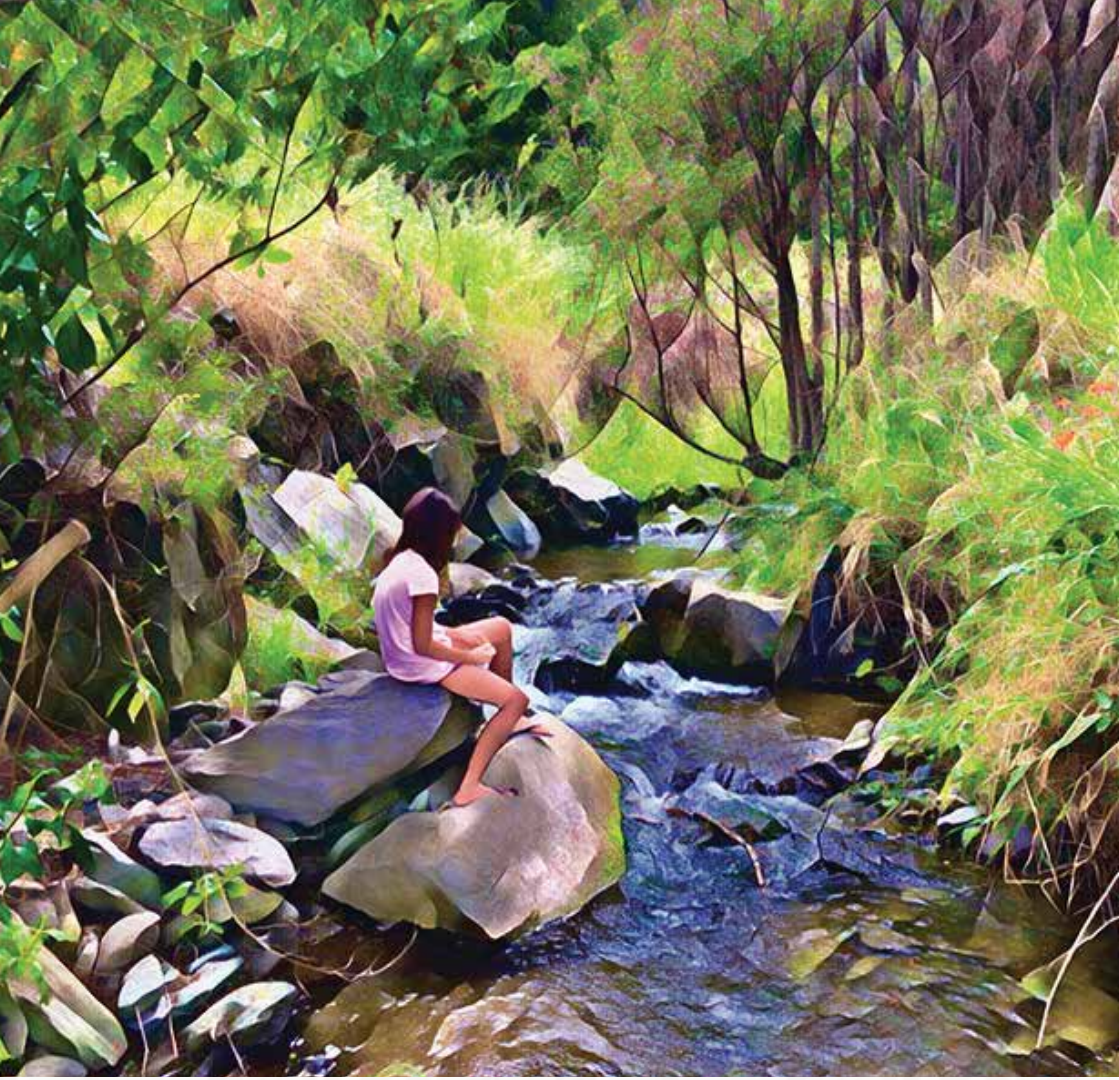


Ōmaio Stoke

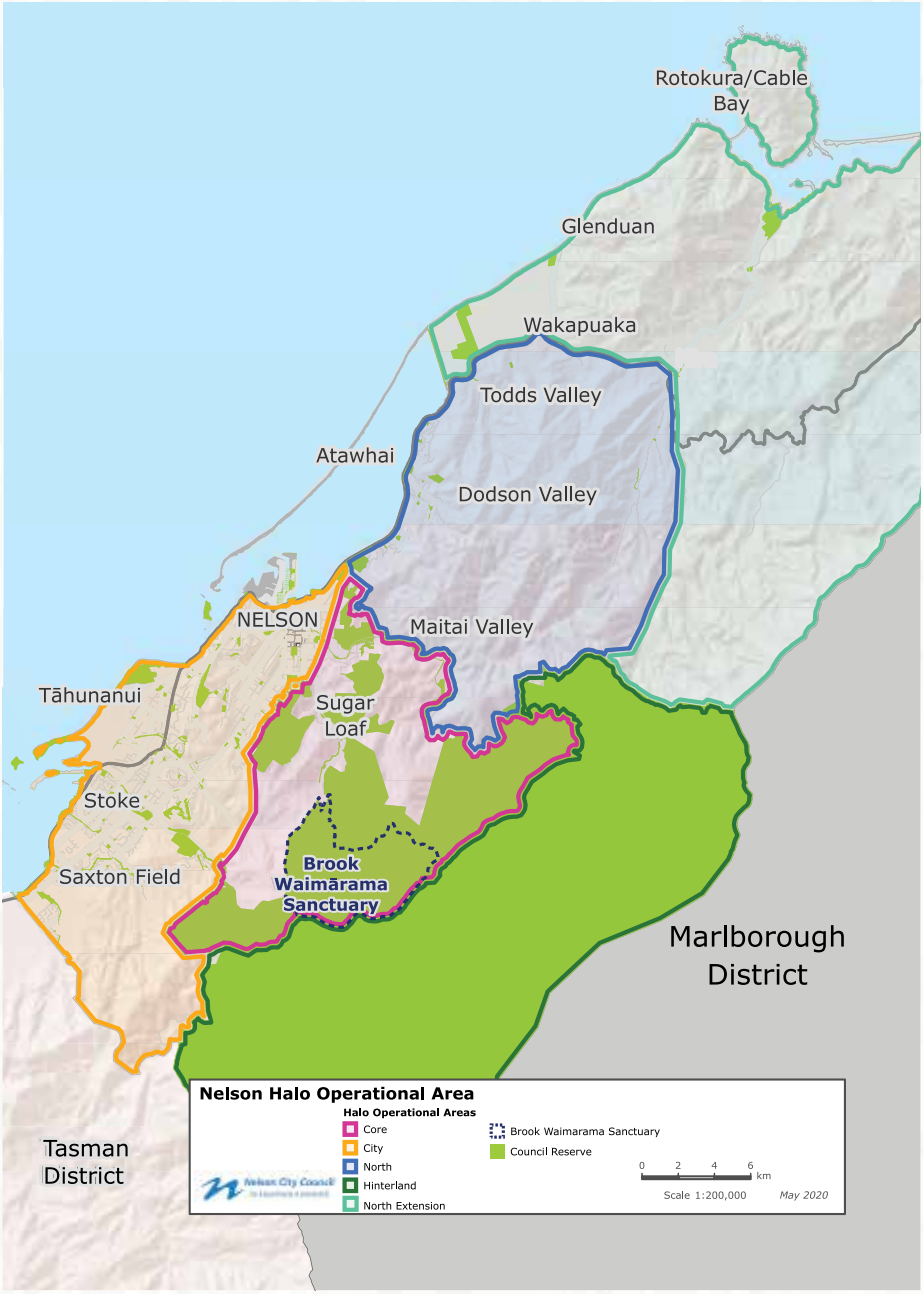
Poorman Valley stream field guide

Belongs to:

_____

Healthy Streams

From the Mountains to the Sea
ki uta ki tai


Rotokura/Cable Bay
Glenduan
Wakapuaka
Todds Valley
Atawhai
Dodson Valley
NELSON
Maitai Valley
Tāhunanui
Sugar Loaf
Stoke
Saxton Field
Brook Waimārama Sanctuary
Marlborough District
Tasman District
Nelson Halo Operational Area
Halo Operational Areas
Core
City
North
Hinterland
North Extension
Brook Waimarama Sanctuary
Council Reserve
0 2 4 6 km
Scale 1:200,000
May 2020

Toitii te marae a Tane,
Toitii te marae a Tangaroa,
Toitii te tangata.

If the land is well
and the sea is well,
the people will thrive.

