

Paerewa Paetae

Aronga	Pūtaiao 2.2		
Ingoa	Te tūhura i ngā panoni hauropi o tētahi wāhi whakahirahira ki te Māori		
Kaupae	2	Whiwhinga	4
		Aromatawai	Ā-roto
Marau akoranga	Te Marautanga o Aotearoa		
Kokonga akoranga	Pūtaiao		
Mana rēhita	Kua rēhitatia	Te rā i mana ai	19 Whiringa-ā-rangi 2015
Te rā e arotakengia ai	31 Hakihea 2018	Te rā i puta ai	19 Whiringa-ā-rangi 2015

Te Hononga ki te Marautanga

I ahu mai tēnei paerewa paetae i te Taumata 7 o Te Marautanga o Aotearoa, i whakaputaina e Te Pou Taki Kōrero i te tau 2008.

Te Ao Tūroa, Te Taiao

3(ii) *Ka torotoro i ngā tauira horahora hauropi, ā, ka whakamārama i ētahi take mō aua tauira.*

Ngā Tautake Pūtaiao me ngā Kōrero o Mua

2 *Ka mārama haere ki ngā huatau o te tautake o te mātauranga, kia kite ai i ngā uara taketake o te pūtaiao, he rerekē i ērā o te tangata whenua. Ka mārama haere ki ngā tikanga whakahaere o te mātauranga pūtaiao, me te ako i ngā kōrero mō ētahi tauira whakapai, whakakino rānei. Ka tirohia ētahi take porihanga o ēnei rā e pā ana ki ngā matatika pūtaiao, me pēhea hoki e uruparehia ai.*

E hono ana ki te Papa Whakaako mō te Pūtaiao kei te pae tukutuku nei:

<http://tmoa.tki.org.nz/Te-Marautanga-o-Aotearoa/Taumata-Matauranga-a-Motu-Ka-Taea>

Te Hononga ki ngā Tikanga Aromatawai

Arā ngā Tikanga Aromatawai mō tēnei paerewa paetae, kei te:

<http://tmoa.tki.org.nz/Te-Marautanga-o-Aotearoa/Taumata-Matauranga-a-Motu-Ka-Taea>

Paerewa Paetae

<p>Paetae Te tūhura i ngā panoni hauropi o tētahi wāhi whakahirahira ki te Māori.</p>	<p>Hei tohu i te paetae:</p> <ul style="list-style-type: none"> • Ka tūhura i ngā panoni hauropi. • Ka whakaahua i aua panoni, ā, ka tautohu i ngā huatau hauropi e whai pānga ana.
<p>Kaiaka He kaiaka te tūhura i ngā panoni hauropi o tētahi wāhi whakahirahira ki te Māori.</p>	<p>Hei tohu i te kaiaka:</p> <ul style="list-style-type: none"> • Ka whakamārama i ngā panoni me ngā huatau hauropi e whai pānga ana.
<p>Kairangi He kairangi te tūhura i ngā panoni hauropi o tētahi wāhi whakahirahira ki te Māori.</p>	<p>Hei tohu i te kairangi:</p> <ul style="list-style-type: none"> • Ka kōrero mō ngā pānga o ngā panoni me ngā huatau hauropi e whai pānga ana.

Kōrero Āpiti

E whai ake nei ngā whakamārama o ngā tino kupu, kīanga rānei:

tūhura	Ka whakamahi i ētahi tikanga kōhi raraunga, tātari raraunga, whakamāori raraunga anō hoki e tika ana i roto i te ao pūtaiao, otirā, ka whai hoki i ngā tikanga tuku iho mō te kohikohi me te pūrongo i ngā kōrero ā-iwi, ā-hapū, ā-whānau rānei.
ngā panoni hauropi	<ul style="list-style-type: none"> • te toi tupu, toi heke rānei o tētahi taupori koiora • te korekore haere, te urutomo, te poka noa rānei o tētahi momo rauropi i roto i te pūnaha hauropi • te panoni o ngā āhuatanga ōkiko o te taiao • te panoni o te hurihuri o ngā toiora i roto i te pūnaha hauropi • te rerekē o te noho tahi o ngā rauropi i roto i te hapori • te putanga o ētahi urutaunga kē i ētahi o ngā rauropi • te uru o tētahi momo rauropi whakakino.
wāhi whakahirahira ki te Māori	Ko tētahi wāhi i noho ai, i mahi kai ai, i takatakahi ai ngā mātua tūpuna, i waiho ai rānei hei wāhi whakahirahira i roto i ngā kōrero ā-iwi.

