

**BEFORE THE COMMISSION  
APPOINTED BY THE OTAGO REGIONAL COUNCIL**

**UNDER** the Resource Management  
Act 1991 (RMA)

**IN THE MATTER** Of an application by Dunedin  
City Council for resource  
consent being processed with  
reference RM20.280

**BY** **ŌTOKIA CREEK AND  
MARSH HABITAT TRUST**  
**Submitter**

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**STATEMENT OF EVIDENCE OF ANNE-CLAIRE MAUGER**

**DATED 6 MAY 2022**

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## STATEMENT OF EVIDENCE OF ANNE-CLAIRE MAUGER

### Mihimihi - Introduction

1. My name is Anne-Claire Mauger. I am a PhD candidate at the Archaeology programme, Otago University and a Trustee of the Ōtokia Creek and Marsh Habitat Trust (the Trust). I am authorised by the Trust to provide this evidence on its behalf.
2. The Trust was formed 22 September 2020 with the purpose to enhance and protect the waters in the Ōtokia catchment and surroundings for the use and wellbeing of the Brighton community.
3. Since the Trust's inception, it has been our vision to advocate for the cultural and archaeological values of the Ōtokia landscape, in consultation with tangata whenua and the kaiatiaki Ōtokia Whānau. In this perspective, core cultural values to be restored and uphold are mauri wai, mahinga kai and wāhi tupuna.

### Scope and Structure of Evidence

4. My evidence will address the following matters :
  - (a) The cultural and archaeological significance of the Ōtokia landscape
    - (i) Evidence for human occupation around the Ōtokia catchment
    - (ii) Evidence for mahinga kai practices in the Ōtokia catchment
    - (iii) No consideration to cultural and archaeological significance of the Ōtokia landscape

### The cultural significance of the Ōtokia landscape

5. The Ōtokia creek is valued as a significant natural and cultural landscape by tangata whenua, locals and tourists.
6. The Ōtokia lagoon, river and beach are a natural asset. The attachment of the community to this landscape is expressed by memories of a wide array of activities: fishing, eel catching, paddling, swimming, jumping, sailing, fishing, and surfing.
7. Through the Ōtokia landscape, the local community connects to their ancestors and past activities. The river, the surrounding hills and the beach are part of the cultural landscape that carries local oral stories, from Māori tūpuna to first European farmers. In that regard, the Ōtokia landscape is a wāhi tupuna.



Figure 1: Pounamu tōki, Ōtokia banks (D18.485)

