

Te ika taketake i te pāmu

KO TĀ TE KAITIAKI PĀMU PAI, HE WHAI KIA RITE TE PAI, KIA PAI AKE RĀNEI TE PĀMU KA TUKUNA IHO E KOE KI Ō URI I TŌNA ĀHUA I TE WĀ I RIRO AI I A KOE. HE PĒRĀ ANŌ TE ĀHUA KI TE WAI E RERE ANA I TŌ PĀMU. ĀKONA ME PĒHEA E WHAI ORA AI NGĀ ARAWAI MŌ TE HUNGA KEI TE TAHA WHAKARARO O TE WAI, E WHAI HUA AI ANŌ HOKI TŌ PĀMU.

*Tētehi kōawa pāmu
kua tika te whakatōkia.
Nā Monica Peters, nō
NZ Landcare Trust te
whakaahua.*

*He kōkopu. Nā Stephen
Moore, nō Landcare
Research te whakaahua.*



He painga mō te pāmu, he painga mō te ika

He rite te pāmu kāore ōna kōawa ki te ika whai paihikara – me uaua ka kitea! Ahakoa kāore pea e pērā rawa te purata o te rauwiringa kōawa, manga hoki e rere ana i ngā pāmu, kāore e kore he ika taketake, he hātaretare, he rērēwai anō hoki kei roto i aua wai. Tērā pea he whaitua whakaputa hua ngā kōawa kei ngā pāmu kei te taha moana mō te ranga matamata o reira, tērā pea he kōwaro onge kei ngā pāmu hipi kei ngā ika whenua.

Mā te whakarite kia marumaru ō kōawa, kia kaua ai e takahia e te kararehe, e tauria e te parapara me te kenepuru, me te whakarite kia tere pai ngā ika i ngā kōreke, e ora pai ai ngā ika taketake i tō pāmu. Pērā i te pōpokotea a te kaikeri, he tohu pai ngā momo ika me ngā hātaretare kei tō pāmu i te ora o te wai me te pai o ngā mahi tiaki i te pāmu.

- Kaua e tukuna kia horo tō pāmu. Mā te whakatō otaota i ngā paritū, i ngā pakohu me ngā tahatika kōawa e iti iho ai te horo whenua i te pāmu, kia kore ai te kenepuru e tau ki roto i te wai.
- Wai ora, kararehe ora. Ka hora ngā pōkuhu ngaruru patu i te tangata, i te kurī me te kararehe, i te nui rawa o ngā whakamōmona i te wairākau me te parapara; i te wera o te rangi me ngā kōawa kāore e whai marumaru. Aukatihia te pōkuhu ngaruru mā te whakatū taiapa, mā te whakatō otaota hoki ki ngā arawai hei whakamātao i te wai. Ki te kore e taea te whakatū taiapa, whakatūria he waka whāinu kararehe, whakatōkia hoki he rākau whakamarumaru ki te wāhanga o runga o te pātiki, kia kore ai ngā kararehe e whakatata atu ki ngā repo me ngā kōawa.
- Tiakina te puna. He hikuwai whakahirahira ngā whenua pōharuharu e papī ai te wai me ngā puna i te pāmu mō ngā kōawa, ka mutu ka tino whaihua i ngā marama maroke o te Raumatī. Kaua e tangohia te wai o reira, whakatūria kētia he taiapa, whakatōkia hoki ki ngā maui māori me ngā harakeke, hei whaitua kaupare hei ngongo, hei whakapōturi hoki i te rere o te wai pātāua i muri i te patapataiāwhā.
- Kaua ō huamoni e riro i te kerī manga. He nui te utu o ngā mīhini kerī. Mā te whakatū taiapa me te whakatō otaota ki rō manga e raru ai ngā taru i te maru, e aukati ai hoki i te kenepuru, kia iti iho ai ō keringa i aua manga.
- Kia māmā te tuku i te hauota. Mā te waiho i ngā pīnaki e horo haere ana me ngā whenua pōharuharu e wātea ai koe ki te aro ki ngā hua e puta ai i ō whenua papai katoa. Ka heke iho te utu o te wairākau, ka penapena i te wā, i te moni me te ora o te kōawa.

*I MUA: I uru noa atu ngā kau ki te
kōawa, ā, ka tūkinohia ngā tahatika, i
kino hoki te wai i te para.*

*I MURI: Ka whakatūria he taiapa, ka whakatōkia
hoki he otaota ki te kōawa, ka whakatūria he
waka whāinu kararehe. Nā Fred Lichtwark, nō
Whāingaroa Harbour Care ngā whakaahua.*

*He kau waiū me te hipi. Nā
Abby Davidson, nō NZ Landcare
Trust te whakaahua.*





Aukatihia mā te taiapa!

