

Aotearoa Ki Te Raki Northern NZ

PUKA ĀRAHI MŌ TE TAPĀTAI ONE SANDY & MUDDY SHORE GUIDE

He puka ārahi ngāwari mō ngā kararehe me ngā tipu e kitea noatia ana ki ngā tapātai one o Aotearoa ki te Raki.

Common animals and plants living on the sandy and muddy seashores of northern New Zealand.



NEW ZEALAND
MARINE STUDIES CENTRE
UNIVERSITY OF OTAGO



COASTAL PEOPLE :
SOUTHERN SKIES

Centre of Research Excellence

KŌTORE MOANA ANEMONES



Kōtore
Burrowing Anemone
Edwardsia neozelanica
20 mm



Kōtore
Mudflat Anemone
Anthopleura hermaphroditica
20 mm



TIOTIO BARNACLES



Attached to cockle shells

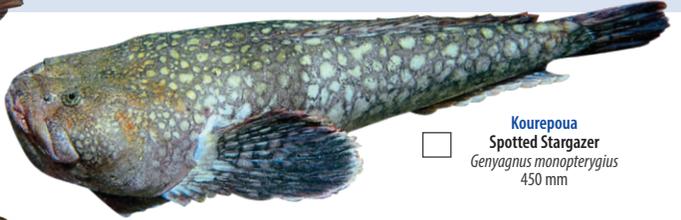


Tiotio
Estuarine Barnacle
Austrominius modestus
5 mm

IKA FISH



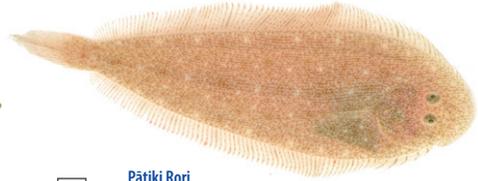
Estuarine Triplefin
Forsterygion nigripenne
90 mm



Kourepou
Spotted Stargazer
Genyagnus monoptyerygius
450 mm



Pātiki
Sand Flounder
Rhombosolea plebeia
430 mm



Pātiki Rori
Sole
Peltorhamphus spp.
350 mm

PĀPAKA CRABS



Burrow opening



Pāpaka
Stalk-eyed Mud Crab
Hemiplax hirtipes
35 mm



Pāpaka
Paddle Crab
Ovalipes catharus
150 mm



Burrow opening



Pāpaka
Tunnelling Mud Crab
Austrohelice crassa
20 mm



Pāpaka Hurahura
Hairy-handed Crab
Hemigrapsus crenulatus
40 mm



Pāpaka
Estuarine Pillbox Crab
Halicarcinus whitei
10 mm



ANGARUA BIVALVES



Nut Clam
Linucula hartvigiana
8 mm



**Tāwera
Morning Star Clam**
Tawera spissa
25 mm



**Tuangi / Hūai / Huangi / Hinangi
Cockle / Little-neck Clam**
Austrovenus stutchburyi
50 mm



**Kuhakuha
Small Dog Cockle**
Glycymeris modesta
30 mm



**Karoro
Ribbed Venus Clam**
Leukoma crassicosta
45 mm



**Hahari
Oblong Venus Clam**
Venerupis largillierii
60 mm

**Tuangi Haruru
Venus Clam**
Dosinia subrosea
60 mm



Wafer Clam
Hiatula siliquens
50 mm



**Pipi / Angarite, Kōkota
Pipi**
Paphies australis
60 mm



**Takarepo
Sunset Shell**
Gari canvexa
60 mm



**Kaikaikaroro
Triangular Trough Clam**
Crassula aequilatera
70 mm



**Whāngai Karoro
Surf Clam**
Spisula sp.
90 mm



**Tuatua / Kahitua / Kaitua /
Pipi-tairaki / Tairaki
Northern Tuatua**
Paphies subtriangulata
50 mm



Feeding mark



**Hanikura
Wedge Clam**
Macomona liliana
55 mm



**Tio
Pacific Oyster**
Crassostrea gigas
120 mm

KŌURAURA ME NGĀ URI TATA

SHRIMPS & HOPPERS



Burrows

Potipoti
Burrowing Amphipod
Paracorophium spp.
3 mm



Mōwhiti / Mōwhitiwhiti / Potipoti
Sandhopper
Bellorchestia spp.
14 mm

Kutu moana
Isopod
Scyphax ornatus
10 mm



Kōwhitiwhiti Moana
Snapping Shrimp
Alpheus richardsoni
65 mm



Burrow entrance and exit

Tarawera
Ghost Shrimp
Filholianassa filholi
60 mm



Burrow opening

Tawawera
Mantis Shrimp
Heterosquilla tricarinata
75 mm

Toa Male



Uwha Female



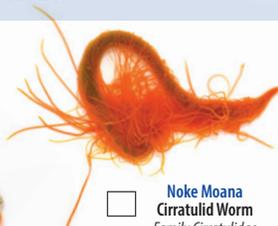
Tawawera
Sand Shrimp
Philocheras australis
40 mm

