

GREAT LAKES FISHERY COMMISSION

Project Completion Report¹

A Bibliography of the Maori Fishery for Lampreys in New Zealand

by:

John R. M. Kelso
Department of Fisheries and Oceans
Great Lakes Lab. for Fisheries and Aquatic Sciences
1 Canal Drive
Sault Ste. Marie, Ontario P6A 6W4

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Introduction and Background

Freshwater fishes were an important food resource for Maori from the time of their first arrival in New Zealand, perhaps 1000 years ago. Although few freshwater fish species were present (McDowall 1990) what is known of their numerical abundance at the time when Europeans first arrived early in the 1800s, suggests that some species including lampreys, *Geotria australis*, were abundant. Lampreys are still abundant (Kelso and Todd 1993); however, data are inadequate to evaluate whether lamprey abundance has changed in any body of water during any period as a result of exploitation or otherwise.

The New Zealand government has obligations under the Treaty of Waitangi (1840) for natural resources, including freshwater fishes, of cultural and economic value to the Maori. Throughout the history of New Zealand settlement, there has been continual mention in the written and oral record of freshwater fishes used as food. However, only eels (*Anguilla australis* and *A. dieffenbachii*), the species that make up whitebait and the occasional large Galaxid or Prototroctid were taken as food by Europeans (McDowall 1990). Lampreys in New Zealand were almost exclusively captured and consumed by Maori with the possible exception of minor undocumented use by Scandinavians in the first half of the twentieth century.

Consequently, Maori exploitation is the primary source for developing a description of methods for capturing lampreys. To

secure relevant literature I therefore used McDowall (1990, 1993), conducted a computer search from the National Institute of Water and Atmospheric Research Ltd. of New Zealand publications and used the accumulated references as an information resource. The nature of references listed in this bibliography varies widely. References range from carefully documented scientific and historical records to unsupported historic and current literature. *All citations relate to lamprey capture and those marked by * have been copied in part or in full for use by the Great Lakes Fishery Commission. One copy of the appropriate extract or complete document is held in Sault Ste. Marie, Ontario.*

Many accounts are derivative in character. Amongst the derivative accounts, some source material has been published again and again. An example is J.T. Thompson's (1867) account of Maori catching lampreys from the face of the Mataura Falls; this account has been republished in part or in whole by May (1967), Hall-Jones (1971, 1992), Temple (1985) and McDowall (1990). I did not include derivatives when repetition exactly matched the original publication.

I have been discriminating with regard to inclusion of references. Only those references which relate to capture method are included. Written claims, which describe capture and the yield from historical fisheries, by Maori to the Waitangi Tribunal are listed (marked +) but have not been copied because these submissions are based on oral traditions and personal experience and the submissions are found in only a few libraries in the

country. The claims to the Waitangi Tribunal will therefore not be helpful to the Great Lakes Fishery Commission and its agents should the initiative to further develop lamprey trapping techniques increase. All references from New Zealand that might aid an engineer or a study team interested in pursuing methods used to capture lampreys are included. This bibliography of methods and fisheries for lampreys in New Zealand is offered as a contribution to decisions made about alternative methods to reducing sea lamprey abundance in the Great Lakes.

Acknowledgements

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