



# GLOBAL STRATEGY FOR PLANT CONSERVATION WORKSHOPS: SUMMARY REPORT





Inaugural meeting of the New Zealand Plant Conservation Network

Museum of New Zealand *Te Papa Tongarewa*, Wellington

2 August 2003

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held at the Museum of New Zealand Te Papa Tongarewa, Wellington, New Zealand on Saturday 2 August 2003.

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# EXECUTIVE SUMMARY

The inaugural meeting of the New Zealand Plant Conservation Network was held on Saturday 2 August 2003 at the Museum of New Zealand *Te Papa Tongarewa*, Wellington. More than 100 people attended the meeting representing plant nurseries, botanic gardens, universities and colleges, the Department of Conservation, territorial authorities and botanical societies. Objectives for the day were to officially launch the New Zealand Plant Conservation Network as an organization and set priorities for plant conservation based on the framework established by New Zealand's ratification of the Global Strategy for Plant Conservation.

The Global Strategy is a new initiative to specifically address plant conservation and was developed by Botanic Gardens Conservation International, in collaboration with technical and professional bodies around the world. The Strategy has sixteen targets designed to guide conservation of threatened species and ecosystems. It recognises that effective, long-term conservation will involve a wide range of partners—governments, institutions, NGOs, and local communities. The establishment of the New Zealand Plant Conservation Network means that Target 16 of the Global Strategy has already been achieved.

Seven workshops were held during the meeting on Global Strategy targets. Key recommendations were that:

- The Network must help in collection of information needed to complete threatened species lists. The Network must publicise gaps in our knowledge of biodiversity e.g., algae, fungi, bryophytes etc. The Network must raise awareness of the reasons for protecting plant communities and species. The Network must promote through the website, methods to fill information gaps, particularly for Data Deficient species.
- The Network must lobby government to ensure international obligations to list threatened species are met. The Network must lobby relevant agencies and funding bodies to fulfil Target 2 and lobby for adequate resourcing.
- The Network can establish a group of key stakeholders and arrange a meeting to develop the national process for an Important Plant Area project.
- The network can organise a workshop to develop an Important Plant Area site selection manual (using the European manual as a basis).
- The Network should approach the Millennium Seed Bank in London (UK) as a strategic partner in establishing an *ex-situ* repository for native seed.
- The Network should promote utilisation of a percentage of threatened plants in all revegetation programmes where appropriate.
- The Network must undertake a stock take of the current *ex-situ* status of threatened species at botanic and private gardens and existing *ex-situ* projects.
- The Network should review legal protection mechanisms for native plants used globally and determine how they mesh with New Zealand legislation.
- The Network must pursue legal protection for native plants through scoping out issues and options and reviewing overseas experience and developing a process.
- The Network must identify plant education resources and plant education programmes that currently exist and undertake a stock take of current practice.
- The Network should promote examples of good practice in plant conservation education.
- The Network should identify gaps in the plant education programme and work out how to fill the gaps by preparing an education strategy for the Network.

- The Network should set up regional plant conservation networks (10 in total) and by the end of the first year have 4 regional networks.
- The Network should build volunteer capacity
  - Year one undertake a needs analysis
  - Year 2-3 create appropriate standards for volunteer training
  - Year 2-3 design appropriate training workshops
- The Network should immediately prepare and maintain a "yellow pages" on web identifying who is doing what and maintain.
- The Network must develop relationship with iwi.
- The Network must promote the website and opportunities to store cultural information about plants on the site and advertise good plant projects.

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## INTRODUCTION AND BACKGROUND

The inaugural meeting of the New Zealand Plant Conservation Network was held on Saturday 2 August 2003 at the Museum of New Zealand Te Papa Tongarewa, Wellington. More than 100 people attended the meeting representing plant nurseries, botanic gardens, universities and colleges, the Department of Conservation, territorial authorities and botanic societies. The objectives for the day were to:

- Launch the New Zealand Plant Conservation Network as an organization and
- Set priorities for plant conservation based on the framework established by New Zealand's ratification of the Global Strategy for Plant Conservation.

The vision of the network is that *no indigenous plant species or community will become extinct nor be placed at risk as a result of human action or indifference.* More information about the Network may be found at <u>www.nzpcn.org.nz</u>.

