

FORESTS of the SEA

Seaweeds belong to three different groups: brown, green and red algae.

Did you know?

- ✦ In Te Reo Māori, the name for seaweed is rimurimu!
- ✦ Seaweeds are marine macroalgae that often live on rock and other structures in coastal areas
- ✦ The seaweed gardens create important and productive coastal marine ecosystems
- ✦ Seaweeds provide shelter and nutrients for a variety of marine species
- ✦ Seaweed buffers waves to protect coasts from erosion and they indicate the health of our marine environment
- ✦ Seaweeds are under threat from land reclamation, pollution, overfishing and ocean warming



Marine plants produce over 70% of Earth's oxygen!

Wellington Harbour hosts a range of native seaweeds that create underwater gardens.



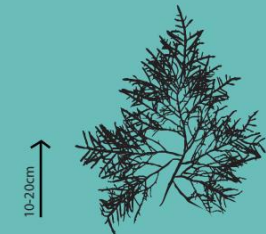
MACROCYSTIS PYRIFERA

Also known as Giant Kelp, this is a large brown seaweed that grows in underwater forests. Individual algae can grow as long as 45 metres!



CARPOPHYLLUM MASCHALOCARPUM

Or Flapjack, this is a brown seaweed that resembles leather. Air filled spongy cells grow on the algae to help support the plants stems underwater.



PTEROCLADIELLA CAPILLACEA

Bush-like and dark red / purple in colour, this seaweed prefers shallow water. It is commonly found in coastal lagoons like Wellington's Whairepo.

#loveseaweed

Te NGAHERE o te MOANA

E toru ngā momo rimurimu: porouri, kākāriki me te pūkohu wai whero.

I mōhio rānei koe?

- ✦ Ko te rimurimu te ingoa Māori mō te seaweed
- ✦ Ko te rimurimu he momo pūkohu wai ka tipu i ringa i ngā toka me ērā momo hanganga o te moana
- ✦ He mea hirahira ngā māra rimurimu mō te oranga o Tangaroa
- ✦ He kāinga, he kai hoki te rimurimu mō ngā uri o Tangaroa
- ✦ Ka whakahaumarū te rimurimu i te takutai mā te karo i ngā ngaru me te aukati i te ngāhorohoro o te whenua
- ✦ He tūtohu hoki te rimurimu mō te orange o te taiao. Engari kei te matemate haere te Rimurimu nā te tipu whenua, te parahanga me te mahana haere o te moana

He maha ngā rimurimu taketake o Te Whanganui-a-tara ka hanga i ngā māra o te moana.



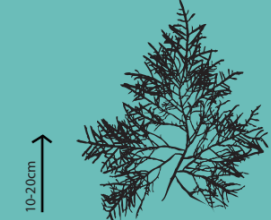
MACROCYSTIS PYRIFERA

E mōhio anō mā te ingoa Giant Kelp, he rimurimu parāone nui ka tipu i ngā ngahere o te moana. E taea tētahi te tipu ki te 45 mita te tāroaroa.



CARPOPHYLLUM MASCHALOCARPUM

Me kī te Flapjack, he rimurimu parāone anō, pērā tōna rite ki te kirikau. Ka tipu ngā pūtau hau ngohengohe i runga i te tipu nei kia pai te oranga o te tipu i raro i ngā wai.



PTEROCLADIELLA CAPILLACEA

He rimurimu pōruru, he whero, he waiporoporo te tai. Ka tipu i ngā wai pāpaku. Ka kitea tēnei tipu i ngā hāpua o Te Whanganui-a-tara pērā ki te hāpua o Whairepo.



Ka whakaputa ngā tipu o te moana neke atu i te 70% o te hāora o te ao!

#arohaterimurimu

WHO lives HERE?

EAGLE RAY | WHAI REPO



Rays belong to the group of cartilaginous fish. They use electro-sensory organs to find prey. Both eagle rays and sting rays frequent the Wellington waterfront and Whairepo lagoon.