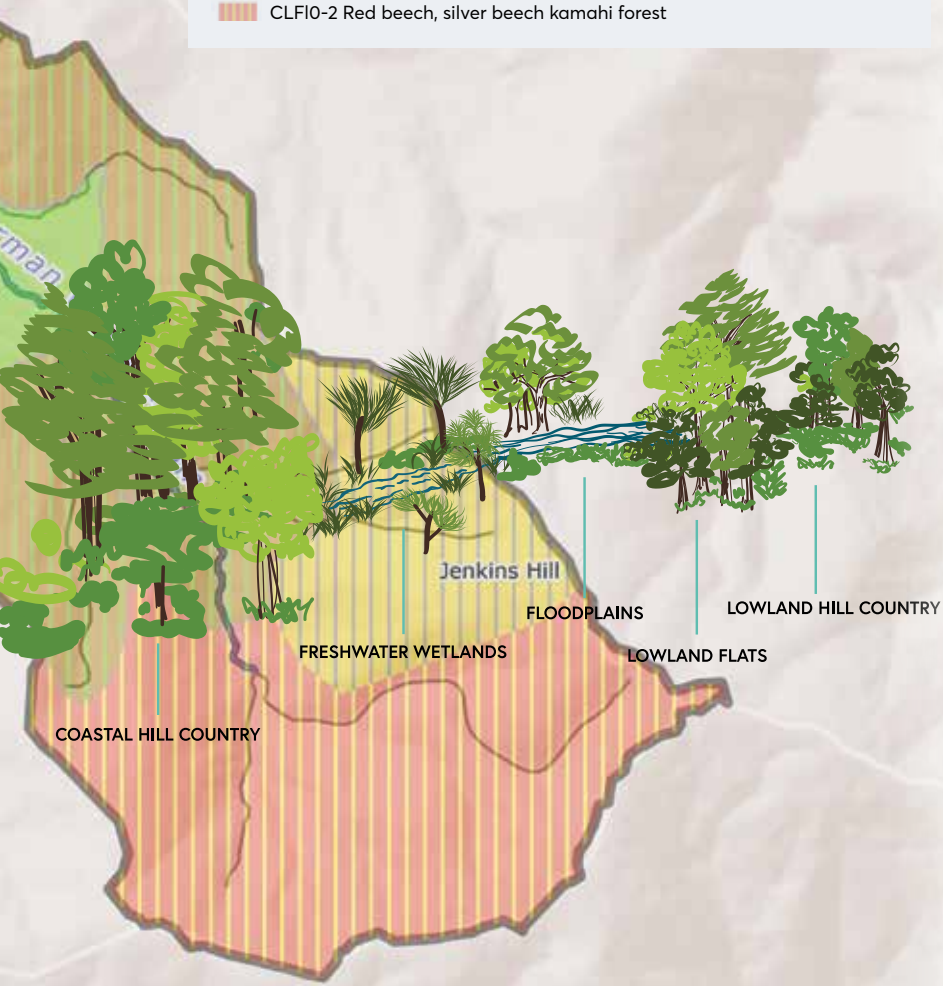
This booklet is to encourage you to trace your own path along the waterway. The project is brought to you by the Healthy Streams initiative and supports the riparian (streamside) restoration being undertaken by Nelson City Council and communities along the awa. Find out more at healthystreams.nz


Waimea Road
Annesbrook
6
Songer Street
Nayland Road
Marsden Valley
Main Road Stoke
Polstead Road
The Ridgeway
Suffolk Road
BOULDER BANK AND ISLETS
ESTUARIES
COASTAL FLATS
COASTAL DUNES

Mai I te kahui Maunga ki tangaroa
From the mountains to the ocean

Potential Ecosystems

- SA2, Searush, oioi, glasswort, sea primrose rushland/herbfield [Saltmarsh]
- WF3, Tawa, titoki, podocarp forest
- WF6, Totara, matai, broadleaved forest (Dune forest]
- WFS, Kah ikatea, pukatea forest
- WF14-1, Kamahi, tawa, podocarp, hard beech forest
- MF20-2, Hard beech, black beech, kamahi, rimu forest
- MF22-2, Kamahi, rimu, hard beech, tawa forest
- CLFI0-2 Red beech, silver beech kamahi forest



How to look at plants

Look carefully at the shape and edge of the leaves. Is the underside different from the top? How do they attach to the branch (are they opposite or alternate)? What is the bark like?

Make an impression of interesting bark by holding the paper against it and rubbing over it with your pencil or crayon.

Towai, Weinmannia racemosa -a forest tree with long, leathery, dark green leaves with blunt teeth. Flowers white to cream or pale rose. Also known as kamahi it is found throughout Aotearoa/New Zealand.

Koromiko Hebe species - shrubs with leaves in pairs at right angles to the one below it and flowers are white or light blue. Koromiko forms a large part of shoreline scrub and the wood was used for making fire.

Taupata, Coprosma repens - This rakau can grow tall if sheltered or along the ground if by the coast. Taupata has shiny green leaves and the female plants have bright orange berries. Taupata was also called the looking glass plant.

Ngaio, Myoporum laetum is a tree with leaves that have pale, dot-like oil glands, visible when held up to the light. Its small white flowers have purple markings. Ngaio leaves can be rubbed on as an insect repellent but are poisonous to eat.

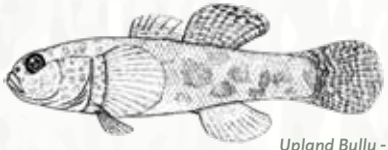

Top of the South Maps
Legend
Property at Subdivision Stage 223
Property Boundary
Place Names
Road Labels
State Highway
Nelson City Council
tasman

Ika/Fish

One of these fish are not like the others

There are seven bully species which have a different appearance and habits to the Galaxiid family of whitebait. Bullies typically sit on the stream bed resting on their front fins and have noticeable scales.

This Upland Bully is also non-diadromous, that means they don't migrate between the sea and freshwater like most of our freshwater species.



Upland Bully - Gobiomorphus breviceps

Stream states

Riffle

Run

Pool

Streams with a variety of states allow our native species fish to feed, breed, travel and rest. When water flows over rocks oxygen is introduced. All stream inhabitants need water that is cool, clear and flowing.

Why is this a barrier to fish moving up and down stream?

Let Council know if you notice anywhere that limits fish in their ability to climb.

Who are the stars in our whitebait patties?

Galaxiids were named for their sparkly patterns, little galaxies caught in the light as we spotlight their nocturnal movements. They can be hard to tell apart as juveniles but all five of these adults could be in that whitebait catch as they migrate back from salt to freshwater. If they avoid the net some make it a long way upstream. All Galaxiid fish species are threatened by habitat loss and degradation.