# **GLOBAL STRATEGY FOR PLANT CONSERVATION**

Since the Convention on Biological Diversity (CBD) was ratified in 1992 there has been a continuing decline in the status of the world's plant life. This has resulted in a new global initiative specifically to address plant conservation. It is led by Botanic Gardens Conservation International, in collaboration with technical and professional bodies around the world.

They proposed a Global Strategy for Plant Conservation with sixteen targets designed to guide conservation of threatened species and ecosystems. The strategy recognises that effective, long-term conservation will involve a wide range of partners—governments, institutions, NGOs, and local communities. The strategy has well-defined and achievable goals for integrated (*ex situ* and *in situ*) conservation of plant diversity, linked to targets for research, information management, public education and awareness to attain these goals.

The Global Strategy for Plant Conservation may be obtained through the home page of the New Zealand Plant Conservation Network website (<u>www.nzpcn.org.nz</u>) or through the web site of the Botanic Gardens Conservation International (<u>www.bgci.org.uk/</u>)

The establishment of the New Zealand Plant Conservation Network means that Target 16 of the Global Strategy has already been achieved.

## **PURPOSE OF THIS REPORT**

Workshops were held during the meeting on several targets of the Global Strategy for Plant Conservation. Targets subject to workshops are shown in Box 1. The purpose of this report is to summarise the results of those workshops including recommendations concerning the future work of the Network. A list of Network members is provided at the end of this document. Box 1: Targets of the Global Strategy for Plant Conservation that were the subject of workshops at the inaugural meeting of the New Zealand Plant Conservation Network.

- **Target 2**: A preliminary assessment of the conservation status of all known plant species and communities (at national, regional and international levels).
- **Target 5**: Protection of 50 per cent of the most important areas for plant diversity assured.
- **Target 8**: 60 per cent of threatened plant species are in accessible *ex situ* collections and 10 percent of them included in recovery and restoration programmes.
- Target 11: No species of wild flora is endangered through international trade.
- **Target 14**: The importance of plant diversity and the need for its conservation is incorporated into education and public awareness programmes.
- **Target 15**: The number of trained people working, with appropriate facilities in plant conservation, is increased, according to national needs.
- **National target**: Integration of iwi in threatened species recovery and education programmes.

# TARGET 2: A PRELIMINARY ASSESSMENT OF THE CONSERVATION STATUS OF ALL KNOWN PLANT SPECIES AND COMMUNITIES (AT NATIONAL, REGIONAL AND INTERNATIONAL LEVELS)

## Aims

- To determine how New Zealand can meet this target.
- To determine the role of the network in undertaking this assessment.

# Facilitator

Cathy Jones, Department of Conservation – Botanist

# Summary of recommendations and feedback

Priorities for assessing plant conservation status in New Zealand

- Promote coordination of efforts between agencies, iwi, NGOs and interested individuals in assessing plant status.
- Development of plant community classification.
- Development of regional threatened species lists.
- Information about status of non-vascular plant species and fungi.

#### Role of the network in achieving these priorities

- Seek resources for assessing conservation status of all plant species.
- Assist with collation of information about plant species status and publicise gaps in knowledge.
- Act as liaison with IUCN over international listing process.
- Encourage development of lists of threatened plants and communities (both national and regional) and promoting involvement of all agencies and public.
- Coordinate development of a classification system for plant communities acknowledging there is a need to look at overseas models.

#### First steps – recommendations

- The Network must help in collection of information needed to complete threatened species lists. The Network must publicise gaps in our knowledge of biodiversity e.g., algae, fungi, bryophytes etc. The Network must raise awareness of the reasons for protecting plant communities and species. The Network must promote through the website, methods to fill information gaps, particularly for Data Deficient species.
- The Network must lobby government to keep up with other countries with regard to international obligations to list threatened species. The Network must lobby relevant agencies and funding bodies to fulfill Target 2 and lobby for adequate resourcing.

# Background

- It was noted that most of our threatened flora are endemic and therefore internationally important.
- Since the 1930s, lists have been prepared of vascular plants considered to be nationally threatened in New Zealand. In the 1970s and 1980s a more formalised system was set up and 'Red lists' were prepared using international IUCN criteria.