## Evidence for human occupation around the Ōtokia catchment

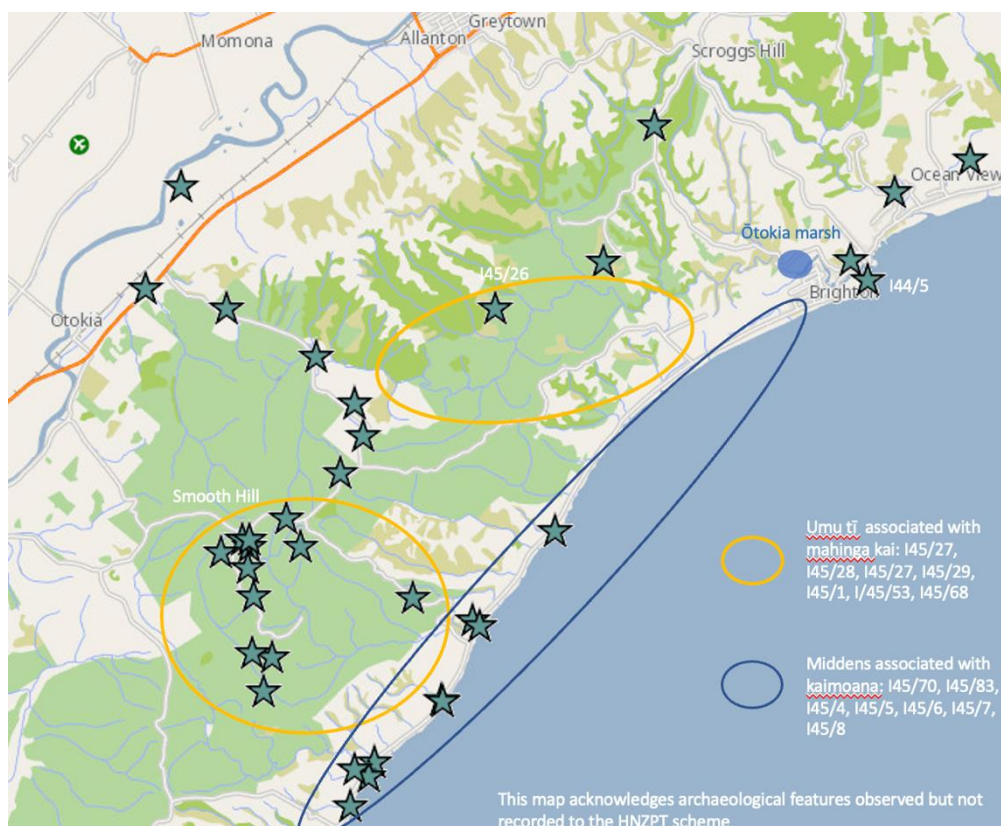


Figure 2: archaeological sites recorded by New Zealand Heritage Pouhere Taonga in the vicinity of the Ōtokia catchment (Anne-Claire Mauger)

8. The Ōtokia landscape has been occupied by humans for more than 700 years. On the coast between the Otago Peninsula/Dunedin and Taieri Mouth, there are only two wetlands<sup>1</sup>. The presence of multiple archaeological and historical sites around the Ōtokia outlines the significance of the marsh and river to human occupation (figure 2 and table 1).

<sup>1</sup> 1 Otago Regional Council, wetlands and estuaries, Dunedin district Wetlands. <https://www.orc.govt.nz>

Table 1: Archaeological sites in the Ōtokia catchment

<b>NZHTP #</b>	<b>Archaeological features</b>	<b>Archaeological attribution</b>	<b>Relation to Ōtokia</b>
I44/5	Basalt working floors, middens	Kāinga, settlement	River mouth
I45/27	Oven associated with midden	Umu tī, mahinga kai	Hill along river
I45/28	Oven associated with midden	Umu tī, mahinga kai	Hill along river
I45/29	Oven associated with midden	Umu tī, mahinga kai	Hill along river
I45/26	Oven associated with midden	Umu tī, mahinga kai	Hill along river
I45/1	Four ovens associated with midden	Umu tī, mahinga kai	Hill along river
I45/53	Two ovens associated with terrace	Umu tī, mahinga kai	Hill along river
I45/68	Oven	Mahinga kai	Hill along river
I45/70	Midden	Mahinga kai, kai moana	Beach at hill foot
I45/83	Midden	Mahinga kai, kai moana	Beach at hill foot
I45/4	Midden	Mahinga kai, kai moana	Beach at hill foot
I45/5	Midden	Mahinga kai, kai moana	Beach at hill foot
I45/6	Midden	Mahinga kai, kai moana	Beach at hill foot
I45/7	Midden	Mahinga kai, kai moana	Beach at hill foot
I45/8	Midden	Mahinga kai, kai moana	Beach at hill foot

I45/9	Midden	Mahinga kai, kai moana	Beach at hill foot
I44/11	Pā Te Rua taniwha	Pā Tūwatawata, fortified settlement	Proximity to Matapunehu lagoon

9. The archaeological evidence attests that first generations of Māori settled at the Ōtokia mouth in the 14<sup>th</sup> century (I44/5). This kāinga is an important early coastal site (Anderson 1982), specialised in the production of basalt tool preforms (figure 4), distributed through coastal exchange networks. The proximity of the kāinga to the marsh was strategic to sustain its population and exchange networks

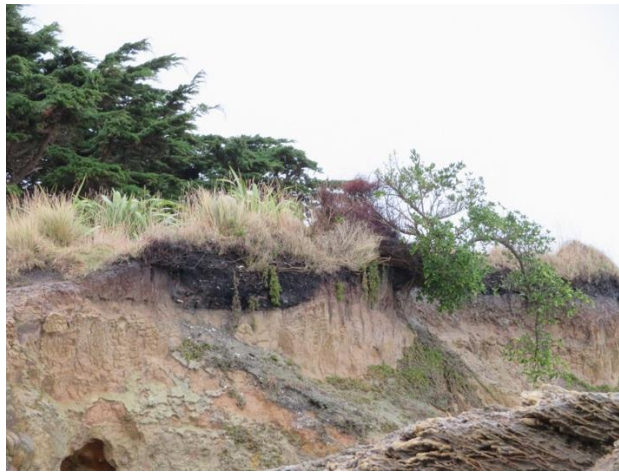


Figure 3 : Eroding midden, kāinga, Ōtokia river mouth (I44/5)



Figure 4: Eroding basalt workshop, kāinga, Ōtokia river mouth (I44/5)

10. The name Ōtokia appears in a Māori document from 1880s, written by Hori Kerei Taiaroa <sup>2</sup>. Among many names recorded for the area at the end of the 19<sup>th</sup> century, Inehu Korako Matene and Hoani Kana <sup>3</sup> mentioned two places of food gathering: Papakaio, the ngaio flat, and Matapunehu, the lagoon.