There are seven bully species which have a different appearance and habits to the Galaxiid family of whitebait. Bullies typically sit on the stream bed resting on their front fins and have noticeable scales.

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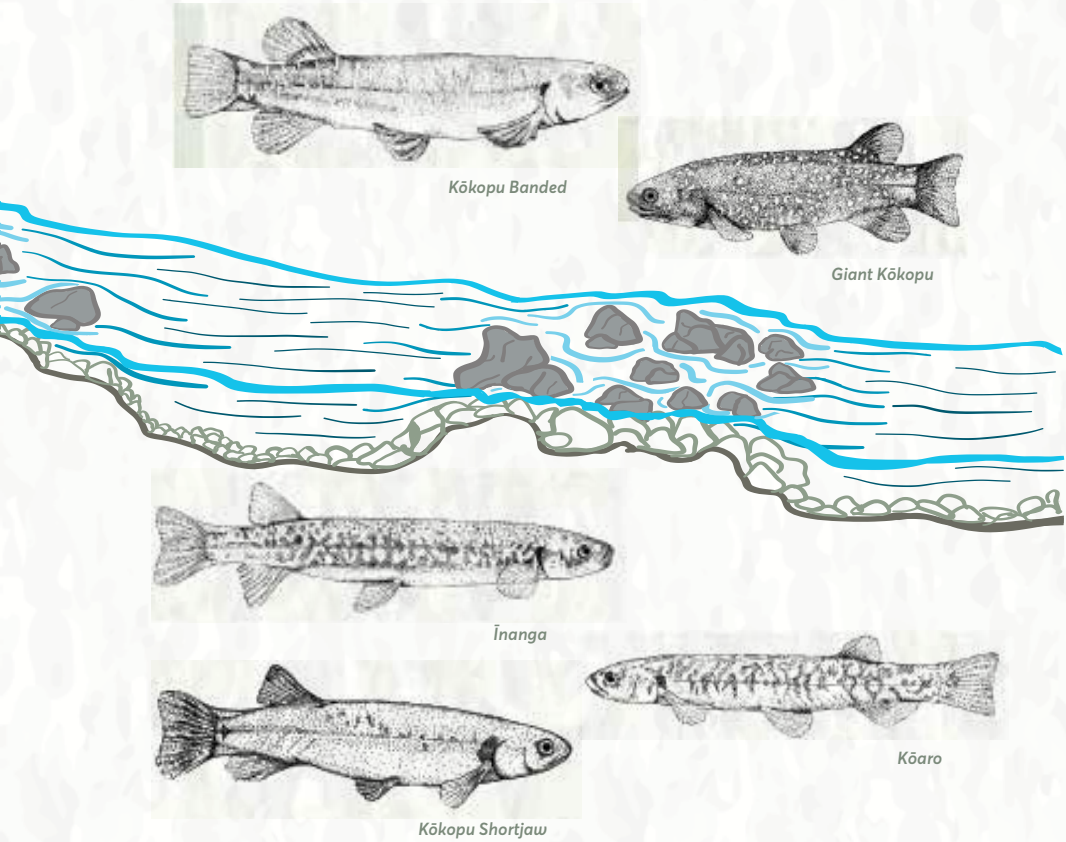