- The IUCN system for classifying threatened species has limitations. In the 1990s New Zealand modified the IUCN criteria and categories were chosen to suit the New Zealand situation. New Zealand species did not fit the IUCN criteria very well.
- Several countries have done this in various ways, though the majority still uses the IUCN system.
- The current national system of threat assessment and classification for vascular and non-vascular plants includes all native species, with the plant section operating under the umbrella of the New Zealand Botanical Society and funded by DOC.
- Some Department of Conservation Conservancies maintain lists of plants considered to be regionally threatened in their areas.
- New Zealand does not have a system for classifying and assessing regional, national or international status of plant communities.
- New Zealand criteria for threat assessment do not correlate completely with IUCN criteria and therefore there has been no accurate international assessment of the status of New Zealand native plants according to the international system.

## Issues and points arising

- The current New Zealand system for national assessment of plant threat status seems good and should be able to serve the purpose with a few changes to the process:
  - publishing the lists quickly after the assessment process;

 allowing all interested parties plenty of time to make the submissions before the committee meets to assess threats;

 making sure a wider sector of the community is aware of the submission process and feels able to contribute;

- ensuring the committee comprises a representative group of botanists.

- The New Zealand system is perhaps applicable to other countries, particularly island nations; therefore there is a need to publish the system in an international journal so that a valuable international contribution can be made. It was noted that the IUCN criteria were revised in 2002 (?) to take more account of island situations and this must be looked at as there may be less difference between the two systems than there used to be.
- Lists of regionally threatened plants are the responsibility of regional councils, public etc, not just of the Department of Conservation.
- A framework/system is required for classifying plant communities. There is potential for adjusting the plant classification and listing systems to suit. There is a need to take note of the fact that there are communities containing threatened plant (or animal) species and threatened communities which do not contain threatened biota. There is a need to research species interactions within communities and a need to promote links with other disciplines e.g., invertebrates, herpetefauna, birds etc.

# TARGET 5: PROTECTION OF 50 PERCENT OF THE MOST IMPORTANT AREAS FOR PLANT DIVERSITY ASSURED

## Aims

- To determine how New Zealand should identify its most important areas for threatened plant species and communities.
- To determine whether an Important Plant Area programme should be run in New Zealand.

## Facilitator

John Sawyer, Department of Conservation – Plant ecologist

## Summary of recommendations and feedback

#### Priorities for protecting Important Plant Areas in New Zealand

There was strong support for undertaking an Important Plant Area project in New Zealand with the view that it would be beneficial in several ways:

- Good advocacy for plant conservation in New Zealand and throughout Oceania.
- Good for providing a baseline of what is the current protection afforded important plant areas in New Zealand.
- Good for auditing whether other protection mechanisms for ecological systems (adopted by other organisations such as the Department of Conservation) are working.
- Good for prioritising future protection efforts for native plant life.

Role of the network in achieving these priorities

- Act as the lead organisation for the IPA project.
- Build relationships with key stakeholders.

First steps – recommendations

- The Network can establish a group of key stakeholders and arrange a meeting to develop the national process for an Important Plant Area project.
- The network can organize a workshop to develop a site selection manual (using the European manual as a basis).

# Background

Questions were asked about our current state of knowledge regarding important plant areas. For example, do we know enough already to be able to identify important plant areas? What gaps (such as fungi and mosses) are there in our knowledge? Do we know the extent to which New Zealand's Important Plant Areas are already protected? Is 50 percent too low a target for a developed country with an advanced conservation programme? How much would an IPA project cost and what would be the benefits?

If an Important Plant Area programme is run then it should also provide information on how to protect sites (not just legal options but also any physical protection required).

It was decided that the criteria used in Europe for identifying IPAs need greater definition? The words 'Significant', 'Exceptional' and 'Outstanding' are subjective. More criteria may be

added, than currently used in Europe, to allow for important plant sites of cultural importance to be identified. Developing an IPA site selection manual for Australasia may be an option. In Australia a bioregional approach has been taken looking at sites with regard to endemism and working out how to protect maximum endeminism.

It was noted that many sites in New Zealand that would qualify as IPAs are privately owned and that there was no legal obligation to follow European system. It is possible that the Network could seek for inclusion of plant conservation targets during the forthcoming Biodiversity Strategy review.

