Being able to do the job

Objective 4
To sustain and improve the essential skills, control techniques, information and relationships that support DoC's management of invasive weeds in the long term.

Objective 5
To maintain and improve the quality of weed management systems.

Lagarosiphon smothers lowgrowing native aquatic communities. To ensure that lagarosiphon does not spread through Southland lakes and rivers, DoC, Southland Regional Council and ECNZ have a joint surveillance and containment programme to monitor at Waiau River and Lakes Manapouri. Te Anau, Mavora, Monowai and Hauroko; and to publicise risks to boat owners in Southland and Central Otago. This photo of lagarosiphon brushing the surface of Lake Dunston indicates the tall, dense beds that can lie below the surface. P.N. Johnson, 1995

WHAT IS DOC DOING?

To support its work on invasive weeds, DoC has published weed databases and developed prioritising systems and guidelines for carrying out weed inventory. Each Conservancy has a conservancy weed strategy, and will ensure that staff have appropriate training. DoC is also developing guidelines for monitoring the results of control programmes, a computer database and a manual for identifying weeds.

Research:

DOC has identified and published its priorities for research in an *Environmental Weeds Research Plan*. Information on invasive weeds and their impacts is often lacking, particularly for new species. Effective control techniques do not yet exist for all weeds in all situations—each weed species requires specific control techniques and herbicide formulations, and appropriate and effective control techniques also vary with the climate, the time of year, the type of vegetation in which the weed is growing, and the presence of threatened species or other natural values in the area. Improved information and technology will always be required as new plant species naturalise and established species spread. DoC will work with other key researchers and management agencies when developing and conducting weed research, and will encourage and support the sharing of information and technology on weeds.

Surveillance:

Identifying new populations of invasive weeds accurately and at an early stage requires surveillance, especially for those species that disperse and establish rapidly. A

surveillance plan will develop systems to identify new invasions into comparatively pristine protected natural areas at an early stage, and to detect populations of new invasive weed species at a stage when eradication or containment in a weed-led programme may still be



possible. DoC will consult and co-ordinate with regional councils, other local authorities, MAF, and other research and management agencies in this work wherever possible and appropriate.

Quality management systems:

By 2001, DoC will have in place a nationally consistent system to ensure that conservancies identify and carry out priority weed control work, and that programmes are well planned, monitored, and use best practice. Among other things it will include procedures and standards for integrating weed control with the management of other threats, such as animal pests; identifying and addressing issues of concern to tangata whenua; and avoiding or minimising any unintended impacts of controlling weeds on a site's historic, cultural or recreational values.

What are the priorities?

Priority 1 Contributing to effective border control for new invasive weeds, as appropriate (objective 1); because the first and best line of defence for managing weed threats is

at the border (Principle 2).

Priority 2 Weed-led programmes (objective 2); because managing potential invasive weed species at an early stage minimises future control costs and the possible degradation

and loss of New Zealand's natural heritage (Principle 3).

Weed-led priorities are based on the species' potential impacts on natural systems, the rate and success with which it establishes and spreads, and the practicality of eradicating or containing it on the scale proposed.

Priority 3 Site-led programmes to protect natural areas administered by DoC (objective

3); because managing invasive weeds is essential to protect the long-term survival of New Zealand's native species and natural communities (Principle 1).

Site-led priorities are based on:

- 1. The botanical or wildlife values of the area, and the degree of risk posed to an area's values by invasive weeds;
- 2. Preventing invasions, or stopping them at an early stage whenever possible. This helps to maintain the condition of a place and enable it to resist further invasions. It also allows a place to recover faster by minimising disturbance, and minimises the costs and difficulty of control.
- 3. Ensuring programmes reflect the diversity of natural community types being affected by weeds.
- 4. Integrating weed control with the management of other threats where this is possible. An area where weeds are the main threat, or where other threats are already being managed, is a higher priority than one where they are not.
- 5. Ensuring management of invasive weeds in existing high priority programmes is adequate to protect the values of those places before starting new programmes.

Priority 4 Helping to protect natural areas on private land (objective 3); because sites on private land may be important to New Zealand's natural heritage and some places may require DoC's support to manage threats.

However, the benefits of controlling invasive weeds on private land are more uncertain than in reserves and national parks because land ownership, uses, or management practices can change. In general, therefore, DoC will contribute to weed control on private land only if:

- 1. the land owner or manager supports the proposal; and
- 2. the place is a high priority for a species recovery programme, or relative to other Conservancy invasive weed programmes; and resources are available; and
- the site's important natural values are likely to be protected in the long-term given the risks of any other threats and any likely changes to the site's ownership, management and uses; and
- 4. other options for controlling the threats posed by invasive weeds are not available.

Working together

In the long-term, protecting New Zealand's natural heritage from weed threats will require all those with an interest in weed management to work together. It is particularly important for DoC to develop supportive partnerships with landowners, regional councils and other local authorities, and Iwi, and to encourage public support and involvement.

DOC, REGIONAL COUNCILS AND LANDOWNERS

DoC's invasive weed work occurs within a broader context of central and local government, community and individual efforts to manage invasive weeds. National and Regional Pest Management Strategies (NPMSs and RPMSs) under the Biosecurity Act are the most important mechanisms for co-ordinating these efforts and, as a major land manager, DoC will be a stakeholder in these strategies.

DoC is committed to supporting community initiatives to manage weeds that could seriously affect the long-term integrity or survival of native species and natural communities. DoC will, where possible and appropriate:

- Provide advice on risks to native species and communities from invasive weeds to landowners, and to regional councils (especially when RPMSs are being developed or amended).
- Provide technical support and information on appropriate weed management to landowners.
- Share information and technology with regional councils, and other local authorities and management agencies.
- Make reasonable and justified contributions to RPMSs, including appropriate levels
 of control on areas administered by DoC, and appropriate contributions to
 surveillance, monitoring, public education, or enforcement costs. DoC will only seek
 to have actions or species included in an RPMS if it is able to make the relevant
 appropriate contributions.

DoC will also explore options under the Biosecurity Act (including preparing an NPMS or RPMS), when high priority weed-led and site-led programmes require more formal or extensive activities or co-ordination than DoC can negotiate directly with landowners or regional councils etc.

IWI AND DOC

When prioritising decisions for managing invasive weeds, DoC will consider whether active steps are needed to protect Maori interests, and will undertake all practical steps within the resources available to protect sites culturally or spiritually important to Iwi (e.g., waahi tapu). DoC will consult with Iwi to share information and to assist DoC's understanding of Iwi issues relevant to managing invasive weeds.

How you can help

You can help play a vital role in managing weed threats to New Zealand's natural heritage. Some of the ways are described below:

BECOME A WEED WALLOPER:



Become involved in DoC weed control programmes. Volunteers from the community and Conservation Corps, Forest and Bird and other groups, and DoC summer holiday programmes, are important for the success of weed control programmes in many places. Contact the community relations officer at your local DoC office for information on possible opportunities in your area.

Conservation Corps volunteers pulling out Scots pine seedlings in Sedgemere in South Marlborough. Colin Davis, 1997



Volunteers are vital for controlling pink ragwort in Whitiau Scientific Reserve south of Wanganui, one of the last unmodified dunelands between Paekakariki and Patea. Over three days each year volunteers remove thousands of plants which, if left, would soon smother large areas of the reserve. Ridgway Lytbgoe, 1998