

Te whakatika i ngā tapu kōawa

E PAI ANA TE MĀTAO KI NGĀ IKA TAKETAKE. E WAIA ANA RĀTOU KI NGĀ ARAWAI MARUMARU KUA TUPURIA E TE OTAOTA URURUA, I TE MEA NEKE ATU I TE 80 ŌRAU O AOTEAROA, HE NGAHERE I ŌNA WĀ. ME PĀNUI TONU E KITEA AI NGĀ MAHI E TORU HEI WHAKAORA I NGĀ KŌAWA ME NGĀ WHAITUA ORANGA IKA.

e kōawa o Waitete.
Nā Rob Davies-
Colley, nō NIWA
te whakaahua.

Te mōhio ki te kōawa

Ka ora katoa ngā ika taketake i roto i ngā kōawa me ngā awa kua tupuria ngā tahataha e ngā mauti, e ngā rākau me ngā otaota māori. Me whai rākau wharewhare aua kōawa hei whakamarumarū i ngā ika, hei whakauka i ngā tahatika, e makere ai hoki ngā rau me ngā ngārara ki roto i te wai hei kai mā ngā ika. I mōhio rānei koe...

- mā te whakatū taiapa aukati kararehe i ngā kōawa ki tuwhenua, ka tino piki te kounga o te wai, ā, ka whakakore pea i te matenga o ngā kararehe i ngā whenua pōharuharu
- mā te whakatō otaota ki ngā tahatika, ka tino piki te kounga o te whaitua oranga ika taketake me te kounga o te wai
- ka tukuna e ngā matamata ō rātou hua ki runga i ngā mauti roa, i ngā toetoe me ngā wīwī i te taha o ngā kōawa ki te taha moana me ngā wahapū
- mā te whakatō i te tini toetoe tae atu ki ngā mea taketake me te harakeke anō hoki e āwhina ki te aukati i ngā waipara, i ngā whakamōmona, i ngā huakita me ētehi atu para, i mua i te rerenga ki roto i ngā kōawa me ngā arawai
- mehemea kei te pāmu koe, mā te whakatō otaota me te whakatū taiapa i ō manga, ka iti iho te tupu o te taru, ka iti iho hoki ngā utu whakapaipai manga haere ake, ā, mā reira hoki e tupu ai ētehi whaitua oranga mō ētehi atu momo koiora, pērā i te ngārara me te manu.

Ngā wāhi me mātua whakaora hei whaitua oranga ika:

- ngā kōawa tuwhera pērā i ngā whenua pāmu kāore anō kia tupuria ngā tahatika e te otaota
- ngā kōawa paku kei ngā hikuwai o ngā roto
- ngā taha o ngā kōawa ka whitikina e te rā (e anga ana ki te raki, ki te uru hoki)
- ngā whenua, e 200 mita, neke atu rānei te roa kua tupuria e te otaota, hei whakamātao i te wai
- ngā wahapū e whakatōkia ai ngā toetoe me ngā mauti hei whaitua whakaputa hua matamata

Pātaitia tō kaunihera ā-rohe i mua i te whakatō otaota ki rō manga - tērā pea he herenga e pā ana ki te haeretanga atu ki te whakapaipai i aua wāhi.

He hua inanga kei waenga i ngā toetoe. Nā Sjaan Charteris, nō Te Papa Atawhai te whakaahua. Kei te Karauna te mana tārua.



Inanga. Nā Stephen Moore, nō Landcare Research te whakaahua.

Ngā mahi e toru hei whakaora i ngā kōawa

1. Me whakarite

Mā te whakarite pai i te wāhi e pai ake ai te rarau o ngā otaota ki te whenua. Me fīmata ngā mahi whakarite i te Raumati, kia rite ai ki te whakatō i te Ngahuru me te Hōtoke.

Mehemea kei waenga mauti matomato tō wāhi, e pai ana kia tapahia, kia tukuna kia paku kainga e te kararehe, kia rehua rānei ētehi wāhi ki te rehu patu taru e tika ana, e pai ana rānei kia whakatōkia rawatia ki te otaota, kei te āhua o te momo. E taea ana te whakatō otaota ki roto tonu i ngā wāhi kei reira te mauti poto, i te nuinga o te wā, engari me tūpato mehemea he kikuyu, he taru mauti rānei e tata ana, kei tupuria ō otaota e aua taru.