ngā huatau hauropi	<p>Ko ētahi o ngā huatau hauropi, ko:</p> <ul style="list-style-type: none"> • te āhua o te rere o te pūngao, te papatipu koiora i roto i te māwhaiwhai kame • te āhua o te noho tahi a ētahi rauropi i roto i tētahi taupori/hapori, ahakoa taupuhipuhi, ahakoa taukumekume • te pūmau, te panoni rānei o te rerenga koiora o tētahi hapori i roto i te wā • te pūmau, te panoni rānei o te rerekētanga ā-ira o tētahi taupori i roto i te wā • te whiringa māori me te whiringa horihori, otirā, te rerenga ā-ira e whakaawe nei i te puta o te ihu o t/ētahi rauropi • te tauatanga i roto i tētahi hapori i roto i te takanga o te wā.
Ka whakamārama i ngā panoni me ngā huatau hauropi e whai pānga ana.	<p>Te tūhonohono kōrero, taunakitanga hoki kia mārama ai ngā huatau hauropi e pā ana ki ngā panoni hauropi. Tērā hoki te whakamāramahia o ngā take o ngā panoni hauropi i kitea, pērā i:</p> <ul style="list-style-type: none"> • te tope rākau me ērā atu mahi whakamāraakerake • te tipu o te ururua, te whakatōkanga rānei o ētahi tipu kē, tipu hou rānei • te korekore haere o te wao urutapu, o te koiora taketake rānei • ngā mahi ahuhenua • ngā mahi kerī awa, pāpuni awa, ngongo wai rānei • te tuku i tētahi matū ki te wai, ki te whenua, ki te hau rānei • te kerī, ahakoa kerī kohuke, kōhatu, te mahi huarahi, te hanga whare, papakāinga, tāone rānei • te rerekē o ngā tikanga whakahaere i te whenua • ngā kaupapa whakarauora taiao.
Ka kōrero mō ngā pānga o ngā panoni me ngā huatau hauropi e whai pānga ana.	<p>Ko ngā pānga ki te:</p> <ul style="list-style-type: none"> • noho ā-iwi, ā-hapū, ā-whānau rānei, otirā ki ngā tikanga, te reo, me te hauora tangata • taiao me te ao koiora • mātauranga pūtaiao, mātauranga hangarau hoki • ōhanga. <p>Tērā hoki te kōrerohia o ngā mātāpono matatika e hāngai ana.</p>

Kuputaka:

huatau hauropi
koiora taketake
papatipu koiora
pāpuni
puta o te ihu
tauatanga
toiora
urutomo

ecological concept
native/indigenous species
biomass
dam
survival
succession
nutrient
invade

Tātari Kounga

- 1 Me mātua whakamana ngā Kaituku Akoranga me ngā Whakahaere Whakangungu Ahumahi e te Mana Tohu Mātauranga o Aotearoa ka rēhita ai i ngā hua ka puta mai i ngā aromatawai ki ngā paerewa paetae.
- 2 Ko ngā Kaituku Akoranga me ngā Whakahaere Whakangungu Ahumahi kua mana, ā, e aromatawai ana i ā rātou hōtaka ki ngā paerewa paetae, me uru rātou ki ngā pūnaha whakaōrite e tika ana mō aua paerewa paetae.

Ko te tohutoro ki te Mahere Whakamana, Whakaōritenga hoki

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