Research may be undertaken to determine whether sites identified as part of an IPA process are the same as those identified during other key area identification processes (such as those being adopted by the Department of Conservation).

In conclusion it was the view that an IPA project in NZ would be beneficial in several ways:

- Good advocacy for plant conservation in NZ and throughout Oceania.
- Good for providing a baseline of what is the current protection afforded important plant areas in New Zealand.
- Good for auditing whether other protection mechanisms for ecological systems (adopted by other organisations such as the Department of Conservation) are working.
- Good for prioritising future protection efforts for native plant life.

The Network could facilitate (or lobby for) establishment of a steering group of key parties to develop the project. Key stakeholders may include: Department of Conservation, Ministry for the Environment, local government and landowners. There was general support for the Network starting an IPA project as it would aid conservation and protection of important sites.

# TARGET 8: SIXTY PERCENT OF THREATENED PLANT SPECIES ARE IN ACCESSIBLE *EX-SITU* COLLECTIONS, AND TEN PERCENT OF THEM INCLUDED IN RECOVERY AND RESTORATION PROGRAMMES

## Aims

- To determine how threatened plants may be managed more effectively in *ex-situ* collections.
- To determine how to improve efficiencies at including threatened flora in re-vegetation programmes.
- To determine how this target is to be met in New Zealand.

# Facilitator

Jack Hobbs – Auckland Regional Botanic Gardens Curator

# Summary of recommendations and feedback

Priorities for establishing ex-situ collections of threatened plants

• Determine current status of *ex-situ* holdings of threatened plants and the extent to which these are available for use in species recovery.

#### Role of the network in achieving these priorities

- Set standards for best practice in collection and management.
- Advocate use of threatened species (e.g., to councils for them to adopt a species).
- Assist in coordination of NZ Botanic Gardens (with respect to involvement in threatened species programmes).
- Improve training for expert propagators.

#### First steps – recommendations

- The Network should approach the Millennium Seed Bank in London (UK) as a strategic partner in establishing an *ex-situ* repository for native seed.
- The Network should promote utilisation of a percentage of threatened plants in all revegetation programmes (where they are appropriate).
- The Network must undertake a stock take of the current *ex-situ* status of threatened species at botanic and private gardens and existing *ex-situ* projects.

# Background

- Political continuity is required (especially local councils) for effective management of exsitu plant collections.
- The New Zealand Network of Botanic Gardens could be strengthened through the work of the New Zealand Plant Conservation Network.
- 100 percent of regional species in *ex-situ* collections is a worthy goal.
- National Seed Bank is vital and Millennium Seed Bank at Kew (UK) could be a strategic partner and potential financial supporter.
- Establishment of a National Botanic Garden is an option but probably not realistic due to regional differences in climate etc.
- Income streams for *ex-situ* management require investigation.

- Corporate volunteerism can raise funding opportunities for *ex-situ* work.
- Private collections could contribute, although this raises issues (such as what private use can be made of the plants (e.g., sale) and how do they obtain plants).
- Commercial growers already curating threatened plants and this is not recognised.
- Potential for greater use of threatened plants in amenity situations (e.g., traffic islands and in urban plantings).
- Councils could assume specific responsibilities for local species in their districts.
- Responsibilities beyond borders—considered that immediate priority lies with regional and national responsibilities first.
- Community involvement—potential for greater participation (e.g., Wellington F&B home nursery scheme).
- Ex situ goes beyond conserving just species to maintaining local genetic integrity.
- Guidelines are required to ensure genetic reprehensive collections are established and these should equate to 80 percent of measured parental population.
- The Network should be wary of imposing horticultural criteria when selecting propagation material.
- Collection of plant material from the wild can be problematic (with regard to permits).

# 10 percent of species included in recovery and restoration programmes

#### How is this target to be met in New Zealand?

- Department of Conservation to be asked to send recovery plans to New Zealand Plant Conservation Network.
- Species lists required for each area (council, reserve, and region).
- Clear links required between target and existing and planned programmes of species recovery.
- Introduce a percentage of threatened plants into all revegetation programmes (e.g., regional council soil conservation plantings).
- Planned management programmes must be tailored to species/habitat required—not just gardening in the landscape.
- It is more important to run successful programmes than achieving stated percentage target.
- Every Council should adopt specific plant groups or species.
- The group additionally considered the proposition that 90 percent of critically threatened plants should be in recovery programmes—it was agreed that ideally 100 percent of critically threatened plants should be in such programmes.