Figure 5: Breid's Flaxmill on the Ōtokia circa 1900 <sup>4</sup>

11. The first Europeans settled in the Ōtokia vicinity in the 1860s, in farms in the hills and in the township. With the introduction of European farming practices, partial vegetation clearing began to transform the landscape. Cabbage trees and flaxes were then collected from the gullies of the Ōtokia and to be processed by flax mills, established on the river (figure 5).

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<sup>2</sup> Ngāi Tahu Archives, Canterbury Museum

<sup>3</sup> Roberts, S. 1914. Place names of Otago and Southland. Southland Times, 27/6/1914, p8

<sup>4</sup> Hocken Photographs Collections (1285\_01\_009A)



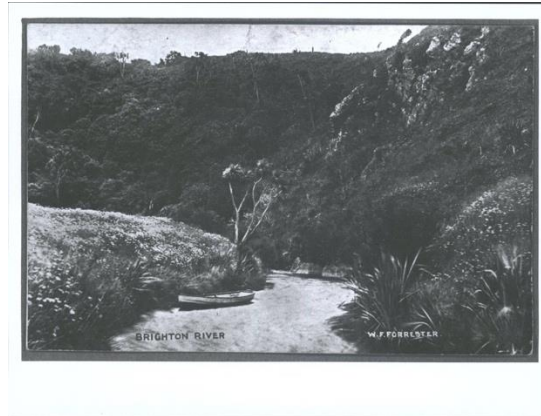


Figure 6: Brighton River circa 1900 <sup>5</sup>



Figure 7: Brighton Beach circa 1900 <sup>6</sup>

12. Brighton township was first surveyed in 1863 to accommodate farming families. In the 1890s, the locality became a beach destination for Dunedin residents. Hotels, shops and boat rentals were developed to accommodate weekenders (figures 6 and 7). A high number of archival photographs from the end of the 19<sup>th</sup> century illustrate these visits, particularly people enjoying a paddle on the river (figure 8).

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<sup>5</sup> Photograph by W. Forrester. Hocken Photographs Collections (0260\_01\_044A)

<sup>6</sup> Photograph by McLean. Hocken Photographs Collections (0260\_01\_036A)





Figure 8: Sneddon sisters on a boat, 1899 <sup>7</sup>

13. Brighton developed in the 20<sup>th</sup> century with a surge of young families moving to the area leading to the establishment of a school and churches. Generations of children have left their trace and memories in the Ōtokia: an old swinging rope, the former sailing channels of the Boating club, an abandoned diving chair, and the rotting jetty of the Scouts club.

#### **Evidence for mahinga kai practices within the Ōtokia catchment**

14. There is archaeological evidence for mahinga kai practiced since the 14<sup>th</sup> century in the Ōtokia landscape.
15. Mahinga kai refers to the practice of collecting resources and managing them to ensure longevity (Anderson 1996), and protecting the mauri of the place. At heart it is a system for managing resources (Williams 2010). Mahinga kai is not restricted to fishing, it includes other activities such as plant harvesting and animal hunting (figures 9, 10 and 13).

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<sup>7</sup> Hocken Photographs Collections (0260\_01\_031A)



Figure 9: Illustration of Māori eel-weiring. 1925 <sup>8</sup>



Figure 10: Illustration of traditional eel drying rack, 1948 <sup>9</sup>

16. There is evidence of the practice of mahinga kai at a few archaeological sites of the Ōtokia landscape. In the Ōtokia mouth village, the investigation of middens revealed species from the marsh, including the rare southern crested grebe and kotuku, the white heron (Anderson 1982). Despite the lack of archaeological records due to the scarcity of archaeological investigations in the area, and the destruction of features due to forestry activities, a series of umu tī (figure 2) are reported along

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<sup>8</sup> Photograph by Leslie Adkin. Hokio stream. Te Papa Museum, Photography Collection (B.021667)

<sup>9</sup> Photograph by K. V. Bigwood. Alexander Turnbull Library, Tourist and Publicity Department Collection (1/2-040047-F)

the Ōtokia river (Allingham 1984). Along with the collection of artefacts found by the river and at the river mouth (e.g. figures 1 and 15), they indicate the practice of mahinga kai. Umu tī were ovens (Knight 1966) used to transform cabbage tree, tī kouka into carbohydrate, kauru (figures 11 and 12).