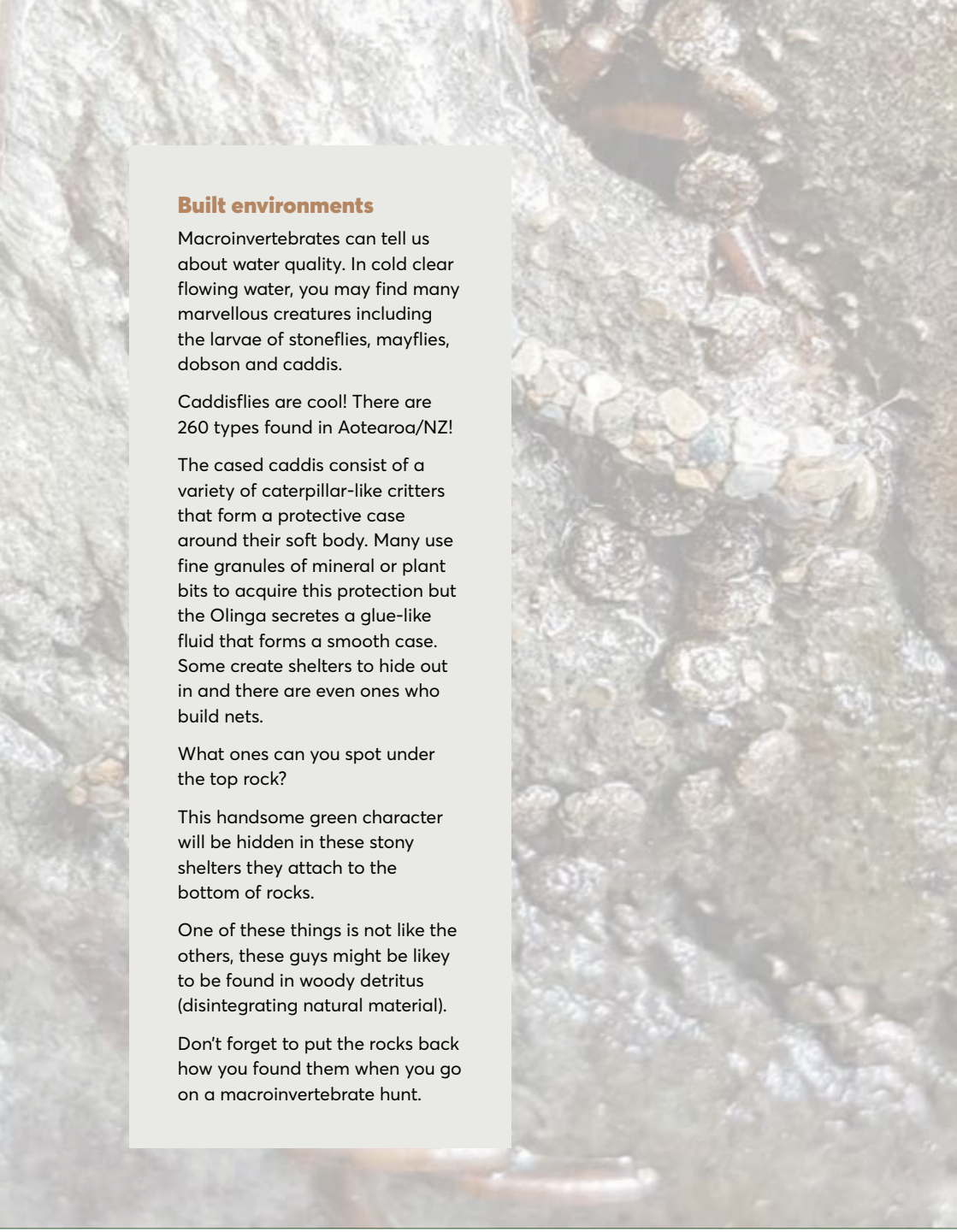
Kōkopu Banded

Giant Kōkopu

Īnanga

Kōaro

Kōkopu Shortjaw



Built environments

Macroinvertebrates can tell us about water quality. In cold clear flowing water, you may find many marvellous creatures including the larvae of stoneflies, mayflies, dobson and caddis.

Caddisflies are cool! There are 260 types found in Aotearoa/NZ!

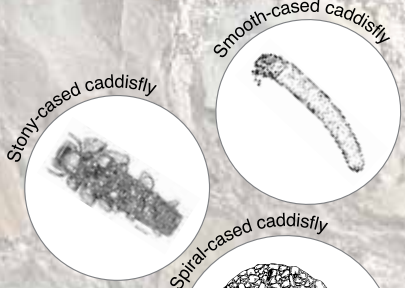
The cased caddis consist of a variety of caterpillar-like critters that form a protective case around their soft body. Many use fine granules of mineral or plant bits to acquire this protection but the Olinga secretes a glue-like fluid that forms a smooth case. Some create shelters to hide out in and there are even ones who build nets.

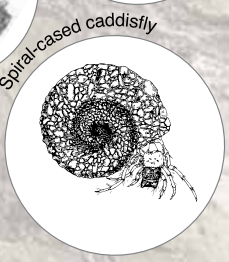
What ones can you spot under the top rock?

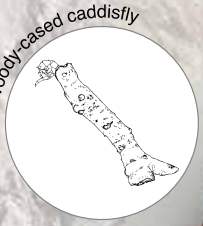
This handsome green character will be hidden in these stony shelters they attach to the bottom of rocks.

One of these things is not like the others, these guys might be likey to be found in woody detritus (disintegrating natural material).

Don't forget to put the rocks back how you found them when you go on a macroinvertebrate hunt.







Buildings

Since people first arrived there have been structures built around, and sometimes in, waterways. The Prow has interesting stories of the settlement in Omaio Stoke and you can download a walk through the built history. Many early colonial buildings in the area were made of local materials. Marsden's Isel House is made of wood and stone and Broadgreen House, a fine cob construction (a mix of soil, sand or gravel and straw). The background of this page is a detail of part of an old building on the edge of Isel Park, made of stones from Poorman Valley stream.

Flight paths

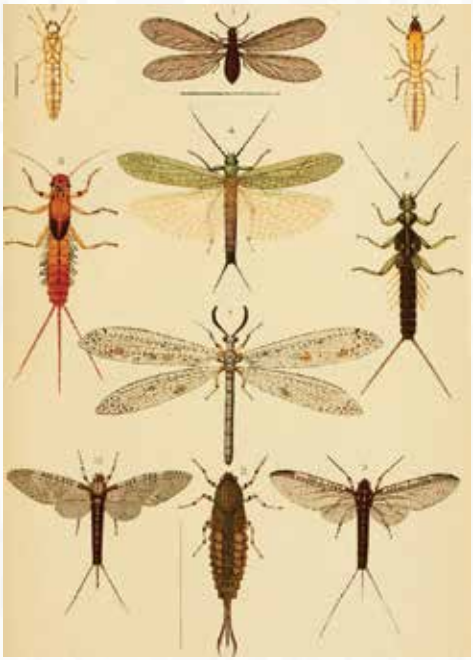
Many of the critters in the stream turn into flying insects!