TOKE MOANA WORMS

Toke Moana
Spaghetti Worm
Family Terebellidae
40 mm



Toke Waitai
Oweniid Worm
Family Oweniidae
45 mm

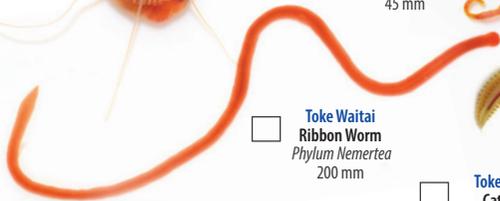


Noke Moana
Cirratiid Worm
Family Cirratulidae
100 mm

Toke Moana
Cockle Shell Worm
Boccardia acus
20 mm



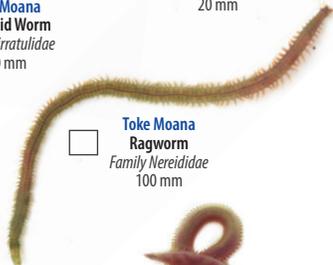
Toke Waitai
Ribbon Worm
Phylum Nemertea
200 mm



Toke Moana
Catworm
Family Nephtyidae
100 mm



Toke Moana
Ragworm
Family Nereididae
100 mm



Toke Moana
Bamboo Worm
Family Maldanidae
130 mm



Feecal casts

Toke Moana
Lugworm
Abarenicola affinis
100 mm



Toke Moana
Blood Worm
Family Glyceridae
130 mm



Toke Moana
Polychaete Worm
Family Orbinidae
100 mm



Feecal casts

PŪPŪ & NGĀKIHI SNAILS & LIMPETS



Pūpū Top Shell
Micrelenchus huttonii
5 mm



Koeti Horn Snail
Zeacumantus subcarinatus
15 mm



Ngākihi Estuarine Limpet
Motoacmea scapha
11 mm



Koeti Large Horn Snail
Zeacumantus lutulentus
25 mm



Tikoaka Southern Olive Snail
Amalda australis
30 mm



Pūpū Wheel Snail
Zethalia zelandica
22 mm



Titiko / Karahū / Karehu / Koriakai Mud Snail
Amphibola crenata
30 mm



Whētiko Mudflat Top Shell
Diloma subrostrata
25 mm



Pūpū Rore Arabic Volute
Alcithoe arabica
100 mm



Auger Shell
Euterebra tristis
24 mm



Pūpū-waharoa Olive Bubble Shell
Bulla quoyii
55 mm



Totoree Ostrich Foot Snail
Struthiolaria papulosa
60 mm



Ngaere Necklace Snail
Tanea zelandica
33 mm



Pūpū Tuatea White Bubble Shell
Haminoea zelandiae
20 mm



Tākai Ostrich Foot Whelk
Pellicaria vermis
40 mm



Kāwari Mudflat Whelk
Cominella glandiformis
25 mm



Kōriri Small Turret
Stiracolpus pagoda
30 mm



Kāwari Speckled Whelk
Cominella adspersa
45 mm



Papatāi Turret Shell
Maoricolpus roseus
80 mm



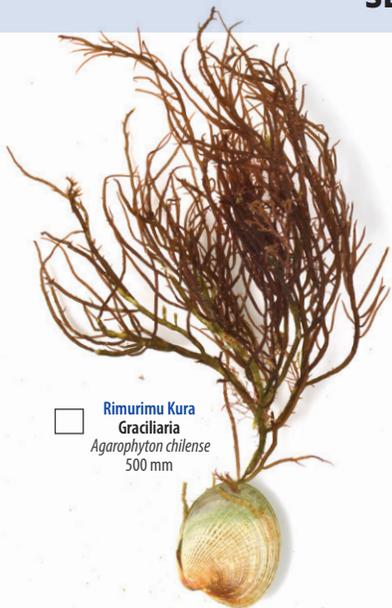
Tōtoto Wentletrap
Cirsotrema zeledori
22 mm



Australian Dog Whelk
Nassarius burchardi
12 mm

RIMURIMU & DIATOMS

SEAWEED & DIATOMS



Rimurimu Kura
Gracilaria
Agarophyton chilense
500 mm



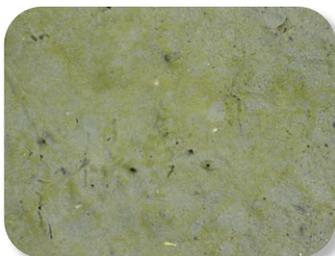
Rimu
Sea Lettuce
Ulva spp.
300 mm



Rimurimu Kura
Filamentous Red
Polysiphonia spp.
150 mm



Spume (Diatom matter)



Benthic Diatom
(green scum)