#### Efficiencies

- Detailed management plans for each project / region should consider the available resources.
- Better site / ecology analysis for each threatened plant is required.
- Collaborative partnerships are needed. We should not do everything ourselves and we should improve role definition for different partners.
- Provide technical expertise. Propagation expertise is a key requirement.
- Ongoing funding commitments must be secured.
- List of current projects should be prepared as the basis of future planning and schedule of stakeholders.
- Regional Councils have a role in preparation of strategic plans for biodiversity conservation.
- The Network could coordinate NZ Botanic Gardens and what support they provide.

# TARGET II: NO SPECIES OF WILD FLORA IS ENDANGERED THROUGH INTERNATIONAL TRADE

## Aims

- To determine whether CITES provide adequate protection for New Zealand's native plant life.
- To determine whether legal protection of New Zealand threatened plants is required and how this is to be achieved.

## Facilitator

John Sawyer, Department of Conservation – Plant Ecologist

## Summary of recommendations and feedback

Priorities for legal protection of plants in New Zealand

• Greater protection for acutely threatened plants in New Zealand.

Role of the network in achieving these priorities

- Advocacy for protection of native plant life.
- Build relationships with organisations affected by process of legal protection of plants.

First steps – recommendations

- Review legal protection mechanisms for native plants used globally and determine how they mesh with New Zealand legislation.
- Network pursues legal protection for native plants through scoping out issues and options and reviewing overseas experience and developing a process.

# Background

CITES is a valuable tool but works most effectively in protection of tropical plants (e.g., Orchidaceae). Some legislation may be needed to cover species in trade especially native timber trees.

The Wildlife Act may work for protection of New Zealand's plant life in the same way as it does for lizards. It seemed illogical to provide legal protection for some native species and not others.

The Resource Management Act 1991 can be effective for protection of native plants. However, it was considered that legal protection of New Zealand plants would be a more valuable target. It was noted that legislation works in other parts of the world (e.g., Western Australia where all native flora is protected by law).

# Past work

The Native Plant Protection Act 1934 cannot be revived but demonstrates that legal protection for native plants is not a new concept in New Zealand. A draft bill was prepared in 1980s by Brian Molloy and David Given. This would be worth reviewing to see if it has anything useful that could be resurrected.

# TARGET 14: THE IMPORTANCE OF PLANT DIVERSITY AND THE NEED FOR ITS CONSERVATION IS INCORPORATED INTO EDUCATION AND PUBLIC AWARENESS PROGRAMMES

## Aims

- To identify priorities for plant conservation public awareness and education in New Zealand
- To determine the role of the network in achieving those priorities

# Facilitator

Wendy Barry, WWF conservation teacher

# Summary of recommendations and feedback

Priorities for plant conservation education and public awareness in NZ

- To raise general awareness amongst everyday New Zealanders about the threats, threatened species and threatened habitats, to the same level of awareness about threatened fauna, using interdependence between plants and animals as leverage. For example, the relationship between bats and Dactylanthus, people know about bats, can use that knowledge to introduce awareness about the plants associated with it.
- Target formal education sector.
- Bring about policy change at national and local government levels.
- Make plants accessible to people. Share positive messages about them and the relationships between people and indigenous plants.

#### Role of the network in achieving these priorities

- Build education capacity amongst membership.
- Advocacy for education. Especially with MfE, DOC and MoE.
- Build relationships with other networks involved with plants and environmental education e.g., NZAEE, NZERN.

#### First steps – recommendations

- Identify resources and programmes that currently exist (contract out a stock take).
- Promote examples of good practice.
- Identify gaps and works at how to fill the gaps by preparing an education strategy for the network.

# Participant responses

Participants were asked to respond to four questions about plant conservation and education. The answers are listed below and can be used for further work when addressing Target 14.

What individuals and organisations are responsible for providing education about plant conservation?