SPOTTY FISH | PAEKIRIKIRI



Spotties are native to New Zealand so they are as important to biodiversity as the kiwi. Young juvenile fish feed on small crustaceans which cling to kelp.



OCTOPUS | WHEKE

The common octopus is among the most intelligent and flexible of all invertebrate animals. The tiny pygmy octopus is often found during clean ups in Wellington.

HERMIT CRAB | KĀUNGA

The colourful hermit crab uses empty shells to hide their soft hind, as well as it's egg mass while it is incubated. As the hermit crabs grow they change their home for larger shells.



WANDERING ANEMONE | HUMENGA

The wandering sea anemone is the largest anemone species found in shallow water around New Zealand, growing up to 200 mm in length and 100 mm wide. It can detach itself and move to new locations.



STARFISH | PAPTANGAROA

The small cushion star is the most abundant starfish found around Wellington. It is often seen scattered across flat rocks and sediment covered reef in shallow water.

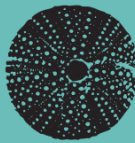


EAR SHELLS | PĀUA



Pāua are commonly found along rocky coasts in depths down to 10 m. Pāua eat seaweed and they are most active at night, moving freely about on the surface of rocks.

SEA URCHIN | KINA



Small kina (1-2 cm) are found under rocks and overhangs, while adult kina can reach 10-15 cm. Kina are mainly herbivorous, feeding on large brown algae, red algae and encrusting substrate.



SEA HORSE | MANAIA

Sea horses are ambush hunters that anchor to seaweed with their curled tails, waiting for food to swim by. They blend in with their surroundings changing colour with pigment cells in their skin.

KO WAI ka noho I KONEI?

WHAI REPO | EAGLE RAY



Nō te whānau ika cartilaginous te whai. Ka whakamahi rātau i tētahi whēkau hiko ki te kimi kai. Ka kitea ngā whai me ngā whai repo putanoa i Te Whanganui-a-tara me te hāpua o Whairepo.

PAEKIRIKIRI | SPOTTY FISH



He ika taketake te paekirikiri, he ika whakahirahira mō te oranga o te taiao pērā ki te kiwi. Ka kai ngā punua ika i ngā kararehe ka mau ki ngā rimurimu.



WHEKE | OCTOPUS

He kararehe matatau te wheke, ā, he awariwari hoki. Ka kimi te matatini o ngā wheke iti i ngā mahi whakapai o Te Whanganui-a-tara.

KAUNGA | HERMIT CRAB

Ka whakamahi te kaunga muramura i ngā anganga ki te tiaki i tōna tinana me ōna hēki i te wā e tipu ana rātau. I te wā ka tipu te kāunga ka kimi anga nui ake hei kāinga hau mō rātau.



HŪMENGA | WANDERING ANEMONE

Ko te hūmenga te kararehe kaitā rawa o tōna whānau ka kitea i ngā wai o Aoteraroa. Ka tipu te hūmenga ki te 200mm te tāroaroa, me te 100mm te tāwhitiwhiti. Ka taea hoki rātau te hūnuku mai tētahi wāhi ki tētahi atu.



PAPATANGAROA | STARFISH

Ka kite whānuitia te papatangaroa iti ki Te Whanganui-a-tara, ka kitea ki ngā toka pararahi me ngā puna.



PĀUA | EAR SHELLS



Ka kitea te pāua ki ngā tai totoka o Te Whanganui-a-tara, ka noho ki te rētōtanga o te 10m. Ka kai te pāua i te rimurimu, ā, ka neke haere ki runga i ngā toka i te pō.

KINA | SEA URCHIN



Ka noho ngā kina iti (1-2cm) ki raro ki ngā tahataha o ngā toka, ka taea ngā kina te tipu ki te rahinga o te 12-15cm. Ko te nuinga o ngā kai a te kina he rimurimu parāone, he rimurimu whero me ētahi atu kai ka piri ki ngā toka.