Ehara te kukume kau i ngā repo me ngā arawai i ngā pō marangai o te Hōtoke i te mahi ngahau, ā, kāore hoki e whaihua ā-moni nei ina mate ngā kau, inā hoki ka ngaro tōna \$1500 i ia kau tuku waiū pai ka mate. Huri noa i te motu, e kitea ana e ngā kaipāmu, mā ngā tikanga manaaki taiapa whaihua, pērā i te whakatū taiapa i ngā arawai, ka angitu ā rātou pakihī.

Mā ngā kaunihera ā-rohe, mā NZ Landcare Trust, mā ngā kaimahi o Te Papa Atawhai rānei koe e āwhina ki te whakarite i tētehi mahere whakatō otaota.

Ka whaihua ā-pakihī nei te whakatū taiapa. Nā Monica Peters, nō NZ Landcare Trust te whakaahua.



Mehemea kua kore he otaota māori i ngā tahatika, ki te āta tangohia ngā koiira o reira, ka tere tupu mai anō ngā otaota ki te tapa o te kōawa. Nā Robin Black, nō Hancock Natural Resource Group te whakaahua.

Te ika me te mahinga ngahere

- Kitea ai ngā ika taketake i ngā ngahere paina nā te roa o ngā wā e uka ai aua wāhi me te nui o ngā ngārara hei kai.
- Me mātua whai tāiha rākau uka, me whai maru hoki kia kore ai e mahana rawa, hei whakaruruhau hoki ā muri i te topenga o ngā rākau.
- Me mātua wātea ngā arawai hei terenga mō ngā ika - tohua ngā whakawhitinga kōre e whaihua ana, whakatikaina ērā kāore e whaihua ana.
- Me rere noa ngā mahi whakatika, whakapai hoki i ngā hanganga whakahaere waipara e kouna tonu ai te wai.

| Ngā momo arawai | Te tawhiti i waenga i te taiapa me te maero |
|---|---|
| He kōre pāmu paku < e 2 mita te whānui | Whakatōkia ngā tapa o te rāwhiti me te tonga ki ngā mauti poto, waiho rānei hei mauti matomato e wātea ai ngā torohanga o te mīhini kerī, o te mīhini rehu rānei ki te toro ki te maero |
| Ngā whenua ka rite tonu te waipukehia, ngā whenua papahoro rānei | Whakatūria he taiapa hiko wāpoto ki tua tata atu o te wāhi ka waipuketia, kia āhua 'tawhiti' tonu i te tapa o waho o ngā piko o ngā awa |
| Ngā kōawa iti (e 4 ki te 5 mita te whānui) - ngā whenua rōnaki | Kia 2 ki te 3 mita ki ia 100 mita o ngā mauti pīnaki, tae atu ki te kahiwi |
| Ngā kōawa iti (e 4 ki te 5 mita te whānui) - ngā whenua poupu ake | 10 ki te 15 mita i ia 100 mita o te pīnakitanga |
| Ngā kōawa nui ake / ngā awa > e 5 mita te whānui | > 5 mita, 10 ki te 20 mita mō ngā otaota kei ngā tahatika e tupu noa ana |

He pāmu hei tauira

Ka whakaatuhia e te pāmu Scott, i waho atu o Kirikiriroa, ētehi kōwhiringa hei whakahaere i ngā arawai me ētehi rongoā hei akoranga mā ngā kaipāmu, ka mutu, hei mahi mā rātou i runga i ā rātou ake pāmu.

He mea tautoko ā-pūtea te wāhi whakaatu i ngā whakatōkanga tahatika i te pāmu Scott, e DairyNZ me the MAF Sustainable Farming Fund me Waikato Regional Council. www.dairynz.co.nz

He pakoḥu kua kore i whakamahia, kua taiapatia, kua whakatōkia hoki ki te rākau māori. Nā Monica Peters, nō Landcare Trust te whakaahua.



Mā te Reo. Me te Reo. Mō te Reo



Waikato Raupatu River Trust



Ministry for the Environment
Manatū Ahu i Te Taiao



Kei te hiahia pārongo anō?

Tirohia "A Guide to Managing Waterways on Canterbury Farms" Environment Canterbury www.ecan.govt.nz me "Clean Streams" Environment Waikato www.ew.govt.nz

He tauira rawe kei te Farm Environment Award Trust e kitea ai ngā kaipāmu me ō rātou "Winning Waterways" i www.nzfeatrust.org.nz

Ki te hiahia koe ki te mōhio ki tō kaha ki te whakahaere arawai, tirohia tā Dairy NZ whārangi, "Farm for Tomorrow: How Do I Rate?" www.dairynz.co.nz

Kei te NZ Water and Waste Association ētehi kōrero mō te "Sustainable Drainage Management" i www.waternz.org.nz

Te Reo translation: Pānia Papa, Takatū Associates Ltd.

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.