Figure 11: Transformation of tī kouka stem into kauru <sup>10</sup> (a) Tī kōuka baked stems (b) Tī kōuka fibres and fructose after baking (c) Tī kōuka fructose: kauru



Figure 12: Umu tī on the Otago peninsula, 14<sup>th</sup> century <sup>11</sup>

17. Mahinga kai in the Ōtokia is recorded in 1880 by Hōri Kerei Taiaroa, in a document called the Taiaroa lists <sup>12</sup>. This document provides evidence to the Smith-Nairn commission, in support of the Ngai Tahu claim. It compiled testimonies of kāumatua, who provided main locations and nature of mahinga kai in Otago and Canterbury.

<sup>10</sup> Sue Scheele: Māori plant use database, Landcare Research.

<sup>11</sup> Knight 1960

<sup>12</sup> Ngāi Tahu Archives, Canterbury Museum



Figure 13: Flax cutting circa 1919<sup>13</sup>

18. Mahinga kai also appear in Ngati Mamoe local oral stories. One story depicts a trail for mahinga kai: from the river and marsh the track would cross the forest between the hills to access the Matapunehu lagoon (Stuart 1981), which today has disappeared. Recorded mahinga kai are fish, birds, tutu berries, cabbage tree, flax and ferns.



Figure 14: Illustration of a kāinga nohoanga circa 1920<sup>14</sup>

<sup>13</sup> Photograph by Northwood Brothers. Lake Ohia. Alexander Turnbull Library, Northwood Collection. Ref.: 1/1-006285-G

<sup>14</sup> Photograph by F. G. Radcliffe. Hocken Photographs Collections (1678\_01\_003A)

19. Archaeological and ethnographic evidence attest that Māori occupation in the Ōtokia was a major kāinga associated with mahinga kai from the 14<sup>th</sup> century, and was in the later period a kāinga nohoanga (figure 14). This means a settlement with rudimentary whare, maintained and visited on a regular basis, especially for mahinga kai (Williams 2010). This type of settlement leaves a subtle trace in the archaeological record, due to the low impact of the activities on the environment (Figure 13).

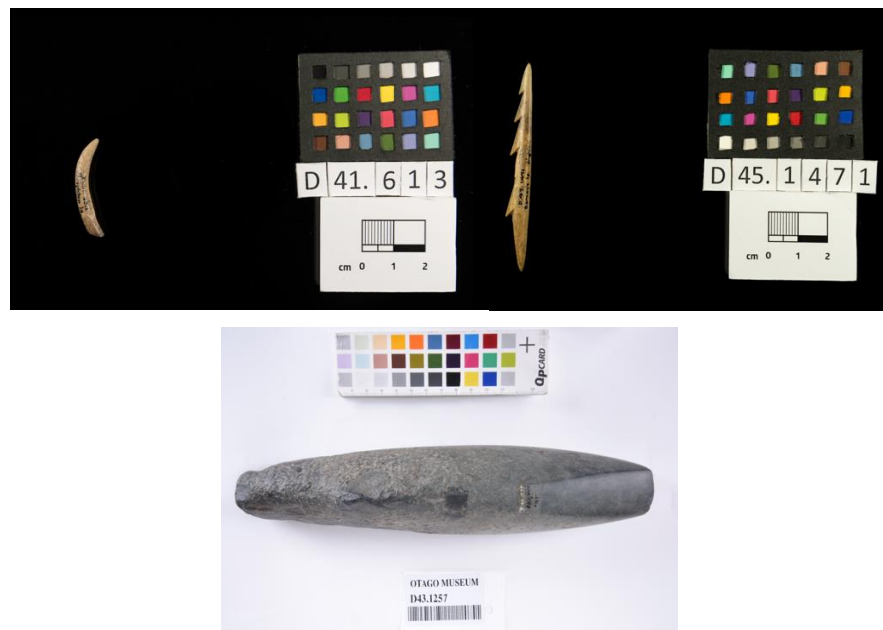
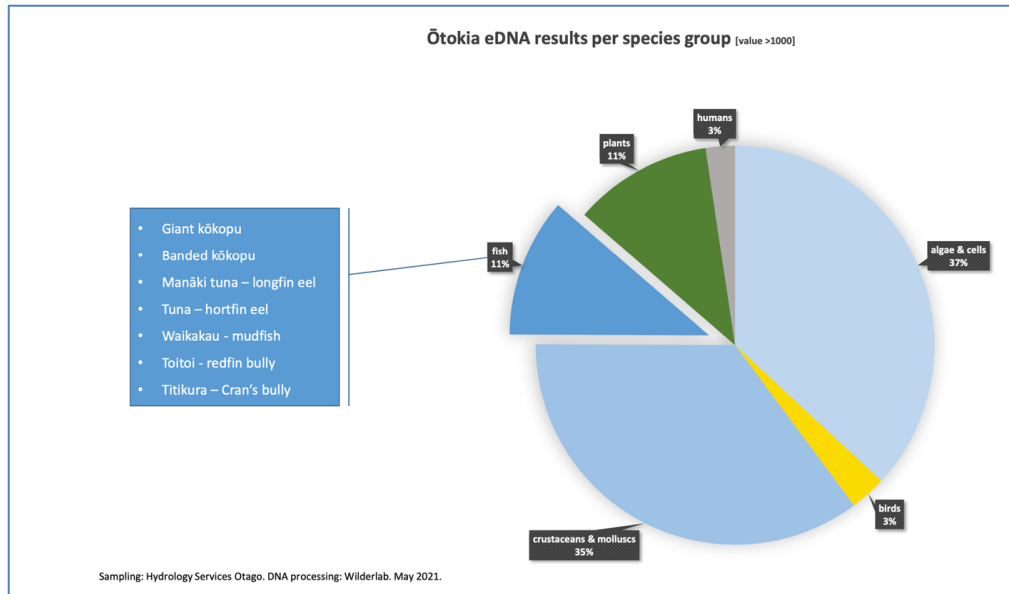