Kotakota Ngū
Ram's Horn Squid Shell
Spirula spirula
30 mm

DRIFT



Kararua
Violet Snail
Janthina sp.
45 mm



Ihumoana / Katiaho
Blue Bottle Jellyfish
Physalia physalia
150 mm

Werewere
Pelagic Barnacles
Lepas anatifera
40 mm

KINA

SEA URCHINS



Kina Papa
Sand Dollar
Fellaster zelandiae
100 mm



Kina Pākira
Heart Urchin
Echinocardium cordatum
90 mm

OTAOTA PLANTS



Karepō / Nana
Eelgrass
Zostera muelleri
300 mm



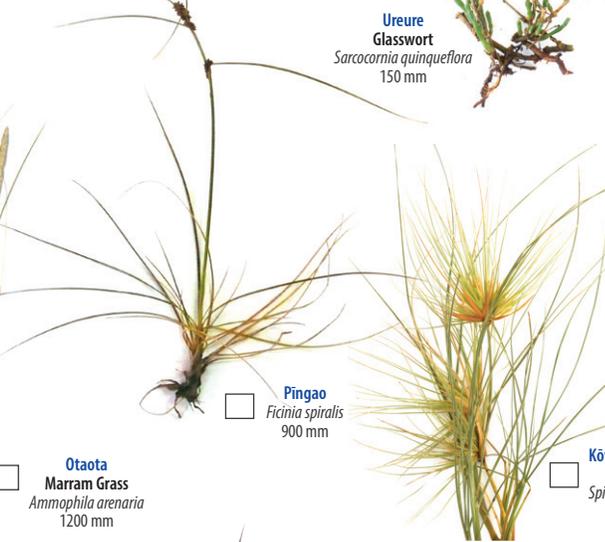
Ureure
Glasswort
Sarcocornia quinqueflora
150 mm



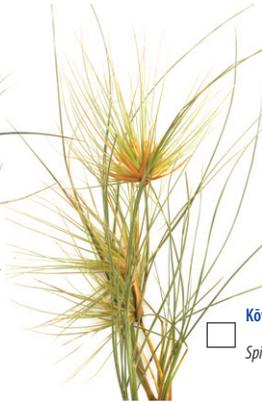
Waiū Atua /
Waiū-o-Kahukura
Shore Spurge
Euphorbia glauca
500 mm



Otaota
Marram Grass
Ammophila arenaria
1200 mm



Pingao
Ficinia spiralis
900 mm



Kōwhangatare
Spinifex
Spinifex sericeus
300 mm



Rūpene
Tree Lupin
Lupinus arboreus
1500 mm



Wiwi
Knobbly Clubrush
Ficinia nodosa
1500 mm



Wiwi
Sea Rush
Juncus kraussii var. *australiensis*
1200 mm



Oioi
Jointed Wire Rush
Apodasmia similis
1500 mm



Mānawa
Mangrove
Avicenna marina *australasica*
2000 mm

KIA TIAKINA KĀ TINI O TAKAROA

SHOW RESPECT FOR SEASHORE CREATURES



- ☆ Āta hīkoi
Tread carefully.
- ☆ Waiho atu kā tini o Takaroa
Leave creatures where you found them.
- ☆ Waiho atu kā rimurapa kua piri ki kā toka
Leave attached seaweed in place.
- ☆ Kia kāwari tō pā atu ki kā tini o Takaroa – pātata atu ki te whenua me ō rikarika mākū
Handle creatures with care - close to the ground with wet hands.
- ☆ Kia āta whakahoki kā toka ki ō rātau wāhi tika
Carefully put rocks back to the same position you found them.
- ☆ Kauraka e rahi tō kohikohi aka, he kāika kē mō ētahi atu tini o Takaroa
Limit your collection of empty shells as other creatures use them as homes.

KIA KAHA KIA KAURAKA E RAWEKE I KA TINI O TAKAROA

AVOID DISTURBING WILDLIFE



- 👁️ Me noho tawhiti koe i kā manu me kā penu
Keep your distance from seabirds including penguins.
- 👁️ Me noho tawhiti koe i kā pakake me kā whakahao
Keep your distance from seals and sea lions.
- 👁️ Whakamahia ō karu toro me tō kāmera ki te titiro pātata
Use the zoom on your camera or binoculars for close viewing.
- 👁️ Ki te pātata atu kā whakahao ki a koe – āta neke whakamuri
If sea lions approach you - back away slowly.
- 🐕 Kia mauri tau tāu kuri
Keep dogs under control.

KIA TŪPATO, KIA TIKA HOKI TŌ MAHI

BE CAREFUL AND KEEP SAFE



- 🌊 Me aro atu ki kā tai timu, tai pari
Check tide times to avoid being cut off by rising tide.
- 🌊 Kauraka koe me tō kotahi e toro atu ki te ākau toka
Do not explore the seashore alone.
- 🌊 Me aro atu koe ki kā tohu o te raki me Tawhirimātea
Watch for changing weather.
- 🌊 Kia mataara ki kā karu – kauraka e huri tuarā atu i a Takaroa
Look out for waves - never turn your back to the ocean.
- 🌊 Kia tūpato ki kā wāhi māeneene, ki kā toka titaha hoki
Beware of slippery and uneven rock surfaces.
- 🌊 Haria atu kā para ka kimihia ki te ākau, whiua ki te ipu para kē
Pick up any rubbish found on the shore and dispose of it appropriately.

Acknowledgements

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Whanau, hapū, and iwi may have their own names of the species in their area. Any regional variations or corrections, please email marine-studies@otago.ac.nz