Caddisflies become small insects whose bodies and wings are covered in hairs rather than scales like moths and butterflies. Check out the resource links at the back of this guide to find out about other awesome creatures in our streams. Here are some more matches for you.

Ōmaio/Stoke also has some human flight connections

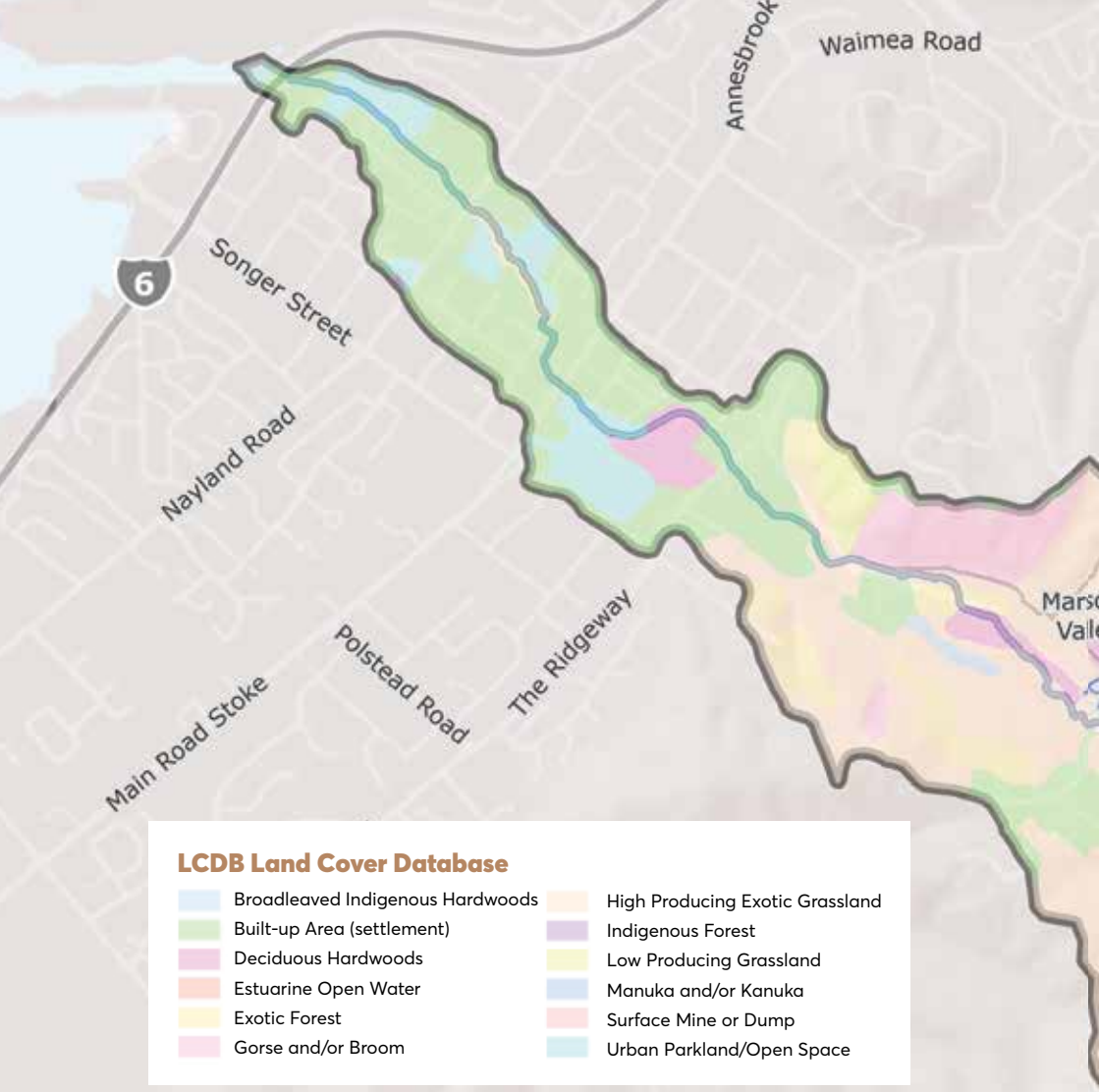
Beside the tennis courts you can find a stone pou with a plaque marking the site of the first flight across Raukawakawa (Cook Stra it) in 1921 . Go and have a look in the Commun ity Centre for a large photograph of the event and follow the stream down to the estuary where Nelson's airport, where you can find more information.

