Dunedin Botanic Garden harakeke and wharariki project
Minutes of Community Hui
Held Friday 4th of July, 2008
At Te Tumu, School of Māori, Pacific and Indigenous Studies, University of Otago, Dunedin

Hui structure
The hui began at 10am and concluded at 3.30pm. The hui was facilitated by Darryn Russell, Director of the Office of Māori Development, University of Otago. Information was presented at the hui using Powerpoint slides. A printout of all slides is attached at the end of these minutes

Present
Darryn Russell, Debra Carr, Huata Holmes, Khyla Russell, Moana Wesley, Bronwyn Lowe, Rua McCallum, Anna Gorham, Catherine Smith, Phil Latham, Paul Star, Adrienne Mulqueen, Sue Scheele, Mark Brunton, Sēān Brosnahan, Janice Lord, Tom Myers, Chris Holtham, Lisa Phillips, Mark Borrie, Stephen Scott, Roka Cameron, Clare Nicholls, Simon Cox, Natasha Cruthers, Carolyn Campbell, Bec Lodge, Alan Matchett, Liz Girvan, Heather Walker, Ani Kainamu, Heramaahina Eketone, Pip Pehi, Lucy Smith, Christine Keller, Tia Neha, Raechel Laing, Helen Leach, Lorraine Johnston, Rose Harrison

Apologies
Ranui Ngarimu, Phyllis Smith, Kahutoi Te Kanawa, Imogen Inglis, Graham (Tiny) Metzger, Professor Vernon Squire, Kate Berard, Cheryl Wilson, Erina Hurihanganui, Dr Poia Rewi, Brian Niven, Henrik Moller, Barbara Wheeler, Shirley Stuart, Hannah Morgan, Rosie Allen, Mayor Peter Chin, Mick Reece, Phil Glassey, Apanui Skipper, Pereri Hathaway, Shar Brydon, Matapura Ellison, David Mules, Lee Houlihan, Pascale Michel, Lucas Miller, Vicky Totoro

Proceedings
Huata Holmes welcomed everyone in Te Reo, and led the group in a waiata.

Mr Darryn Russell (facilitator), acknowledged Huata’s welcome, read the apologies and agenda, and drew attention to fire exits etc. He announced that the purpose of the hui was informal discussion, and that questions and requests for clarification from the floor were welcome. Mr Russell thanked people for coming to the hui.

Break for cup of tea.
After morning tea, Mr Russell informed the gathering that proceedings were being video taped, and that individuals could request that they not be recorded. An attendance list was circulated for names and contact details to allow the minutes of the hui to be disseminated at a later date.

Dr Debra Carr introduced herself in Te Reo and Welsh. She acknowledged other research team members and Kaimahi Harakeke members, and reported that Kaimahi Harakeke has a positive impact on the project. She then proceeded to present information on the background of the Dunedin harakeke project (see attached printout of slides).

Question from the floor [Huata Holmes]:
Whakapapa is important, but the future is important also. What effect will changes to Lovelock Ave make?

Response [Alan Matchett]
Dunedin Botanic Garden (DBG) has a development proposal planned for the realignment of the road (Lovelock Ave) between Lovelock bush and the Northern Cemetery. The Collection of harakeke along the boundary, and the Rene Orchiston Collection plants will need to be relocated. This has been discussed with the research team, and options are being investigated.

Dr Bronwyn Lowe introduced herself in Te Reo and English, and thanked attendees for coming. She thanked Dr Carr for the over view of the Dunedin Harakeke Project. She then talked about the work that had been carried out over the previous year, and discussed how that work has developed form the original proposal. Support from the Kaimahi Harakeke, FRST, colleagues at the University of Otago, and from staff at the DBG was acknowledged. Questions and comments from the floor were welcomed throughout the presentation. The presentation began by describing the spheres of knowledge supporting the project (Mātauranga Māori, history and Western science) and describing the location of the harakeke and wharariki cultivar Collection in the Dunedin Botanic Garden. Results of the research where then presented in sections The first section discussed historical research being done on Pākehā connections with the Collection. The second section discussed the research being done on the properties of selected cultivars, using Mātauranga Māori and Textile Science methods. The third section discussed investigations into the microstructure of the selected cultivars. The fourth section of the presentation discussed research on the botanical characteristics of the cultivars. The fifth section outlined proposals for research to be carried out in the coming year. A printout of all slides used in the presentation is attached to these minutes.
Section 1: Pākehā history of the Collection

Comment from floor [Sue Scheele]

Poa is a cookianum [comment difficult to hear]

Question from the floor [Stephen Scott]

Are there collections of plants overseas, with records of flaxes that have been exported?

Responses

Dr Carr has been in contact with gardens in Ireland and Britain, however, these collection are modern (1960s). Flax was reportedly taken to Ireland in 1789, and there are also reports of cultivation around Dundee.

DBG staff have contacted Kew gardens (Britain), and are waiting for a reply.

Harakeke was exported out of New Zealand from early times. There are reportedly large plantings in France.