- Botanical societies
- Ministry of Education
- Rangers at Department of Conservation/Regional Council camping areas and visitor information centres

- Parliamentary Commissioner for the Environment
- TLAs
- Forest and Bird
- NZ Ecological Restoration Network
- Schools
- DOC local, regional and national focuses
- Various trusts e.g., Otari
- University, techs
- Parents
- Care groups and community volunteer groups
- Zoos
- Scouts, guides etc
- Garden centres
- Media e.g., Holmes, TV
- NZAEE
- Botanic gardens and public parks
- Environment Centres
- Suburban garden groups
- TOPS Training opportunity Programmes for young people
- Retired groups
- Garden magazines

#### What messages, knowledge and skills should plant conservation education provide?

- Sense of urgency, crisis
- Monitoring practices for school groups
- Uses old and new
- Botanical principles such as genetics etc that help drive conservation needs
- Unique status of NZ plants
- Taxonomy
- Field identification
- Examples of conservation stories
- Conservation status
- Before and after of restoration
- Plant life and relationship with animals
- Individuals can make a difference through direct action and having a voice
- All are descendents of Tane
- Plants are living organisms with special needs
- Applied horticultural skills
- Why we should bother with plant conservation at all
- What we should consider as acceptable. Old people have seen the changes but young are starting from status quo

# What existing plant conservation programmes/resources do you know of? What are the key messages, skills and knowledge provided?

- Kaipatiki Ecological Restoration Network
- Enviroschools and Enviroschool Awards
- Waiora Regional Council

- NZ Ecological society
- QE 2 Trust
- Botanical societies
- Karori Wildlife Sanctuary
- Care groups (regional councils)
- Forest and Bird Kiwi Conservation Club
- DOC community relations programmes, especially for different audiences and ethnic groups
- Otari Wilton's Bush native botanic garden and trust
- Auckland Zoo
- Te Whanau Kotahi Ora
- Project Crimson
- TLA public education strategies
- NZERN especially website and plant listing
- ISAAC Centre Lincoln University
- Magazines LIANZ, Home and garden
- Maggie Barry
- Landcare Research plant and fungal biosystematics programme
- Maungatautari Ecological Island Trust
- NZAEE and the directory of EE <u>www.eednz.org.nz</u>
- Nga Manu trust
- Ngauruora Kapiti project

What audiences should plant conservation education programmes target?

- Early childhood, primary, secondary and tertiary students
- Local community groups
- Landowners
- Ratepayers
- Ministers and decision makers
- Families
- Media
- Gardeners
- Non traditional audiences e.g., arts community
- Ethnic groups
- Websites for children
- Garden designers
- Horticultural workers
- Garden centre shoppers
- Corporate sponsors
- Developers
- Businesses
- Overseas visitors
- Council staff
- Iwi
- Teachers
- TLAs
- Garden centres
- Visitors to botanic gardens

## Small group discussions

Participants were then asked a further four questions to discuss closely in small groups

What are some opportunities for improving education about plant conservation?

- Media TV, Maggie Barry
- Te Papa
- Zoos
- Learning Media and other books
- Educational tours
- Promotion of website to schools, teachers, communities etc
- Events page on existing website
- Native planting around public sites council policy
- New secondary school NCEA
- Network needs an education plan
- Practical element of tertiary education programmes
- Corporate sponsorship for publicity
- TV documentaries on NZ flora
- Make it sexy dynamic and exciting
- Teaching resources for children
- Crises stories plants saved in the nick of time
- Farmers need to know how to make natives work for them e.g., soil conservation, fences etc

What are some potential barriers to education about plant conservation?

- Lack of enthusiasm amongst responsible organisations
- Funding
- Plants are not appealing
- Lack of knowledge
- Implementation perceived to be too hard
- Inertia
- Lack of time
- Arenas, meeting places
- Motivation within people and audiences
- Knowledgeable people
- Generating interest
- Making it applicable to communities and lifestyles
- Traditional knowledge
- Lack of a national framework
- Access e.g., wheelchairs
- Access to private land
- Relevant materials
- Tutors
- Reliance on volunteers and amateurs
- Not a priority
- Modern culture e.g., shopping malls, sipping wine on the deck, TV and video games
- Ecofundamentalism purist greenies

What are the priorities for plant conservation in New Zealand?