Ki ana ētehi wāhi i te taru tauhou, ka mutu he tino pērā ngā wāhi e tata ana ki ngā taone. Ka tupuria ngā otaota māori e ētehi momo taru ki te kore e āta arowhaitia. Me āta huhuti i ngā taru i mua i te whakatō otaota māori. I ngā wāhi e kaha tupuria ana e te tarutaru, me whakarite i ngā wā patu taru me ngā wā whakatō mō ētehi tau torotoru nei. Mā konei e whāiti ai tō whakarite i tētehi wāhi iti, ā, ka pai ake te whitinga, i te wāhi e pokea ana e te taru ki tētehi wāhi e tupuria ana e te otaota māori. Ki te kore he rākau māori, he otaota māori hoki, ka noho ko aua taru tauhou hei nōhanga, hei whaitua oranga rānei mō te manu, mō te moko me te ika.

Tirohia te whārangi ipurangi Weedbusters e kitea ai ngā rongoā mō ngā taru whakapōrearea, me tono pārongo anō rānei i tō kaunihera ā-taone.



Te Kōawa o Waitete, ki Waihi. Nā Rob Davies-Colley, nō NIWA te whakaahua.

Ka tere tupu te fī kōuka, ā, he rākau pai hei whakauka i ngā tahatika.

Mā te whakatō kōwhai, karamu me te harakeke, ka whai kai ngā manu māori pērā i te tūi. Nā Dianne John te whakaahua.

2. Me whakatō

Ko te Ngahuru te wā pai ki te whakatō. Inā rā, ka whai wā ngā otaota ki te rarau ki te whenua, i ngā marama makariri ake, mākū ake hoki, kia rite ai mō te Raumatī. I ngā wāhi e kaha tauria ai e te hauhunga, he pai ake te tatari ki te whiore o te kaupeka kia kore ai ngā pihinga e mate.

I waenga i te Kōanga me te fīmatanga o te Raumatī te wā pai ki te whakatō otaota ki ngā wāhi tino mākū, kia heke rā anō te wai. Mā konei e kore ai ngā otaota e pukewaitia, e kawea atu rānei e ngā wai marangai o te Hōtoke.

He kupu āwhina: Poua ia tupu ki tētehi tūtoko. Mā konei e kitea ai e koe ā te wā e huti taru ana, ā, ka kitea hoki mehemea kua mate ētehi tupu kia pai ai tō whakatō tupu anō. Inā kē te uaua o te kite ake i te wāhi i whakatōkia ai ngā tupu ka tupuria ana e te tarutaru i te Kōanga me te Raumatī.

Me whakatō i ēhea otaota?

Ko te huarahi pai katoa, ko te rapu i tētehi kōawa māori, i tētehi whenua pukewai rānei e tata ana ki tō wāhi. Mātākihia ngā mea e tupu māori ana i reira, ā, me whai koe i tērā tauria. I ētehi wā, ko te painga atu mehemea ka fīmata tō whakatō i ētehi otaota pakari te tupu me te waiho kia tupuria māoritia te wāhi e ētehi anō otaota i roto i te wā. Manohi anō, e pai

ana te whakatō i ētehi momo otaota 'rerekē' hei muri ake, kia rarau rā anō ngā 'otaota māori' pakari.

Ko te momo otaota pai katoa hei whakatō māu kei te āhua tonu o tō wāhi, nō reira me mātua whai i ngā pārongo o te takiwā. He kōrero ārahi e pā ana ki te momo otaota hei whakatō māu me te wā tika hei whakatō, kei tō kaunihera ā-rohe, kei te NZ Landcare Trust, kei a Te Papa Atawhai rānei.

Anei ētehi whakaaro:

Ngā rākau me ngā otaota ka tere tupu: te mānuka, te kākūka, te karamu me te fī kōuka.

