

# MĀORI VALUES AND WETLAND ENHANCEMENT

GARTH R HARMSWORTH

Landcare Research Manaaki Whenua,  
Palmerston North 4442, New Zealand  
harmsworthg@landcareresearch.co.nz

## 3.TAONGA CLASSIFICATIONS AND SPECIES

Assessing whether culturally significant taonga species are present or absent

Example: Taonga species lists comparing taonga from 1840 to 1880, the present day, and the future,to achieve restoration/enhancement goals.

Taonga species 1840 to 1880	Taonga species Present	Taonga species Future?
Habitats – 1840 to 1880	Habitats – Present	Habitats to re-establish taonga species and mauri
<b>Ngā Ika</b> Tuna (freshwater eels) Īnanga (whitebait) Porohe, paraki (smelt) Piharau, kanakana (lamprey) Aua (yellow-eyed mullet) Kanae (grey mullet) Mohoao (black flounder) Kōura, kēwai (freshwater crayfish) Patiki (flounder) Kahawai	Tuna Īnanga Porohe, paraki	Tuna Īnanga Piharau, kanakana Kōkopu Kōaro Kāeo Kōura, kēwai
<b>Ngā mātaitai</b> Kāeo, kākahi, kuku, kūtai, kahika (freshwater mussel) Pipi Tuangi (cockle)	Pipi	Kāeo, kākahi, kuku, kūtai, kahika Pipi Tuangi
<b>Ngā tipu taketake</b> Wiwi Harakeke Kuta Raupō Tī kōuka Mānuka ( <i>Kunzea ericoides</i> ) Kānuka Kahikatea Tōtara	Wiwi Raupō Mānuka	Wiwi Harakeke Kuta Raupō Tī kōuka Mānuka Kānuka Kahikatea Tōtara

Main groups of unwanted (e.g. introduced, exotic) flora and fauna		
Animals	Plants	Fish
Goats	Crack Willow	Koi Carp
Possums	Grey Willow	Rudd
Stoats	Gorse	Catfish
Rats	Old mans beard	Mosquito fish
Deer	Pine	
Cattle	Blackberry	
Horses	Himalayan honeysuckle	
	Machurian wild rice	
Birds		
Ducks	<i>Lagarasiphon major</i>	Micro-organisms
Swans	<i>Elodea Canadensis</i>	Toxic algae
Canada geese		Parasites, protozoa (e.g. <i>Giardia cryptosporidium</i> )
	Red algae	Bacteria (e.g. <i>E.coli</i> , <i>Campylobacter</i> ), faecal coliforms
	Water buttercup	
	Pondweed	
	Waternet	
Insects		
	Mosquito	

Examples of wetland taonga species



## SELECTED REFERENCES FOR WETLANDS:

- Clarkson BR, Sorrell BK, Reeves PN, Champion PD, Partridge TR, Clarkson BD 2002. Handbook for monitoring wetland condition: coordinated monitoring for New Zealand Wetlands. A Ministry for the Environment Sustainable Management Fund Project. Wellington, Ministry for the Environment. 74 p.  
Available at: [www.wetlandtrust.org.nz](http://www.wetlandtrust.org.nz)
- Harmsworth GR, Tipa G 2005. Maori environmental monitoring in New Zealand: progress, concepts, and future direction. Report for the Landcare Research ICM web site. 29 p.
- Harmsworth G 2005. Motueka Integrated Catchment Management (ICM) Programme – working with iwi. Journal of Water and Wastes in New Zealand (May): 43–48.
- Harmsworth GR 2002. Coordinated monitoring of New Zealand wetlands. Phase 2, Goal 2. Maori environmental performance indicators for wetland condition and trend. A Ministry for the Environment SMF project – 5105. Landcare Research Contract Report LC 0102/099. 65 p. <http://www.landcareresearch.co.nz/research/social/maorindicators.asp>
- Hauraki Maori Trust Board (HMTB) 1999. Hauraki Customary Indicators Report. Prepared for the Environmental Performance Indicators Programme of the Ministry for the Environment. Technical Paper No. 57, Maori Indicators Case Study. 117 p.
- Johnson P, Gerbeaux P 2004. Wetland types in New Zealand. Wellington, Department of Conservation. 184 p.
- Kowhai Consulting Ltd & MfE 2002. Te Purongo. Maniapoto State of the Environment Report: a tribal perspective. Te Kuiti, Kowhai Consulting Ltd; Wellington, Ministry for the Environment. 54 p.
- Mattingley B, Pauling C 2005. State of the Takiwa: cultural monitoring and reporting on the health of our environment – development of the Takiwa Database. Christchurch, Te Runanga O Ngai Tahu.
- Ministry for the Environment (MfE) 2006. Using the Cultural Health Index: how to assess the health of streams and waterways. Te Whakamahi i te Kuputohu Hauora Ahurea: Me pehea te arotake i te hauora o nga pukaki me nga awa wai. Wellington, Ministry for the Environment. 54 p.