Figure 15: Archaeological evidence for mahinga kai in the Ōtokia catchment: a) Fish hook b) Spear c) Toki <sup>15</sup>

20. Today, reports of people who mention their mahinga kai catch in the Ōtokia (figure 17) are sometimes challenged. An eDNA survey carried last year (figure 16) corroborated these reports and confirmed the presence of endangered taonga species in the Ōtokia river and marsh.

<sup>15</sup> Otago Museum, D41.613, D45.1471, D43.1257





**Figure 16 : Taonga species of mahinga kai: results of the eDNA survey of the Ōtokia river (Ōtokia Creek and Marsh Habitat Trust)**



**Figure 17 : Kōkopu observed in the Ōtokia river (Ōtokia Creek and Marsh Habitat Trust)**

### **No consideration to the cultural and archaeological significance of the Ōtokia landscape**

21. This evidence is provided upon consultation with tangata whenua and the kaitiaki Ōtokia Whānau, especially with kaumātua Paul Rapata, who recently passed away. The Ōtokia Trust did not consult with mana whenua from the Ōtākou Marae, a different hāpu which has rangatiratanga over the area and provided a report to the DCC on that

matter. The Ōtokia Trust has consulted with tangata whenua with whakapapa linked to the area.

22. in the DCC documentation, there is no mention of consultation with the Ōtokia kaitiaki and tangata whenua. There is no mention of the impact of the Smooth Hill landfill project for tangata whenua, particularly regarding their core values of mauri wai, mahinga kai and wāhi tūpuna.
23. In the archaeological assessment provided by DCC, there is no mention of archaeological evidence for the early coastal kāinga and later kāinga nohoanga, for mahinga kai, umu tī and significant wāhi tūpuna. The archaeological assessment undermines the Ōtokia human occupation by suggesting that Māori occupation was restricted to the Taieri river kāinga.
24. If a landfill was established at the headwaters of the Ōtokia, it would directly undermine the community effort to restore the values of mahinga kai, wāhi tūpuna and mauri wai.
25. The risk of leachate escape alone poses a threat to the seven centuries old practice of mahinga of kai in the Ōtokia. It is difficult to imagine how the presence of a landfill at the headwaters of the Ōtokia would be perceived by tangata whenua and locals as anything other than a degradation of the mauri wai and the wāhi tūpuna, regardless of the actual levels of contaminant escape.
26. The Ōtokia Creek and Marsh have nourished communities for centuries. The Trust is unable to see how a landfill can be appropriately sited at its headwaters without doing irreparable damage to the health and wellbeing of the current community and future generations.
27. For these reasons, the Trust opposes the application in its entirety and asks the Commission to decline consent.

Anne-Claire Mauger

6 May 2022



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