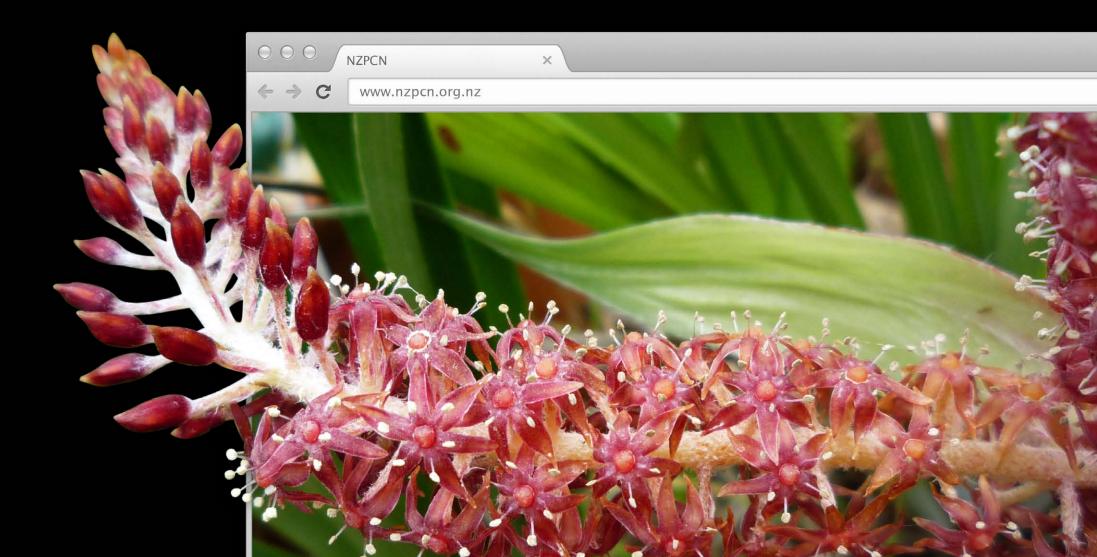


NZPCN Website Strategy 2012–2017



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Executive Summary

close to 500,000 visits annually

The New Zealand Plant Conservation Network (NZPCN) is New Zealand's only non-government organisation solely devoted to the protection of New Zealand's indigenous plant life. Its website is the primary tool used by the Network to communicate with its members and New Zealanders about plant conservation. The website receives close to half a million visits annually.

This website strategy has four themes and sets twelve targets. These targets highlight priority work for the NZPCN with regard to its on-line delivery of plant information. They include:

Content: Improve the website content including:

- Completing species details pages as quickly as possible
- Adding plant distribution data to the flora mapping system
- Illustrating all plant taxa on the website and updating the image library

Engagement: Increase the website audience by providing information in a variety of formats including:

- Using simpler language on the species pages in addition to the existing details and scientific descriptions
- Redesigning the website interface to improve search engine optimization and adopt search engine friendly urls
- Widening the page format to provide a larger canvas for communicating information and optimizing the homepage to improve interaction
- Through the use of smart phone apps and mobile versions of the website to reach a larger audience
- Through on-line training courses
- Through an RSS feed of home page news items
- Through collaboration with other providers of plant biodiversity information in New Zealand and Oceania

Security: Maintain a secure platform for the website and ensure regular back up of the web data

Resourcing: Make the Network website self-financing through sponsorship, advertising, donations and increased annual sales from the website shop so that website hosting, annual maintenance and implementation of the actions in this strategy are all resourced adequately

The strategy gives each action a priority for completion. The strategy identifies 42 Priority 1 actions. These are the most urgent and important and should all be completed by end of 2014. A costed action plan must be developed immediately that sets out the timetable for implementing priority actions.

Network Vision

plant images from more than 2440 photographers

The New Zealand Plant Conservation Network (NZPCN) is New Zealand's only non-government organisation solely devoted to the protection of New Zealand's indigenous plant life. Network membership is open to anyone and includes landowners, schools, botanists, horticulturists, botanic gardens, universities, central, regional and local government, community groups, gardeners and many individuals.

