

Te ika taketake i te tāone

HE MAHA NGĀ ARAWAI KEI Ō TĀTOU TĀONE, KA RITE TONU TE WAREWARE I A TĀTOU, E HUNA ANA I RARO I NGĀ TAHATIKA TARUTARU, E TĀPUKEHIA ANA RĀNEI I ROTO I NGĀ KŌRERE WAI RAIMA KEI RARO I NGĀ ARA HAEREERE. E ORA TONU ANA NGĀ IKA TAKETAKE, NGĀ KURA HUNA - HEOI, E MŌREAREA ANA TAUA ORANGA. ME PĀNUI TONU E KITEA AI NGĀ MAHI HEI PĪKAU MĀU.

Te araturuki i te kōunga o te wai i tētehi kōawa i Tāmaki makaurau. Nā Janet McDonald, nō Atlas Communications & Media Ltd te whakaahua mō te Project Twin Streams.



Ngā kōawa i te tāone kua pōkaikaha

He kino ake te āhua o ngā kōawa i te tāone i ngā kōawa ki tuawhenua mō te taha ki ngā inenga i te kōunga o te wai: te purata, ngā whakamōmona, te mahana, ngā huakita me ngā konganuku taumaha. Mā konei e iti ai te nui me te rerekē o ngā momo koiiora rōwai.

I ngā tāone, ka tūpono ngā ika ki ngā rīrapa paipa, ngā kōrere wai, ngā maero me ngā manga me ōna wai mahana rawa, kōparu, kī ana i te parakino. I ia rā ka ngaro atu ētehi kōawa i ngā mahi whakawhanake i te tāone, otirā e tino pērā ana ngā kōawa pakupaku kei te ika whenua i roto i te rohe hōpuapua. 11 kiromita te roa o ngā kōawa e paipahia ana i Tāmaki makaurau i ia tau.

- Ka rumakina ngā ika e tere ana i ngā kōawa i te tāone ki ngā matū takakino ka rere i ō tātou tuanui, i ngā tiriti me ngā wāhi hangahanga, i te hekenga mai o te ua.
- Ka paitinihia, ka kainga, ka kāpō, ka tāmia rānei ngā ika e te ranu raima, e te peita, e ngā toenga kai, e te hinu, e te penehīni, e te patu pūhekaheka, e te konganuku taumaha, e te hopi horoi waka, e te rehu patu taru, e te one hoki e kawea ana e te wai marangai.
- Ka nui te rere o te wai ki roto i ngā kōawa, ki te kaha te heke o te marangai ki runga i ngā papa mārō, pērā i te rori, i te tuanui, i te ara uru o ngā waka me ngā wāhi whakatū waka, ā, mā reira e horo ai ngā tahatika, e kawea ai te paru me te para, ka mutu, i ētehi wā ka ngawhā ngā pininga parakaingaki.

He toitoi. Nā Stephen Moore, nō Landcare Research te whakaahua.

He kōawa tonu - ehara i te wāhi tuku para!

I mua, kua whakamahia ngā kōawa i te tāone anō he wāhi tuku para. Kua whakatōtikahia, kua keria, kua paipahia hoki e tere ai te rere o te wai marangai me te wai parapara.

Heoi anō, i ngā arawai ā-tāone:

- he nui ngā wāhi kua tupuria e te otaota māori, e te otaota rānei ka tupu i te whenua pukewai
- ka whai whaitua oranga ngā otaota māori me ngā kararehe
- ka whai ara ngā manu me ngā ngārara
- he wāhi e pārekareka ai te tangata
- ka māori ake te takoto o te whenua ā-tāone
- ka kitea ngā wāhi tapu whakahirahira ā-hītori, ā-ahurea hoki

He whakaahua ika e tata ana ki ngā manga i Kirikiriroa hei whakamahara ake i te hunga e noho ana ki reira i te hononga i waenga i ngā manga wai marangai me ngā kōawa o te tāone - me ngā whaitua oranga ika e rere ai aua wai ki roto. Nā Monica Peters, nō NZ Landcare Trust te whakaahua.



Te whakaoranga o Okeover

Kua whakaorangia te āhua o te kōawa o Okeover, e rere ana mā Te Whare Wānanga o Waitaha. I whakatōkia anō tētehi wāhanga o ōna tahatika, e 60 mita nei te roa, ki ngā otaota māori o tava rohe tonu. I āta kōuruā ētehi toka me ētehi poro rākau i fikina ai i wāhi kē, ki roto i te kōawa e nui ake ai ngā whaitua oranga rerekē, hei whakapōturi anō hoki i te rere o te wai.

Nā Duncan Shaw-Brown, nō Te Whare Wānanga o Waitaha te whakaahua (2004).

Te whakahoki i te ora ki ngā kōawa ā-tāone

E piki haere ana te hiahia o ētehi ki te whakaora i ngā kōawa ā-tāone. Ahakoa kāore koe e noho pātata ana ki tētehi kōawa, he rauwiringa pai kei raro i te whenua e hono ana i tō kāinga ki te kōawa e pātata ana. Kua waimarie pea ētehi o koutou i te noho pātata ki tētehi kōawa, ki tētehi awa rānei. Ahakoa tawhiti, ahakoa pātata, he maha ngā mahi hei pīkau māu, e ora tonu ai ngā kōawa.