Ngā otaota whakauka tahatika: Ngā mauti, te fī kōuka, te mānatu i te whenua tāpotupotu, te karamu, te tutu*, te tarata me te kōhūhū. (*he rākau rore ki te kararehe me te tangata te tutu.)

Ngā whaitua orange mō te ika: Ngā mauti nō te whānau kāreka, te mauti puketangata me te toetoe māori e pātata ana ki te tapa o te kōawa.

Ngā tapa o ngā whenua pukewai: Ngā mauti, te harakeke, te fī kōuka me te toetoe māori.

Ngā whenua ka rite tonu te waipuketia: Ngā mauti me te toetoe māori.

Te poapoa manu: te kōwhai, te karamu me te harakeke.

Hei tikanga whānui, whakatōkia ngā mauti kia 1 mita te tawhiti o tētehi i tētehi, whakatōkia ngā otaota kia 1.5 mita te tawhiti o tētehi i tētehi, ā, whakatōkia ngā rākau kia 2-5 mita te tawhiti o tētehi i tētehi. Mehemea e whakapōrearea ana ngā taru, me tata ake te whakatōkanga o ngā otaota, e raru ai ngā taru i te maru.

3. Me tiaki

Mā te tiaki otaota e whaihua ai te mahi whakatō. Kāore e aukatia ana te tupu o te taru i ētehi wāhi kua whakatōkia, ā, mā reira e mate ai ngā otaota maha, ka tupuria ana aua otaota e te taru matomato.

Mā te ū ki te hokihoki ki te tiaki otaota e kore ai e moumou ngā mahi whakarite, whakatō hoki ki tētehi wāhi. Me rite tonu te aukati i te tupu o te taru ki ngā whakatōkanga i ngā tahatika, i ia 3 ki te 4 tau, kia teitei, kia mātotoru rā anō hoki te tupu, e kore ai e raru i te taru. Me hoki ki te tiroiro i ngā otaota hou kua whakatōkia i ia marama i te Kōanga me te Raumatī. Mā te ringa noa iho e huhuti ngā taru i te pūtaka o ia tupu. Me āta tiaki i ngā otaota kei ngā wāhi i kaha tupuria ai e te taru i mua, kei ngā wāhi rānei e pātata ana ngā taru ka kōwaowao i ngā otaota.

Me kōkuhu tupu anō ki ngā āputa, ka mate ana ētehi tupu, kei tupuria taua wāhi e te tarutaru. Kei wareware hoki te patu kīrearea – ka pai ngā rāpeti, ngā hea me ngā pāihamu ki te fitongi i ngā tupu hou. Mā te whakarite tāwhiti, poa rānei e patua ai ngā kīrearea, ā, kei tō kaunihera ā-rohe ētehi pārongo taipitopito.

Ka tere tupu te parakipere, ā, tērā tonu pea me rite tonu te tapatapahi ā haere ake.



Kei te hiahia pārongo anō?

He maha ngā where whakatupu otaota māori e mōhio pū ana ki ngā momo otaota pai mō ngā whenua pukewai me ngā tahatika, māu rānei āu ake tupu e whakamakuru, e whakatō (tirohia ngā aratohu a Environment Waikato, *Planting Natives in the Waikato Region* e kitea ai he kōrero āwhina). E ako ai koe i ngā āhuatanga o ngā otaota māori, tirohia te *New Zealand Plant Conservation Network* i www.nzpcn.org.nz

Ka kitea hoki ētehi hononga ina rapua e

koe ngā whārangi ipurangi mō te 'riparian management' me te 'riparian planting guidelines' i Aotearoa i te pae tukutuku.

Tirohia ēnei: 'A Guide to Managing Waterways on Canterbury Farms' Environment Canterbury www.ecan.govt.nz

'Clean Streams' Environment Waikato's www.ew.govt.nz 'Riparian Planting and Management Guidelines for Tangata Whenua' Ngāi Tahu www.ngaitahu.iwi.nz me Landcare Research riparian planting studies in the Sherry River Catchment (Tasman) www.icm.landcareresearch.co.nz

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

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