The NZPCN was established in 2003 with the vision that

"no indigenous species of plant will become extinct nor be placed at risk of extinction as a result of human action or indifference, and that the rich, diverse and unique plant life of New Zealand will be recognised, cherished and restored."

In 2002 the convention of Biological Diversity adopted the Global Plant Conservation Strategy (GSPC) to promote a common effort towards halting the loss of plant biodiversity worldwide. The strategy highlighted that without plants, there is no life. The functioning of the planet, and our survival, depends upon plants and therefore preventing the continuing loss of plant diversity is of critical importance to humans and the planet. The Convention on Biological Diversity invited relevant international and national organisations to endorse the GSPC and contribute to its implementation, including adopting its targets. NZPCN accepted this challenge and committed to achieving its targets at its inaugural conference in 2003. Those targets have since been revised and up-dated in a new Global Strategy (2011 – 2020¹) which was adopted by the Conference of the Parties to the Convention on Biological Diversity at its tenth meeting in Nagoya in 2009.

http://www.plants2020.net/files/Plants2020/popular_guide/englishguide.pdf

¹ Suzanne Sharrock and BGCI (2012), *Global Strategy for Plant Conservation – a guide*. The Secretariat of the Convention on Biological Diversity and Botanic Gardens Conservation International

2.0

Purpose of this Strategy

approximately

50

Phenology
Recorders

The purpose of this strategy is to deliver the Network's website vision. In this way the strategy will assist the Network in achieving the society's goals and the targets of the Global Strategy for Plant Conservation most effectively. This includes contributing to the delivery an on-line world flora by 2020.

This strategy provides direction for the on-going development and improvement of its on-line plant information system for the next 5 years, including a set of prioritised actions and guidance on how it will identify and reach target audiences and work with its partners.

The strategy will demonstrate to potential funding agencies that the Network is committed to a collaborative solution to the delivery of plant information via its website and to achieve practical plant conservation outcomes.

The strategy will also be used to raise awareness throughout New Zealand, and amongst global partners, of the functionality of the Network's current web system and the ways it will be further developed over the next 5 years.

This website strategy focuses on several key ingredients.

Content

Without good, accurate content there is no need for a strategy.

Engagement

Can people access the content easily? Is it being delivered clearly and effectively? Are web pages set up to optimize search engine discovery? And, is there a strategy for social networks and for the use of social media with clear objective to connect with potential website users? Are we making the best use of information maintained by other organisations concerned with New Zealand plant biodiversity?

Security

Is the website in a secure environment?

Resourcing

Are the website funding arrangements sustainable to achieve maintenance and on-going development?

This website strategy will be reviewed by the end of 2014 but will be updated regularly as new ideas and initiatives are developed by the Network to achieve its goals and vision.

3.0

Network Website Vision and GSPC Targets

more than
23,000
plant
images

The vision of the Network website is "to deliver, to all New Zealanders, the most accurate and up-to-date information to support plant conservation activities in New Zealand".

Priorities for the Network will include working towards the provision of a complete on-line flora of all New Zealand plants, as well as using the website as the basis for educating people about plant conservation especially the conservation needs of threatened species and ecosystems. The following objectives and targets of the Global Strategy for Plant Conservation are therefore of direct relevance to the NZPCN's website strategy. They are:

Objective I: Plant diversity is well understood, documented and recognized

Target 1: An online flora of all known plants.

Target 2: An assessment of the conservation status of all known plant species, as far as possible, to guide conservation action.

Objective IV: Education and awareness about plant diversity, its role in sustainable livelihoods and importance to all life on earth is promoted

Target 14: The importance of plant diversity and the need for its conservation incorporated into communication, education and public awareness programmes.

Objective V: The capacities and public engagement necessary to implement the Strategy have been developed

Target 15: The number of trained people working with appropriate facilities sufficient according to national needs, to achieve the targets of this Strategy.

The achievement of other Global Strategy targets will also benefit from an on-line plant information system. They are:

Target 5: At least 75 per cent of the most important areas for plant diversity of each ecological region protected with effective management in place for conserving plants and their genetic diversity; and

Target 10: Effective management plans in place to prevent new biological invasions and to manage important areas for plant diversity that are invaded.

