

Ngā mahinga kōawa hei painga mō te ika

NĀ NGĀ KŌAWA E PAI ANA MŌ TE IKA, E WHAI WHAITUA ORANGA REREKĒ AI NGĀ IKA TAKETAKE, E WHAI NGĀRARA AI HEI KAI, E WHAI OTAOTA AI HOKI HEI MARU. PĀNUITIA NGĀ MEKA KĀTAHI KA RUKU KI ROTO, KI TE ĀWHINA I NGĀ IKA TAKETAKE!

Te kōawa o Mangakōtukutuku, i Kirikiriroa. Nā Monica Peters, nō NZ Landcare Trust te whakaahua.

Me arotahi ki te wai...

He maha ngā mahi tiaki kōawa e arotahi ana ki te whenua, pērā i te whakatō rākau ki ngā pīnaki me ngā tahatika hei whakaiti i te horonga o te whenua; i te whakarite rārangi mauti tātari hei puru i te kenepuru; i te whakatū taiapa hoki hei aukati i ngā kararehe. Heoi anō, he wero nui ki ngā ika taketake te whai oranga i roto i ngā kōawa. Mā te whakatōtika, mā te whakakotiti, mā te mārau rānei i ngā kōawa, mā te whakatū pā hoki, ka tino rerekē pea te rere o te wai, ā, mā reira pea e kino ai ngā whaitua oranga ika.

Ngā kōawa e pai ana mō te ika

Arā noa atu ngā wāhanga o te kōawa i tua atu i te wai o roto – he wai oruoru, he puna, he kahuwai rerenoa, he tāheke, he hīrere, he wai rōnaki, he ripo, he wai horomi whenua, he rākau wharewhare, he horonga i raro wai anō hoki. E ora ai ngā ika taketake, e tutuki ai hoki te hurihanga ora, me tika ēnei tūhauatanga mō te ika taketake:

- te momo whaitua oranga me rerekē hoki ngā whaitua oranga
- te kounga o te wai (te mahana, te nui o te hau i roto, te purata, te hīmoemoe, ngā whakamōmona)
- te rere o te wai (te nui me te tere)
- te nui o te kai (ngā otaota me ngā ngārara kei roto i te kōawa, kei ngā tapa hoki)
- me ārai atu i ngā kaipatu
- ngā ara heke ki te moana mō ētehi momo ika

Āwhinatia ngā ika!

Whakawāteahia te wai

Ka uaua ake tā ngā ika rapu kai, i te kūkātanga o ngā piha i te waipara o ngā kōawa, ā, mā reira hoki pea e raru ai te hekenga o ngā ika. Ka kati pea ngā otaota apiapi kei ngā tahatika i te kenepuru, engari hei rongoā i te mate i te wā poto, whakatūria he pēra hei ki ngā manga pōharuharu e rere ana ki roto i tō kōawa. Ka kino te wai i te kararehe – aukatihia ngā kararehe, whakaritea hoki he waka whāinu, he papu-mā-ihu rānei hei whāinu i ngā kararehe.

Aukatihia atu ngā kīrearea kaipatu!

Ka whāia ngā ika taketake me ngā ngārara e ngā ika kīrearea pērā i te ika morihana me te kamupūhia. Ko te painga atu mena ka riro mā ngā mātanga tonu e hoepapa ngā ika kīrearea, engari māu tonu e āwhina kia kore ai e hōrapa, mā te āta horoi i ngā poti me ngā taputapu hī ika i mua i te taunga ki wai kē atu, hei hoepapa i ngā toene. Kua rawa e tuku i ngā ika kīrearea ki ngā wai o te taiao – he takahi ture tēnā.

Whakaitihia te mahi whakatika manga

He wā ka purua ngā manga ki te waipara nui rawa, ki te taru, ki te pūkohu wai hoki. Whakaitihia te raweke i ngā manga, mā te whakamahi i ngā rehu kua rēhitatia, i ngā hirou taru rānei, tē whakamahi ai i ngā koko o ngā mīhini kerī hei tango i ngā taru nui. Waiho ētehi manga kia takoto noa ana i ia tau, e ora ai ngā ika. Waiho ngā mahi mō te pito o te Raumatī, mō te fīmatanga rānei o te Ngahuru, hei karo i ngā wā e hua ai ngā ika me ngā wā e heke ai ngā ika.



Ka noho te tāiha uka hei whaitua oranga matua mō ngā ika pērā i te kōkopu. Nā Brenda Aldridge nō NIWA te whakaahua. He hawai. Nā Stephen Moore nō Landcare Research te whakaahua.

Ka whakamahi te ringa kerepeti nō Coromandel, a Barry Brickell i te pereti me te oko hei hanga i ngā arawhata auaha mā ngā ika. Nā Monica Peters, nō NZ Landcare Trust te whakaahua.

Ngā tāiha tātai

Ka whakararu pea ngā tāiha kei roto i ngā arawai, pērā i ngā poro rākau me ngā toka, i te kaiwhakahaere waipuke, ā, he pūmate ki te hunga kauhoe me te hunga whakatere poti, engari me whai tāiha rawa ngā ika kei roto i ngā kōawa:

- hei taumarumarū i ngā au kaha
- hei huna i ngā kaipatu
- hei whakamarumarū i te awatea
- hei taunga, hei maru rānei mō ngā toene
- hei kati, hei taunaki rānei i te kai, pērā i te rau, i te para me ngā ngārara
- hei whakawhānui i ngā momo whaitua oranga rerekē

Waiho ngā tāiha uka ki rō wai, āta whakaarohia i mua i te tangohanga o ngā rākau nui ka taka ki roto ki ngā arawai mehemea kōore he mate ka pā i ērā tāiha.