1. Ko te ua anahe e rere ki te wai

- Kia tūpato te raweke i ngā matū, tae atu ki ngā peita, he wai te pūtake, me ngā hopi teretere, ā, kua rawa e tuku para whakakino ki rō kōre, ki te taha rānei o ngā kōawa.
- Wetekina te kōre i te tuanui i a koe ka horoi i tō tuanui, kia kore ai ngā matū e tomo ki ngā kōre wai marangai.
- Kua rawa e tukuna ngā otaota, ngā ika rānei nō ngā kauranga ika, ki te kōre, ki te taha rānei o tētehi kōawa - ka taupatupatu ēnei ki ngā ika taketake me ngā rērēwai.
- Kua e tuku para ki te taha o te ara - tahia ngā para mauti, kohia ngā rāpihi.

Aukatihia te rere o ēnei matū o te kāinga ki roto i ngā kōawa. Nā Monica Peters, nō NZ Landcare Trust te whakaahua.



Nā ngā kaupapa whiwhita i kōkiriha ai e te kaunihera i huri ai ngā manga wai marangai more...



...hei whaitua oranga mō ngā ika taketake (hei wāhi whaitake hoki ki te hunga noho pātata!) Nā Boffa Miskell ngā whakaahua.

2. E kuhu, e kuhu!

- Whakatōkia ngā mauti me ngā otaota māori ki ngā tahatika, ki ngā whenua hoki e papī ai te wai, hei maru mō ngā ika, kia whai kai hoki ai ngā ika i ngā rau me ngā ngārara ka takataka iho.
- Tukuna kia teitei te tupu o te mauti kei ngā tahatika, kia rarau rā anō ngā otaota ki reira.
- Hūtia ngā taru whakapōrearea e tupu ana i te taha o te kōawa kia kore ai e popoki.
- Tangohia ngā rāpihi i te kōawa e taea ana e tō ringa te toro, engari waiho atu ngā poro rākau me ngā toka kua ū ki reira, hei whaitua oranga mō ngā ika.
- Piri atu ki tētehi rōpū manaaki kōawa i tō rohe hei tiaki i ngā arawai kei tō rohe.

3. Me whai whakaaro ki ngā ika i a koe ka hoahoa

- Whakamahia ngā ara mauti, ngā pūnotinoti rānei, kua te raima, mō ngā ara-uru waka, e heke noa ai te ua ki roto ki te whenua.
- Whakatūria he kōpapa wai hei hopu i ngā wai ka rere i te tuanui, kia iti iho ai ngā wai e totō ana ki roto i ngā kōawa. Mā tēnei wai e whāngai te māra.

- Me māori te rere o ngā kōawa. Ka raru ngā ika i ngā matatara, i ngā pā, i ngā manga me ngā pekanga, waiho ki te tikanga, me whai whakaaetanga i te kaunihera mō ērā mea.

Ētehi atu mahi hei pīkau māu:

- Me tere tonu te whakamōhio atu i tō kaunihera ā-rohe ki te kitea e koe he ika mate, he wai haunga, kōparuru rānei.
- Kua e tukuna te rāpihi ki tō kōawa, ka kino tonu te wai i ngā hikareti me ngā tūtāe kuī.

Ko Pat Williams nō te Waterways Ecology Team. Nā Abby Davidson, nō NZ Landcare Trust te whakaahua.



Mā te Reo. Me te Reo. Mō te Reo.



Kei te hiahia pārongo anō?

Me whakapā atu ki tō kaunihera ā-tāone e mōhio ai koe me pēhea te whakapiki i te kōanga o te wai me te whakaora i ngā kōawa. Me rapu rānei i ngā kupu matua i runga i ēnei whārangī ipurangi:

Urban stream pollutants
www.northshorecity.govt.nz
www.waternz.org.nz
www.bethedifference.gw.govt.nz/story2383.cfm

Urban stream restoration
www.niwa.co.nz/ me www.wrc.govt.nz/

Urban stream restoration groups:

Oakley Creek, Auckland
www.oakleycreek.org.nz/

Meola Creek, Auckland
www.meolacreek.org.nz/

Waitakere Streams, Auckland
www.waitakere.govt.nz/Abtcit/ne/twinstreams.asp

WaiCare, Auckland
www.waicare.org.nz

Mangakotukutuku Stream, Hamilton
www.streamcare.org.nz/

Okeover Stream, Christchurch
<http://nwp.rsnz.org/content/cant.htm>

Ētehi atu pukameka mō te ika i tēnei huinga:

- #1 Ngā ika wai māori
- #2 Ngā mahinga kōawa hei painga mō te ika
- #3 Te whakatika i ngā tapa kōawa
- #4 Te ika taketake i te tāone**
- #5 Te ika taketake i te pāmu
- #6 Te tiaki i ngā hōpuapua

Tikina ngā pukameka katoa i:
www.landcare.org.nz

He mea whakaputa e NZ Landcare Trust 2015.

Te Reo translation: Pānia Papa, Takatū Associates Ltd.