4.0 Website Targets



The Network website is one of the primary methods the NZPCN uses to communicate with its members and New Zealanders about plant conservation. The website now receives close to half a million visits annually. The Network has set ten targets for the next 5 years in order to work towards achieving the website vision. There are four main themes for these targets: Engagement; Content; Security; and Resourcing.

The targets include improving the way the website works for existing users but also improving the way the Network communicates about plants so that it can reach new and larger audiences. The importance of on-going governance and securing funding to maintain and improve the website are also key targets. Finally, the Network has targets for how it will build and maintain partnerships to deliver plant information more effectively to New Zealanders and to expand the team involved in running the website. Those website targets are:

Content

- 1. Complete the remaining species pages for the New Zealand flora by 2017 including non-vascular, exotic and seaweed (macroalgae) species
- 2. Fully illustrate all plant taxa with photographs and/or illustrations (e.g., 1114 exotic and 165 native vascular plant species are still to be illustrated)
- 3. Provide information about New Zealand ecosystems in a similar format to species details pages by 2017
- 4. Provide flora distribution maps using data from all possible sources

Engagement

- 5. Double the current website visitation by 2017 to 3000 visits per day
- 6. Ensure all potential users and all audiences interested in native and exotic plants in New Zealand are aware of, and regularly use, the Network website
- 7. Promote the Network as a trusted leader in plant conservation in New Zealand through plant conservation programmes, competitions and the annual favourite plant vote, through communication of key plant conservation messages and conservation techniques and through collaboration with other existing custodians of New Zealand plant information.
- 8. Redevelop the website design to widen the format and improve search engine optimization by end 2014

Website Targets continued

detail pages for more than 7,500 plant taxa

Security

9. Ensure the website is secure and in an environment that provides for uninterrupted delivery of plant information

Resourcing

- 10. Make the Network website self-financing through sponsorship, advertising, donations and an increase in annual sales from the website shop by 2017
- 11. Increase the size of the website team involved in the day-to-day management of the website
- 12. Use the website to increase support for the Network in its work to achieve practical plant conservation outcomes

93%
of native vascular species are illustrated with photographs

The Network is largely run by volunteers and the programme of work surrounding the website is no exception. There is a small team of people that currently have website roles (see Table 1). In addition to the people actively involved in running the website there are also many people that provide information or images the website.

The website currently has plant images taken by approximately 240 photographers. The website also has approximately 50 people registered as Phenology Recorders that post their observations to the website on a regular basis.

Increasing the size of this website team will increase the capacity to maintain and update the website and troubleshoot any issues that may arise.

Table 1: Current roles for Network website development and maintenance

Website role	Description of role	Person
Webmaster	Website maintenance and security	John Sawyer
	Contract management with web developer	
	Monitor usage	
Image management	Checking and uploading images	Jeremy Rolfe
		John Sawyer
Native species database and nomenclature	Updating of website native species names database	Peter de Lange
Exotic species database and nomenclature	Updating of website exotic species names database	Vacant
Plant images	Provide accurate images of plants	More than 200 photographers
Species details pages	Contract work to complete text in species details pages including descriptions, habitat	Peter de Lange
	and distribution.	NIWA
		Mike Thorsen
Newsletter	Edit and upload the monthly newsletter to the website and provide information on its content to the metadatabase.	Eric Scott
News items	Load news items to the website home page	Eric Scott
		Vacant
Facebook page and Twitter feed	Feed plant conservation related stories out from the Network website and other	Tim Park
	sources to generate interest amongst Facebook and Twitter followers.	Jesse Bythell
		John Sawyer
Forum	Monitor and moderate forum queries and responses	Vacant

continued

Plant Distribution mapping Clongs Water Haustangata East Rustangata East Rensington Permit Prives Raumanga Rustangata Rensington Permit Prives Raumanga Rustangata Rustangata Rensington Permit Rustangata Ru

5.1 Funding the Network Website

The Network is funded through the general membership fees and project grants from government and non-government sources. In addition, various sponsors have provided financial support for aspects of the Network website development. The Network will continue to explore links to corporate sector and to seek grants and sponsorship to improve the Network website.

Until now advertising has not been considered for the website besides promoting major website sponsors. This is the preferred option whilst the Network can afford to run the website without the need for additional advertising revenue. It is believed that without advertising the Network is able to communicate more clearly about plants and plant conservation to web users without distraction.