MANAIA | SEA HORSE

He kararehe manukawhaki te manaia ka piri ki ngā rimurimu me tōna whiore, tatari ai mō tōna kai. Ka konatu rātau ki te tae o te wāhi e noho ana rātau mā te whakarua i tō rātau kiri.

SAVE our SEAWEED

Wellington Underwater Club

We are a community based Dive Club promoting a healthy marine environment for everyone to enjoy. Our members explore and document Wellington's coast and love being in the water. We have an active voice on marine related topics and run a variety of club projects, including citizen science, outreach & education projects:

- Wellington's underwater gardens - seaweed gardening and monitoring of giant kelp
- Marine reserve monitoring
- Maritime archaeology

Follow us on Facebook @wellingtonunderwater
Check out more information at www.wuc.org.nz

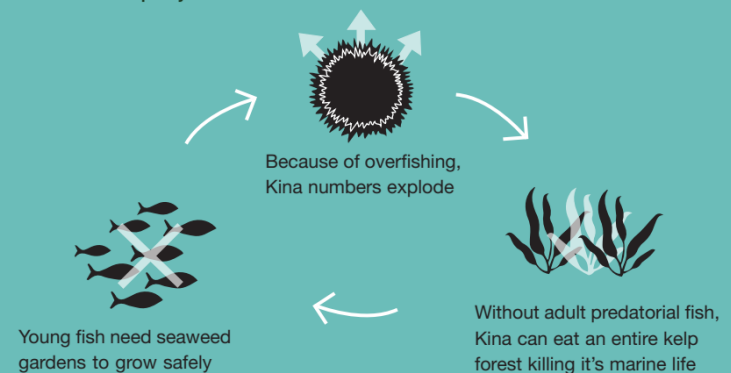


Supported by Wellington City Council. Thanks to the Nikau Foundation and Friends of Taputeranga Marine Reserve.

Mural and Infographic design by Tamara Kogler in collaboration with the Wellington Underwater Club

How can you help Wellington's seaweed?

- Remember to reduce, reuse & recycle your waste, find out when your local recycling pick-ups are
- Don't litter! Drains are only for rain, rubbish left on the road can end up in the ocean
- Tell your city councillor that the marine environment is important to you
- Join one of Wellington's community groups and support local cleanups and restoration projects



Whakaora tō mātau RIMURIMU

Wellington Underwater Club

He karapu hapori tēnei ka whakatuārā i te oranga o te taiao moana, hei painga mō te katoa. Ka hōpara, ka whakakona e a mātau mema i ngā tai o Te Whanganui-a-tara, e kaingākau hoki mātau ki te ruku ki te moana. He reo whakapaoho mātau mō ngā take taiao moana, ā, he nui hoki o mātau mahi, pērā ki te:

- ✦ Ngā Māra o Te Whanganui-a-tara – Te manākitanga o ngā māra rimurimu me te arotūruki o ngā rimurimu kaitā
- ✦ Te arotūruki o ngā moana rāhui
- ✦ Te mātai whaipara moana



Ko ngā pikitia nā Tam Kogler me ngā mema o te Wellington Underwater Club.

@wellingtonunderwater
www.wuc.org.nz

He mea tautoko nā te Kaunihera o te Whanganui-a-tara. Ngā mihi hoki ki te Nikau Foundation me Friends of Taputeranga marine reserve.

Me pēhea tātau e awhi i ngā Rimurimu o Te Whanganui-a-tara?

- ✦ Maumahara kia whakaiti, whakamahi, hangarua i ō para, kimi hoki i te wāhi hangarua o tō rohe
- ✦ Kaua e parahanga! Mō te ua anake te awakeri, ka taea ngā para te rere mai i te rori ki te moana
- ✦ Whāki atu ki tō mema o te kaunihera he mea nui te taiao moana kia koe
- ✦ Whakauruuru ki roto i ngā roopu hapori o Te Whanganui-a-tara, āwhina hoki i ngā āhuatanga whakapai o te rohe