- Increase skill base in key groups e.g., DOC, regional councils
- Getting the message across to other education organisations
- Using an iconic species e.g., kaka beak
- Get some threatened species into common garden cultivation. Use project crimson as a role model
- Plant conservation into school curriculum
- School nurseries
- Education on taxonomy especially of rare species
- Media exposure interesting angles
- Overcome barriers
- Need to increase membership. Follow up with DOC, Botanical Society, TLAs to increase those in the NZPCN information loop
- Identify target audiences
- Secure resources
- Development of appropriate resources

What role should the NZPCN play in education and public awareness?

- Coordination (Currently fragmented and at different levels)
- Identify gaps
- Provide up to date information from specialists
- Need to advertise themselves and services/resources available to education providers
- Marketing to raise awareness of urgency and issues
- Continue with website goals
- Use political clout
- Network represents a wide base of botanical knowledge. Use it for political value, lobby for objectives
- Network could take an active role in implementation of the biodiversity strategy
- Speakers in a public forum

# TARGET 15: THE NUMBER OF TRAINED PEOPLE WORKING, WITH APPROPRIATE FACILITIES IN PLANT CONSERVATION, IS INCREASED, ACCORDING TO NATIONAL NEEDS

## Aim

• To determine what plant conservation training programmes are needed and how these should be delivered.

## **Facilitators**

Michele Frank and Glen Lauder

# Summary of recommendations and feedback

Priorities for plant conservation training in New Zealand

- Build and sustain volunteer capacity.
- Ensuring shared resources e.g., microscope, reference text, are available.
- Ensuring people with skills, expertise and knowledge are known and accessible.
- Sustain and extend the skills of existing specialists.
- Promote the sharing and transfer of skills, expertise and knowledge between organisations e.g., Department of Conservation, Local Government, Botanic Gardens, CRI, Universities, and active conservation groups etc.

#### Role of the network in achieving these priorities

- Build and sustain volunteer capacity.
- Undertake a needs analysis. Identify the spectrum and level of skills need to effectively manage threatened plants. Identify existing capacity and gaps.
- Develop or advocate an appropriate family of standards (which can amongst other things facilitate the move of a volunteer into paid work).
- Develop training programmes.
- Ensuring shared resources e.g., microscope, reference text, are available.
- Create a network of resource centers. Facilities should pool resources, microscopes, books etc.
- Ensuring people with skills, expertise and knowledge are known and accessible.
- Yellow pages on web i.e. who is doing what.
- Sustain and extend the skills of existing specialists.
- Identify ways of extending skills. Input from LGNZ biodiversity capacity building programme.
- Promote the sharing and transfer of skills, expertise and knowledge between organisations e.g., Department of Conservation, Local Government, Botanic Gardens, CRI, Universities, and active conservation groups etc.

#### First steps – recommendations

- Set up regional Plant conservation networks (10 in total). Year one have 4 regional networks set up.
- Build volunteer capacity
  Year one undertake a needs analysis

- Year 2-3 create appropriate standards for volunteer training
- Year 2-3 design appropriate training workshops.
- Develop a "yellow pages" on web of who is doing what. Year one and ongoing.

## Background

Skills and capacity for native plant conservation management was considered with three dimensions:

- 1. In situ conservation
- 2. Ex situ conservation
- 3. Taxonomic/systemic

A needs analysis is required to identify gaps and priorities for these three areas.

## Discussion

The focus of the discussion was on building net capacity to the level required across all three areas.

- New Zealand is a small country where expertise can move between organisations and yet still be available.
- Recruiting does not necessarily add to net capacity (it may just shift it).
- "Losing" staff does not necessarily mean a loss of capacity, especially if people's whereabouts is tracked and access to their experience is retained.
- Skill and knowledge can be maintained and capacity can be built by networking people to build teams with the full range of skills needed (not every organisation needs the full skill set).
- Net capacity can be built with a focus on maintaining active participation and avoiding the loss of capacity when skilled people cannot secure continuity of employment (e.g., those with taxonomic skill).
- Maintaining a pool of volunteer capacity requires sustaining actions.