5.2 Website Resources

Since it was launched in August 2003 the Network website has developed quickly. At that time the information on the website merely consisted of the names of some threatened vascular plants and several images of one species. Since then it has grown to become one of the world's most detailed flora websites providing in excess of 23,000 plant images and species details pages for more than 7,500 plant taxa including native and exotic vascular plant species as well as threatened fungi, liverworts, mosses and lichen.

As of 2012:

- 93% of the native vascular plant species are illustrated with photographs (165 species still to be illustrated)
- 55% of the exotic vascular plant species are illustrated with photographs (1114 species still to be illustrated)
- Users spend approximately 12 minutes on the website during each visit

The website resources have grown to include an on-line shop, a plant quiz, a built in glossary, a national flora mapping system (with close to 1.5 million plant records), a phenology recording system and a tool to map plant observations. The website also has information devoted to ecosystems, a forum to ask questions and a separate section devoted to publications including back issues of all New Zealand's regional botanical society journals. The website has a built in PDF maker which allows website users to harvest information from the website and download species data as PDF factsheets, or to make their own flora books. The Network also has a voting system to allow website users to vote annually for their favourite native plant.

continued



Much of this work has been achieved through support from Terrestrial and Freshwater Biodiversity Information System (TFBIS). This is the government's fund to support the conservation of New Zealand's indigenous biodiversity, by increasing awareness of and access to fundamental data and information about terrestrial and freshwater biota and biodiversity. The Programme is one of a number of initiatives introduced in July 2000 to implement the Government's commitment to achieving the goals of the New Zealand Biodiversity Strategy.

5.3 Existing Projects Underway

There are a number of existing initiatives underway to deliver more website functions and features. These include:

- Writing of a further 200 native vascular plant factsheets and 200 exotic aquatic plant factsheets
- Expanding the flora mapping system with additional plant distribution data from other sources
- Building an ecosystem database
- On demand publishing of plant books

These initiatives will continue but are also included in the strategic programme below to demonstrate what is already being done in the context of the new ideas and new directions.

5.4 Measuring Effectiveness of the Website

It is difficult to measuring the success of a website in achieving plant conservation goals as it appears to be a passive medium for educating and raising awareness. For example, it is impossible to say whether the existence of the website is having demonstrable impacts on practical plant conservation activities in New Zealand.

However, the website now receives close to 1500 visits each day (close to 500,000 visits annually). In additional more than 21,000 images are viewed daily and users spend between 10 and 15 minutes on-line during each visit. At a workshop held in March 2012, participants described a number of tangible plant conservation outcomes that were a result of the Network's website and related information systems. These included:

- Establishing good relations with landowners through gifting of plant books made on the website
- Dairy farmer being converted to using native species through becoming aware of the Network and its website
- Changing behavior of gardeners resulting in them switching to native species
- Community restoration groups making use of threatened species in their planting programmes

continued



Besides using regular (annual) surveys of web users needs, some other measures that can be used to determine how effective the website is being in achieving its vision are listed below. This will be used in reporting to the national Network Council about the website and its use and effectiveness.

- Number of website visitors becoming members
- Annual renewal of membership
- Number of issues and complaints
- Number of species pages viewed and downloaded
- Number of website citations and external links to the website

The Network also knows what people are searching for when they access the website. The most searched for plant species on the Network website are:

- Chatham Island forget-me-not
- Kakabeak

• Aeonium arboreum

Kowhai

Rimu

Totara

Pohutukawa

Tree nettle

Pingao

• Fish-gut plant

Napuka

King fern

continued

5.5 Reviewing Progress

As part of implementing this strategy it is important to review regularly how much progress is being made and to review priorities. This review process will be led by the Network's national council and occur by the end of 2014. This will involve reviewing data on website usage, on what parts of the website are being used most and reviewing changes requested by members. A review of website users needs will be done from time to time in addition to the website feedback systems. This will lead to an annual update of website development and maintenance priorities.



6.0 Website Development

This section highlights some important areas of work for the Network to maintain and continue to improve its website for new and existing audiences. Priorities are shown for each action although these may change depending on funding availability. These are:

Priority 1: Urgent and important (to be completed within the next 2 years by end of 2014).