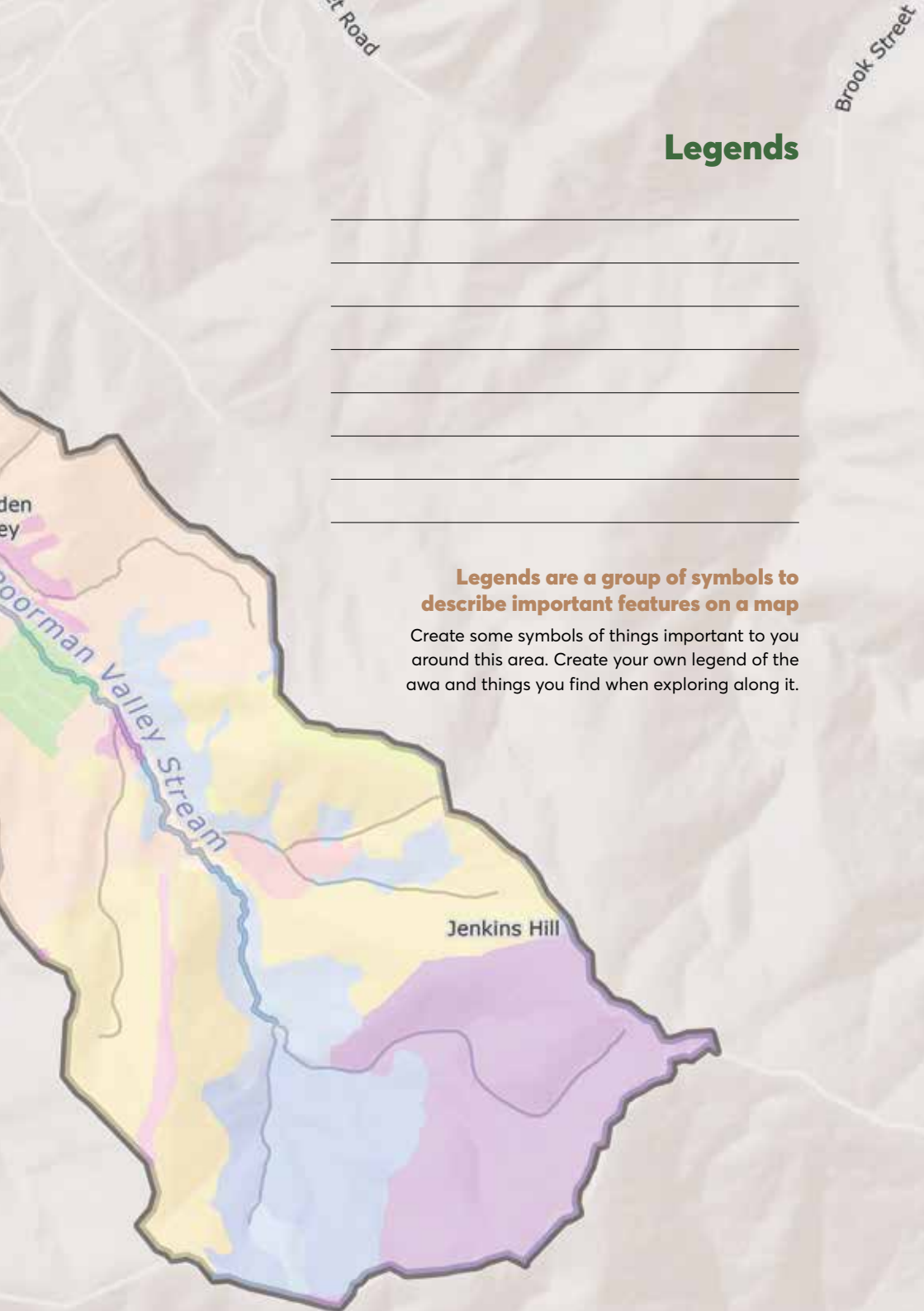
Use a crayon to make a rubbing on the plane.



Wikimedia commons: Illustrations from the Elementary Manual of New Zealand Entomology George Vernon Hudson 1892.


Dorman Valley Stream
Marsden Valley
N
0 100 200 300 400


Waimea Road
Annesbrook
6
Songer Street
Nayland Road
Polstead Road
The Ridgeway
Main Road Stoke
LCDB Land Cover Database
Broadleaved Indigenous Hardwoods
Built-up Area (settlement)
Deciduous Hardwoods
Estuarine Open Water
Exotic Forest
Gorse and/or Broom
High Producing Exotic Grassland
Indigenous Forest
Low Producing Grassland
Manuka and/or Kanuka
Surface Mine or Dump
Urban Parkland/Open Space
N
0
0.5
1
Km



Legends

Legends are a group of symbols to describe important features on a map

Create some symbols of things important to you around this area. Create your own legend of the awa and things you find when exploring along it.

Manu / Birds

The Stoke Community Centre is called Pūtangitangi / Greenmeadows.

Pūtangitangi - Paradise Shelduck

Kawau

Pīwakawaka

Korimako

Bellbird, Wood Pigeon, Fantail, Kingfisher, Shag, Heron, Oystercatcher.

Visit New Zealand Birds Online to bird identify and listen to birds:
nzbirdsonline.org.nz

Be a citizen scientist!

Take part in the annual Garden Bird Survey **gardenbirdsurvey.nz**. It is important to remember to keep dogs on leads, cats indoors at night and try not to stress or disturb birds when they are nesting (between October and May).

Places to picnic

There are many places where you can access the water.