## Skills

There is a large range of skills across three main areas needed, from on-the-ground practical skills through to PhDs.

In situ

Project management and setting priorities Legal protection Restoration Threat management Integrated management Weed control GIS

Ex situ

Propagation Horticultural skills

#### Тахопоту

Identification and classification

## Other points

- Create the demand for sustained threatened plant conservation. Promote botany in universities and Polytechnics.
- Threatened Plant should be integrated into the school curriculum. Need to upskill and motivate teachers.

# NATIONAL TARGET: INTEGRATION OF IWI IN THREATENED SPECIES RECOVERY AND EDUCATION PROGRAMMES

## Aim

• To determine how iwi are to be more effectively engaged in plant conservation programmes such as species recovery and education.

#### **Facilitators**

Robyn Smith and Barbara Mitcalfe

## Summary of recommendations and feedback

Priorities for effectively engaging iwi in plant conservation programmes

- Establish relationship with iwi
- Determine plant conservation priorities for iwi (including culturally significant plants)
- Increase training of iwi in plant conservation

#### Role of the network in achieving these priorities

#### First steps – recommendations

- Network to develop relationship with iwi
- Promote the website and opportunities to store cultural information about plants on the site and advertising good plant projects

## Background

Bicultural opportunity for involvement including learning from iwi:

- stories of the plants
- uses of the plants
- past planting by Maori

Matariki planting times are there to be used. The Network must learn protocols/kawa. The issue of WAI 262 is real and may affect the work of the Network. Long-term plant conservation processes are good for involving iwi (e.g., seed collection, propagation, growing on, planting and releasing).

Resources are available. The ARC ethno-botanical garden has stories, history and cultural information. The Landcare Research website also has some information. However, some plants hold no cultural significance.

Plant conservation awareness programmes developed for the whole population must have a component aimed at Maori.

## Barriers

Asking to involve iwi in plant conservation might appear patronising unless iwi are asked what they would like done by the Network.

Plant information is not usually available in Maori language. There is a need to discuss what plants are not appropriate in an iwi's rohe (e.g., pohutukawa and karo in Wellington). Personal/internal barriers and shyness may also prevent projects getting underway.

There are few Maori in technical roles and therefore scholarships are required to encourage advancement. It is difficult to find skilled 'plant people' in iwi (there are some involved with rongoa).

Iwi do not always have capacity in terms of people and resources. There is a conflict of understanding of time scale for advising of meetings. A verbal approach could be better than writing. A list of regional threatened plants could be taken to iwi to see if they can sponsor a plant or plants taking examples of the plants as a visual ID.

The Network must recognise the problems of access to plants of cultural significance and that some plant information may have been lost.

## **Establishment pathways**

The Network must use key links with iwi. For example, Kawpapa Atawhai managers in the Department of Conservation. Many organisations have an equivalent (e.g., Massey University, Wellington City Council). There is a need to identify members of Network that already have iwi contacts.

The Network must remember the time factor in dealings, processes take time and the network must be patient. If there is no response to a letter, then ring a contact. Personal touch to marae chairman works. Face to face meetings are often more effective.

Iwi could be asked to establish process for doing projects such as restoration plantings on marae. It is recommended that existing knowledge be tapped. Start with plants of cultural significance and build from there. It was suggested that 'low-key' plant training courses be run on marae. The Network should tie restoration projects into cultural significant plants. The Network should ask iwi to chose plant conservation projects and perhaps make gifts of threatened plants to iwi.

The Network should seek to have members of iwi in Network and on the Council (e.g., Holden Hohaia has been advising the Network). The concept of sharing information and passion must be adopted. The Network must be trusted to listen to iwi issues. The website may be used to convey information. The website could be used to demonstrate successful plant conservation projects and how they worked.

A bilingual pamphlet for the Network could be developed and Network meetings may be held on marae. The Network could investigate establishing Maori scholarships at all levels of plant expertise and aim to have Maori in top positions influencing plant conservation.

The Network could develop resources for schools on plants and/or restoration. The Network may also involve community nurseries with schools, growing then planting, joint projects with other organisations. The Network must ensure plant conservation themes are included in school curricula and involve schools in the doing. The Network may develop plant education kits and approach communities through schools.

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