Harakeke was used for rope making.

Cultivar names can be generic rather than specific.

Comment from floor [Tom Myers]

Jane Wright, a former curator at the DBG sent divisions of harakeke to Manaaki whenua, and made maps of the location of plants growing at the DBG. These earlier maps will be compared to current maps.

Section 2: Mātauranga Māori and Textile Science investigations of cultivar properties

Question from the floor

Which leaves on the plants were chosen for investigation?

Response

The younger leaves are in the middle of the fan and older leaves on the outside. It is important to compare leaves that are the same age. Leaves were selected on the basis of previous work and used the third pair (ie first pair of leaves outside the awhi rito).

Question from the floor

What time of year were leaves harvested?

Response

November-late spring, and this is a good time to harvest in Dunedin.

Break for Kai

Mr Russell welcomed everyone back after lunch, and commented that the agenda was likely to finish earlier than planned.

Dr Bronwyn Lowe continued to present the gathering with information on the progress of the research to date.
Section 3: Microstructure investigations of selected cultivars

Question from the floor
Which leaf was used to investigate microstructure? [Comparing microstructure slide]
Response
Both Leaf 3
Comment from the floor
‘B’ was silkier than ‘F’

Dr Lowe reported that rapid assessment of the Cemetery border cultivars was made in response to the proposed re-development of Lovelock Ave.

Section 4: Botanical characteristics of selected cultivars

Question from the floor
How was colour assessed?
Response
Attempts were made to use Royal Horticultural Society colour charts, but assessment by ‘eye’ was found to be more efficient when working outdoors with the harakeke. Colour assessment was done by the same individual.
Comment from the floor
Some bushes flower more prolifically than others, but there is variation from year to year. The number of koladi (flower stalks) is still worth measuring.

Question from the floor
Does flowering of harakeke indicate a good summer?
Response
Perhaps, or perhaps it indicates good growth for the previous year. It is highly variable.

Comment
It is unlikely that questions about flowering will be answered in this 3 year study, but there is an opportunity to take the measurements.

Question from the floor
Is there much variation in the colour of the flowers?
Response
Yes. Also plants have flowers at different angles. Uaka is the name referring to seed pod angle.
Section 5: Proposals for research during the coming year

Comment
Many songs revolve around flax, so it is important to record the songs.

Question from the floor
What is cellulose?

Response
It is the skin around the cells that whītau is composed of, and it makes them strong.

Floor opened for discussion
Rua will lead the research into oral and archival Māori History with steering and advice from Huata.

Question from the floor
Is much known about the history of the flax industry and the cultivars used?

Response
Mostly uncultivated flax was used. There is information about this in the Hocken Library.

There was continued support for ongoing research into the history of the DBG. Naming of cultivars will arise from their history and features, and from the perspectives of the Kaimahi as they become more intimate with the plants. Naming will be done at the end of the project.

There was some discussion about investigation into composition and microstructure. Issues raised included:

- Should this level of science be investigated?
- What impact would there be on cultural use?
- What would be done with the scientific information?
- Who will own the information?
- Do Māori have the right to allow or disallow this type of research?

Originally, the research team had wanted to measure ultimate fibre dimensions, but had abandoned the proposal in response to concerns from Kaimahi that there may be wider commercial implications for that kind of information. Proposed measurement of cellulose content and crystallinity raises the same issue, and needs to be discussed more fully. Kaimahi will continue to function in the role of discussing and approving/disapproving of proposed scientific investigations.
The effects of processing (e.g. addition of oil) harakeke fibre will not be investigated in this project, but could provide a possible topic for another project in the future. There are some indications that traditional knowledge may extend out side of Otago (e.g. West Coast), and a trip is being planned.

Manaaki whenua using DNA analysis of the Rene Orchiston collection plats to identify where the plants came from. An invitation was extended to do the same for the DBG plants, and Kaimahi will discuss this.

A hui will be held next year to pick up on themes discussed today. Publication/dissemination of information will wait until the end of the work, as this will be less distracting for the researchers.

A brochure or similar aimed school science be produced as a form of dissemination. Perhaps a CD would be a useful format for dissemination as oral history interview could be included as well as data, and it would be cost effective. Rob Tipa may be approached to write an article for Te Karaka.

Further ideas for dissemination were welcomed. It is desirable to have multiple levels of dissemination, including divisions of the plants themselves. For divisions of the cemetery border plants, Tom suggested people contact Alan Matchett.

It is desirable that the DBG protect harakeke even if an interim site is required. A relocation plan is desirable. The research team have plans to move plants to private land. Volunteers are required to clean plants prior to removal 26 July and the last week of August. Plans for moving the plants should be sent to hui attendees. Looking at many varieties of harakeke is challenging but good. The diversity of interests among the Kaimahi is positive.

Hearing about all sides of the project (history, science etc) had been interesting. The research team were thanked for their work on the project. Attendees were thanked or their contributions to the hui.

Huata closed the hui with a karakia and waiata.