Priority 2: Urgent or important (to be completed by end 2015).

Priority 3: Not urgent or not immediately important (to be completed by end 2017).

6.1 Improving Access to Information for Existing Audiences

Priority audiences that are already well catered for by the Network's information systems are:

Network members

Biosecurity staff

Field staff

Botanical specialists

Political advisors

• Landscape gardeners

Council parks and reserves staff

Existing audiences	Improvements needed and priority	Explanation
Network members Botanical specialists Landscape gardeners Biosecurity staff Political advisors Council parks and reserves staff Field staff	 Priority 1 Complete the existing species details as quickly as possible (including weed control techniques) Widen the page format to provide a larger canvas for communicating information and optimize the homepage layout and design to improve use interaction Complete illustration of all species – native and exotic Ensure photographs are correctly identified before loading Complete ecosystem database information including images and descriptive text for each ecosystem type 	This is a critical audience for plant information in New Zealand. Working to improve the content and functionality of the website for these people is the priority. There will always be new ideas being suggested by this audience so the work in this area should be regularly reviewed and updated. The Network should allocate funding on an annual basis to complete these improvements.

- Allow the public to add information on plant distribution
- Develop data interrogation systems so that web users can download or explore plant data using other data sources
- Build a "Call to Action" email system to be used in campaigns
- Build smart phone apps and mobile versions of the website to connect with the website information remotely

- Continue to expand access to plant distribution data via the flora mapping system
- Build an Important Plant Area recording system
- Provide a distribution search engine as well as species search to highlight regional floras and threatened floras (i.e., what is threatened near me)
- Connect ecosystem information pages to other sources of information about plant communities
- Add a Network library so that book makers can save their own books into the website after they have made them using the book making facility
- Add references to species details pages
- Seek additional connections with other bibliographical sources of information about plants such as Te Ara Encyclopedia and the NZ Electronic Text Centre
- Review the metadata for each image in the image library and standardize order of display on species details pages
- Give book makers ability to add site maps and species distribution maps to books
- $\,\cdot\,$ Allow content managers to select images to be used as thumbnails.
- Nomination and review of important plant areas
- Regularly review user interaction with the website
- Maintain, review and improve the plant voting system to allow people to nominate a regional favourite plant also

- Make web videos to show how website features work.
- Add more literature on plants
- Provide a facility to make cards, calendars and posters using images and text from the website
- Give users ability to select specific images when making PDFs and books
- Ability to search by district
- Ability to resize images on the system
- Provide links to existing plant keys
- More search criteria to find a plant including plant features such as leaf shape
- Establish an image archive so that not all images can be seen on a species details page
- Expand the Network quiz to engage users with additional types of question (e.g., plant anatomy, species distribution, botanical word meanings and the odd one out)

6.3 Improving Access to Information for New Audiences

Priority audiences that are not well catered for by the Network's information systems are:

Amateur volunteers
 Landowners
 Business

• Educators and children • Iwi

New audiences	Improvements needed and priority	Explanation
Amateur botanical, gardeners and conservation volunteers	 Priority 1 Provide on-line, distance learning plant training courses Build smart phone apps and mobile versions of the website to connect with the website information remotely Add links to other sites (e.g. weed control and Nature Space) and other websites where communities go for information about biodiversity 	The Network can achieve its website audience growth targets most easily by delivering resources to this audience.

- Add plant keys to search engines
- Provide info on how to plant a plant, how to care for a plant and how to kill a weed
- Use social media to build new audiences through RSS feed from website
- Seek additional connections with other bibliographical sources of information about plants such as Te Ara Encyclopedia and the NZ Electronic Text Centre
- Maintain, review and improve the plant voting system to allow people to nominate a regional favourite plant also

Priority 3

- Include information about other organizations in the Network newsletter
- Provide information organized from an ecological perspective
- Provide a facility to make cards, calendars and posters using images and text from the website
- Provide information about the etymology of plant names
- Expand the Network quiz to engage users with additional types of question (e.g., plant anatomy, species distribution, botanical word meanings and the odd one out)

With 1.8 million gardeners in New Zealand and thousands of community volunteers involved in conservation there are many ways in which the website can be used to support and educate these audiences.