From the Barnicoat Range down through the Marsden Valley, see if you can find some fairy houses in the woodland.

Follow the waterway through Isel Park and along the new walkway to Neale Avenue park, and below Nayland road out past Seaview Road reserve to Manukau (the estuary).

Find a spot to experience the water and surroundings.

Look at the texture of the water, draw lines to describe how it flows, what else do you see?

Make a list of all the sounds you hear.

Check **whatbird.co.nz**

Human stories

There have been many people here before us, some have left lasting legacies and their descendants (uri) still live in the area.

J.W Barnicoat was an early surveyor. The range where the Poorman Valley Stream springs from is named after him. In his 1848 map of the region, you might notice some familiar names around 'suburban south' as the Omaio/Stoke region was called. Draw and write your own story of the waterway

Plan of action

The Poorman Valley Stream has a range of habitats along its length; regular visits to the waterway will help develop your detective skills for increasing stream health. What can you see living in or around the stream? You can enjoy the environment and help by taking an extra bag and picking up any litter along the way.

Record your plans to act in a way that will improve the waterway for those who come along after you.

Some suggested actions:

- Try to minimise rubbish to landfill.
- Be careful what goes into the stormwater (it leads to the stream and the ocean) "Only Rain down the Drain"
- Consider our precious water resources, could you collect rainwater for the garden?

How to help?

Check out Healthy Streams **healthystreams.nz** and the Poorman Valley Stream StoryMap to find links to other ways you can contribute to the growing community of care.

Lots of great information can be found at:
nelson.govt.nz/environment/nelson-nature
Including about The Nelson Halo Project

Be a citizen scientist for our manu in the NZ Garden Bird Survey
gardenbirdsurvey.landcareresearch.co.nz

Ask at Council, or download a copy of the Living Heritage planting guide. It has lots of helpful advice on when and what to **plantpollinatorpaths.com**. Plant trees that birds, lizards and insects love!

Visit the Stoke Library and Potangitangi/Greenmeadows Community Centre, both near the waterway, to find local activities and how to join them.

Hotline: (if you see pollution spills or discharge) **0800 NO POLLUTE**
If you can take pictures noting time and place to send in, this will help Council to trace and sort out any issues.

If you see a bird or other native animal entangled or in unnatural danger please call the DOC Hotline: **0800 362 468**

Glossary

Whakapapa	Ancestral connections, inter-related web of life
Papa	Ground, floor
Rangi	Sky, heaven, day
Whenua	Land
Tangata	People
Whakarongo	Listen
Titiro	Look/observe
Manu	Bird
Ika	Fish
Ngahere	Forest/bush
Taiao	Environment
Harakeke	Phormium tenax/flax
Pua	To bloom, produce flowers
Rongoā	Healing methods and substances, apply medicines, to treat
Rakau	Tree, wood, stick
Rau	Leaf
Awa	River, creek, stream
Nga Atua	Supernatural Kaitiaki/Guardians
Papatuanuku	Earth Mother and wife of Ranginui
Ranginui	Sky Father
Tane-mahuta	Atua of forests, trees,vegetation and associated environment
Tawhirimatea	Atua of wind, storms, powerful weather events
Tumatauenga	Atua of War, Man
Tangaroa/Hinemoan	Atua of Ocean, all waters
Ruaumoko	Atua of earthquakes, youngest unborn child of Rangi and Papa
Haumia-tiketike	Atua of uncultivated foods (Mahinga Kai)
Rongo-ma-Tane	Atua of kumara and cultivated foods

maoridictionary.co.nz

Reading and resources

Remember to visit the Library for a wide range of reference books about this area and about our local flora and fauna.

Te Tau Ihu o Te Waka: A History of Maori of Nelson and Marlborough: Series by Mitchell, Hilary By Mitchell, John.

Old Tasman Bay by JD Peart.

The Prow - The Prow: nga korero o te tau ihu features historical and cultural stories from Nelson **theprow.org.nz.**

A list of superb user friendly Field Guides by Andrew Crowe can be found at **read-nz.org/writer/crowe-andrew.**

Field Guide To New Zealand's Native Trees by John Dawson & Rob Lucas is a valuable resource as is the very beautiful The Meaning of Trees by Robert Vennell.

Online resources with lots of great information:

Nelson City Council: nelson.govt.nz

Land, Air, Water, Aotearoa (LAWA): lawa.org.nz

Department of Conservation: doc.govt.nz

NIWA - SHMAK (freshwater monitoring):
niwa.co.nz/our-science/freshwater/tools/shmak

Manaaki Whenua Landcare:
Research: landcareresearch.co.nz/resources/identification
For finding out lots about what lives in and around our waterways.

Don't forget to take part in **Coast Snap** down by the estuary and keep an eye on Shape Nelson for new projects around the rohe.

These pages are designed for you to record different patterns in the environment, water movement, leaf veins, insect wings and bird flight paths. Look for stories in the landscapes, plants and animals you encounter and draw or write some more to share.

Stonefly

Smooth Cased Caddis

Mayfly

Healthy Streams
From the Mountains to the Sea
kiuta kitai

Nelson City Council
Te Kaunihera o Whakatū