Whāia te ia

Ka heke te tini ika taketake i waenga i te moana me ngā whaitua oranga ki te taha whakarunga o te awa, i te wā e moroiti noa iho ana ngā ika, engari ka aukatihia te ara e ngā matatara, e ngā pā, e ngā kēti tuku tai, e ngā kōre wai kua hē te waihangatia, ka noho rānei ki runga ake o te kārewa o te wai (ka mutu, koinei te ārai e kitea whānuitia ana).

Kua whakaritea ngā tauira kōre wai i Aotearoa i runga i te kaha o ngā tuna riki, o ngā kōkopu, o ngā kōaro me ngā toitoi ki te koiri i waenga kōhatu, ki te noho ora ki waho i te wai mō te wā poto, ki te pikī i ngā wāhi mākū o ngā hīrere me ngā taha kōre wai. Me mōhio koutou, kāore ngā tauira kōre wai mō te taraute e pai mō ngā ika taketake moroiti ake.

I ētehi wāhi, kāore he take o te whakatū kōre wai e pai ana mō te ika, hei tauira, mehemea he ārai māori kei reira, pērā i te hīrere nui kei te taha whakararo o te awa, kāore rānei he terenga pai i te taha whakarunga o te awa. Ka whaihua hoki pea ngā ārai hei aukati i te hōrapa o ngā ika kīrearea, hei tiaki rānei i ngā ika taketake ka noho wehe noa, pērā i te kōwaro, i ngā ika ka whai hoki i aua wāhi, pērā i te taraute.

Tonoa he kupu āwhina i te kaunihera ā-rohe, i a Te Papa Atawhai hoki, e mōhio ai koe mehemea e tika ana ngā kōre wai e pai ana mō ngā ika, mō roto i tō kōawa.

Mā te kōre wai e pai ana mō te ika e whakaū:

- te āta rere o te wai (me iti iho i te 30 henemita i te hēkona)
- te wātea mai o ētehi wāhi whakatā mō ngā ika (pērā i ngā toka, i ngā pātū hauwai rānei)
- te rerenga o te wai, kia kore ai e heke iho i te 10 henemita te nui o te wai i ngā wā katoa
- kāore ngā ika e mate ki te peke

Ka noho tau ngā kōre wai i te taiao:

- ka whai i te papawai māori mā te whai i te rōnaki noa me te rere tuatahi o te papawai
- mehemea he whānui ake i te kōawa i te wā e rere noa ana te wai
- mehemea he nui, ā, e kore e hipa i te haurua te nui o te wai i te Kōanga
- mehemea kua whakatūria i te pito o te Raumati, i te fimatanga rānei o te Ngahuru, ā muri i te wā e hua ai ngā ika, e heke ai hoki ngā ika

Tukuna ngā ika kia tere noa mā te:

- whakarite papawai pōhatuhatu e āta rere ai te wai
- whakarite paenga māeneene, kua te paenga kōwakawaka, ki runga ake i te wai hei pikinga mō ngā ika
- whakarite wāhi whakatā, mehemea he roa ake i te toru mita te ara

Whakapaitia te kounga o te wai mā te:

- whakakotiti i te wai ka puta i te roma wai horihori, i te rori rānei
- whakataiapa i te kōawa
- whakarite ara mō te wai ngawhā ka rere i te waipuke

Tiakina ngā whaitua oranga ika mā te:

- whakatū ārai kōhatu i te kōre wai hei aukati i te pakarutanga mai o te wai
- whakatū pā kōhatu pākanikani, papa rōnaki kōhatu rānei ki te taha whakararo o te awa hei puna whakatā mō ngā ika
- whakatupu rākau ki ngā tahatika hei taumarumarū i ngā puna whakatā, hei tiaki hoki i ngā tapa o te kōawa

Tonoa te whakaaetanga

He wāhi mō te katoa ngā arawai, ā, ka pā pea ō mahi i roto i aua arawai ki ētehi atu tāngata, ki ētehi atu pūnaha rauropi i te taha whakararo, i te taha whakarunga hoki o te kōawa.

I mua i tō mahi i roto i ngā kōawa, me whakapā atu ki te kaunihera ā-rohe, ā-taone hoki e kitea ai mehemea me whai whakaaetanga rawa taiao, mehemea rānei he āhuatanga e tika ana hei whai māu.

Katau: Ka aukati ngā kōre wai kua whakarewahia, i te tere whakarungatanga o ngā ika. Heoi, e faea ana te whakahou, pēnei i tēnei (kei raro iho nei), kua whakapitihia atu he taura piringa kuku kitakita, e pikī ai ngā tuna ki Roto Harihari.

He whakaahua whakamarutata i tētehi taura hei pikinga mō te matamata. Nā Bruno David, nō Environment Waikato ngā whakaahua.



Mā te Reo, Me te Reo, Mō te Reo



Waikato Raupatu River Trust



Kei te hiahia pārongo anō?

Whakamahia te ipurangi hei rangahau i ngā kīanga matua i ēnei whārangi ipurangi.

'In-stream restoration'

National Institute of Water and Atmospheric Research www.niwa.co.nz

Te Whare Wānanga o Tāmaki makaurau www.cebl.auckland.ac.nz

Te Whare Wānanga o Waitaha www.sustain.canterbury.ac.nz

Te Kaunihera o Tāmaki makaurau www.aucklandcouncil.govt.nz

'Fish-friendly culverts' me 'fish access'

Waikato Regional Council www.waikatoregion.govt.nz

Greater Wellington www.gw.govt.nz

Te Kaunihera o Tāmaki makaurau www.aucklandcouncil.govt.nz

Te Papa Atawhai www.doc.govt.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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