Educators and children

Priority 1

- Provide language on the website that is friendly to a wider audience
- Build smart phone applications to allow access and interaction via a mobile phone

Priority 2

- Complete layman's descriptions of all plants
- Provide information abut quirky plant features such as poisonous, edible, smelly or weird plants
- Seek additional connections with other bibliographical sources of information about plants such as Te Ara Encyclopedia and the NZ Electronic Text Centre

Connecting with young people is a priority for the Network to create future members.

It will be useful to engage a selection of Enviroschools in a Young Persons review of the website and to ask them for ideas of how to improve it from their perspective.

	 Priority 3 A curriculum based toolkit Run web-based competitions (such as photo competitions, videos etc) Provide links to other website sites useful to young people Provide a facility to make cards, calendars and posters using images and text from the website Provide information about the etymology of plant names Expand the Network quiz to engage users with additional types of question (e.g., plant anatomy, species distribution, botanical word meanings and the odd one out) 	
lwi	Priority 1 • Link to iwi websites and factsheets • Provide on-line plant training courses • Write factsheets that speak at all levels • Highlight taonga and Rongoa – Matauronga on the website • Link names and terms to the Maori on-line dictionary • Provide flora information that takes account of regional differences Priority 2	Iwi are an important audience for information about New Zealand's native flora. Ensuring accessibility of the information to iwi is vital, in terms of language used. This may have important implications for the work of Maori landowners or hapu working on restoration projects or Nga Whenua Rahui projects or riparian and wetland restoration work.
	 Add Te Reo for the site Focus on rediscovering lost knowledge 	
Domestic and international tourists	Priority 1 Build smart phone apps that can be sold to highlight local floras	With more than 2 million tourists to New Zealand annually there is a great scope to use the website to educate visitors. Through purchase of smart
	 Priority 3 Provide a calendar of botanical events nationwide – where to see wild plants in flower Provide a database of botanical tourist spots – where to see alpine plants, where to see the world's largest pohutukawa etc Provide information abut quirky plant features such as poisonous, edible, smelly or weird plants 	phone apps this could also be a revenue raising mechanism.

Landowners	Priority 1 • Provide on-line plant training courses	Landowners are critical audiences for education about plants, why they are important, where hey are and what can be done to conserve them. There are opportunities to use the website to convey important conservation messages and techniques to landowners.
	 Priority 2 Highlight tools that "brokers" could use when talking with landowners. For instance the book making facility has been successfully used as an icebreaker. Post stories about people doing plant conservation related activities on their properties 	
Business	 Priority 1 Provide accurate information for councils requiring businesses to undertake restoration as part of their resource consents. Provide on-line plant training courses 	Businesses often have an interest in restoration projects and may benefit from access to on-line training courses.
	 Priority 2 Provide a list of plant conservation projects that may be of interest to business (from an involvement or sponsorship perspective) 	

6.4 Improving Governance

New Governance	Improvements needed and priority	Explanation
Web site management	 Priority 1 Establish a national website committee to develop and oversee the management and development of the website. This includes preparing a Terms of Reference for the committee for approval by the Network Council. Increase the number of people that can manage various areas of the website including News area, Forum, Twitter and Facebook 	The website has been run in an adhoc fashion with a number of volunteers contributing their time and with a loose arrangement of roles and responsibilities. A clear governance structure for the website is needed with a small team established to ensure the website continues to grow whilst at the same time ensuring existing features are retained.
		This website governance group could meet throughout the year (not necessarily in person) to go over the work programme to ensure roles are understood and to trouble shoot issues.
Nomenclature	Priority 1 • Highlight on the website how nomenclatural decisions are made.	It is not always clear how the Network decides on the names it uses on its website. In most cases this is not a problem, especially where there is national or global consensus in how taxa should be named on the site.
		However, greater clarity is needed for why the Network is using some names and not others. This should be added as a separate field on the species details pages to explain the Network's nomenclatural choices.

6.5 Securing Funding

Securing funding	Improvements needed and priority	Explanation
Consultancies	Priority 1 • Approach consultancy firms that use the website without being members to directly promote value of membership. Priority 2	There is a large audience in New Zealand of companies using the Network website but not being members. This includes a range of environmental, planning and ecological consultancy firms for whom the Network website
	Produce a package showcasing what the site offers.	could be an important resource. Promoting the website to this audience will be important to grow the audience and gain greater support for the Network.
Sponsorship	 Priority 2 Make sponsorship opportunities and benefits more obvious. Target companies that use plant branding to promote particular species on the website Allow companies to sponsor certain parts of the site (e.g., the phenology recording system) Develop an "Adopt a Species" programme through sponsoring species via a species details page button (either for completing the species page or for active plant conservation work associated with this species) Provide a list of plant conservation projects that may be of interest to business (from an involvement or sponsorship perspective) 	The Network website is a phenomenal resource and one that could attract significant sponsorship to pay for the upkeep of the site but also to pay for additional developments and improvements.
	 Priority 3 Leverage off existing programmes such as the Clean Streams Accord. Offer field experiences for corporate staff. 	

Smartphone app	Priority 1 • Build smart phone apps that can be sold to fund the website development.	One important mechanism to ensure a regular funding stream to the Network to pay for the website maintenance and plant conservation initiatives is the creation of a smart phone app for the website information.
		If this is sold it could fund a considerable part of the Network website operation and support plant conservation action.

6.6 Building Partnerships

Partnerships	Improvements needed and priority	Explanation
Department of Conservation	Priority 1 • Meet regularly with the DOC to determine how the Network and the DOC can work together to deliver the most accurate information in the most effective way	The DOC is an important user and provider of plant information including distribution data and images. A strong partnership should be developed to improve the delivery of plant information to New Zealanders.
Enviroschools	Priority 1 • Invite Enviroschools to participate in the website committee	Enviroschools is New Zealand's premier organization involved in delivering conservation and sustainable messages within schools.
	Priority 2 Develop resources to support Enviroschools programmes Ask Enviroschools for regular feedback on improvements and ideas for website development Seek sponsorship for Enviroschools membership of the Network	Increasing their involvement in the delivery of pant information will help expand the younger audience and connect with a group of teachers that have a mandate to promote plant conservation ideas.

NIWA and Landcare Research	 Priority 1 Add the Landcare NIVS data into the national flora mapping system and connect the Virtual Herbarium data (in a federated way) through the Network's mapping system. Priority 2 Investigate partnership projects on plants (both native and exotic) Assist with the promotion of NIWA and Landcare Research plant research and resources 	The Crown Research organizations (CRIs) are leaders in the provision of plant information especially research. Working with the CRIs to promote their plant information and research via the Network website will be useful in achieving plant conservation outcomes.
Global Biodiversity Information Facility (GBIF) and NZ Organisms Register (NZOR)	Priority 1 • Review how the Network can make use of and contribute to both GBIF and NZOR	The national NZOR clearing house of species names may have use to the Network in due course in terms of ensuring we are consistent in nomenclature with the national names database. GBIF is a global clearing house for biodiversity information and it may be possible and appropriate for the Network to feed plant data into that facility.
NZ Garden Industry Association	Priority 3 • Communicate regularly with the NZGIA over website information	Gardeners are potential users on plant information. Messages about weeds and great native garden plants delivered to this audience could achieve greater awareness of plant conservation issues.
MAF (Biosecurity team)	Priority 1 Investigate how to make greater use of the Network website in the management and improvement of plant biosecurity information	Economic and environmental pest species are described on the website, including information about their distribution. There is a great opportunity to work with MAF to achieve biosecurity outcomes and to manage pest information.

Te Papa and Auckland Museum	Priority 2 • Work with Te Papa and Auckland Museum to further promote and add links to the digitized herbarium specimen collection (see Te Papa digitized specimen links at bottom of species details pages	The national herbaria are a critical provider and curator of plant information. Working with them to support and promote their information will be useful to the Network in achieving its goals.
Local government	 Priority 1 Work with local government to support their land management advisors and provide information to assist them with achieving their legal responsibilities (e.g., threatened species and ecosystem distribution data) 	Local government is charged with the protection of biodiversity under the Resource Management Act 1991. It is also involved in the implementation of the Biosecurity Act 1993.
		Assisting local government with initiatives that promote plant conservation (including biosecurity) will be an effective way to achieve the Network's goals.

6.7 Promotion

The Network website is now highly regarded by people involved in plant conservation and botany throughout New Zealand and the world. The website attains high search engine visibility for many searches relating to native plants. However, it is important that promotion continues to ensure the website continues to increase its visibility and thereby increase its usage. This is especially true for exotic plants and weeds.

Promotion	Improvements needed and priority	Explanation
Publications	Priority 1 Design and publish posters regularly that promote the website (e.g., poster to promote phenology recording)	Soft advertising of the website features will be useful for increasing website usage and engagement.
	Priority 2 • Publish books and reports from the Network databases	Not everyone uses the internet to access plant information so in some cases separate publication of web content may be appropriate to reach target audiences.

Trilepidea	Priority 1 • Investigate how to make the newsletter electronic to be embedded in the website as HTML pages rather than, or as well as, a PDF Priority 2	The newsletter, while seemingly outside the scope of a website strategy, is intricately linked to the website. It is used to promote website features and could be further embedded into the website as an electronic newsletter.
	 Include an article in each issue of the Network's monthly newsletter that describes an aspect of the website Continue to highlight new images submitted to the website Publish articles about the data stored on the website including phenology observations (what is flowering now etc) 	Promoting website functionality via the newsletter is one of the most effective ways to raise awareness of what information is available and how to access it.
Search engine optimisation	 Priority 1 Redesign website interface to improve search engine optimization Adopt search engine friendly urls ('pretty urls') to improve search engine optimisation Annually review the searchability of the Network species pages for the Network's priority keywords 	Optimising the website so that search engines find the Network pages and information is important to ensure their visibility.
Newsletters of other organisations	Priority 2 • Prepare articles describing the resources available on the Network website	Regular promotion of the website resources and functionality can be achieved through articles in the monthly newsletter. This is read by Network members but is also forwarded and so reaches thousands of people.
Media releases	Priority 2 Prepare and send out regular media releases highlighting features or news about the website Promote the website and features to Maori TV	Drawing regular media attention to the website will be an effective way to raise awareness of the resources and the issues the Network is dealing with. These could focus on milestones (e.g., 2 million observations on-line) or certain phonological events (e.g., first flowering of pohutukawa).

S	ocial medi	a suc	h as
Fá	acebook a	nd Tv	vitter

- Prepare a strategy for how these social media tools will be used, what the objectives are for using these media and what outcomes are sought
- Train additional people in how to update and feed stories out via Twitter and Facebook
- Provide an RSS web feed to subscribers to syndicate home page news items

The Network should ensure it has a clear strategy for engagement of new audiences and use of social media to promote plant conservation.

6.8 Website Administration

This involves reviewing security and the web platform used for the site and website hosting arrangements.

Administration	Improvements needed and priority	Explanation
Security	Priority 1 • Undertake regular checks of the website backup system	Protecting the website from malicious attack and to ensure continuity in provision of plant information is a critical part of the Network's work.
	Priority 2 • Undertake a regular (every 2 years) security check of the site	
Website hosting	Priority 1 Annually review website hosting arrangements including evaluation of costs and service provided Priority 2	Web hosting continues to improve and the Network should regularly review its needs against what is being provided by the current host. An annual review of costs and services should be undertaken.
	 Include an article in each issue of the Network's monthly newsletter that describes an aspect of the website 	
	 Continue to highlight new images submitted to the website Publish articles about the data stored on the website including phenology observations (what is flowering now etc) 	

Web platform	Priority 1 Investigate future development of the website including review of the programming language	The existing website platform has served the network well for the last 9 years but a regular review of its suitability is necessary. Is it fit for purpose and will it provide a future-proofed environment for further development of the Network website
Measuring effectiveness	Priority 1 Carry out an annual survey of web user needs Monitor key performance indicators of website	The use of regular (annual) surveys of web users needs will provide useful insight into how the site should be developed. There are a number of performance measures that may be used to determine how effective the website is being in achieving its vision.
	Priority 2 • Establish a user review panel of self-nominated people that can provide feedback on the website or test functionality for new initiatives	



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