SPACE INVADERS

A summary of the Department of Conservation's *Strategic Plan for Managing Invasive Weeds*

This document is a summary of the Department of Conservation's *Strategic Plan for Managing Invasive Weeds* (SPMIW).

In addition to the weed impacts, general principles and objectives outlined in this document, the SPMIW also includes targets for DoC weed activities to 2002, criteria for evaluating the feasibility of programmes, ranking systems, and an outline of DoC's legal roles and responsibilities. The SPMIW is primarily an internal document and complements DoC's other national plans for managing possums, wild goats and Himalayan thar.

A detailed overview of weed impacts and trends from the SPMIW is available as a reprint. Copies of this reprint and the full *Strategic Plan for Managing Invasive Weeds* are available in DoC Conservancy office libraries, or through:

The Science Publications Unit, Department of Conservation, P.O. Box 10-420, Wellington Phone (04) 471-0726; e-mail svaughan@doc.govt.nz

Published by Department of Conservation PO Box 10 420 Wellington

(c) First published October 1998(c) Revised publication July 2000

2011 0 (**-**0 04**--** (

ISBN: 0-478-2177-6

CONTENTS

Foreword	5
What are "invasive weeds"?	7
What is the purpose of DOC's weed plan?	7
A GROWING PROBLEM	8
25 000 introduced plants	8
Threatened native species	9
Impacts on natural areas	9
A VISION FOR THE FUTURE	13
GREEN ALIENS AT THE BORDER	14
NIPPING IT INTHE BUD	15
PROTECTING NEW ZEALAND'S NATURAL HERITAGE	17
BEING ABLE TO DO THE JOB	21
WHAT ARE THE PRIORITIES?	22
WORKING TOGETHER	23
DoC, Regional Councils and landowners	23
Iwi and DoC	23
How you can help?	24
FURTHER READING	26
GLOSSARY OF TECHNICAL TERMS	27
COMMON AND SCIENTIFIC NAMES USED IN THE TEXT	28
Native plants and animals	28
Invasive weeds	28

Foreword



Most New Zealanders know that possums are pest enemy number one. The threat from weeds is much less understood. Yet weeds like old man's beard, wild ginger, pampas and contorta pine are a major threat to our unique plant and animal life.

The picture of weed impacts that this document provides is a sobering one. If we fail to manage key weed threats, some native species will become locally and possibly nationally extinct, and the unique character of many places that we treasure will be progressively destroyed by these "space invaders".

Regional pest management strategies have shown the commitment that many communities now have to address weed and animal pest problems. This awareness and commitment provides real hope for the future. In many places, the Department of Conservation, regional councils, landowners, and the general public are already working together to control weed threats. By providing a framework for the Department's activities, my hope is that this weed plan will help to foster such partnerships and make them more successful.

This is one issue where all New Zealanders can make a real difference. It is no accident that the weediest places are often those closest to towns. Over 70% of invasive weeds were originally garden plants. People continue to spread invasive weeds by growing them in their gardens, dumping rubbish from gardens or fish tanks, or accidentally spreading seeds and fragments.

I encourage all New Zealanders to get in behind this plan and help us in the battle against invasive weeds.

Nick Smith

Minister of Conservation

"/M/

WHAT ARE "INVASIVE WEEDS"?

Weeds are plants growing where they are not wanted; plants that are "out of place". Invasive weeds are plants that can seriously affect the long-term survival of native species, the integrity or survival of natural communities, or the genetic variation within native species.

In New Zealand, invasive weeds are almost always plant species that humans have introduced to the country. Sometimes, however, even a native species can be considered to be an invasive weed in a particular site if it affects an important natural value on that site.

WHAT IS THE PURPOSE OF DOC'S WEED PLAN?

The purpose of the Department of Conservation's weed plan is to set out how DoC will seek to protect native species and protected natural areas from threats posed by invasive weeds. DoC manages eight million hectares of native forests, tussocklands, alpine areas, wetlands, dunelands, estuaries, lakes and many islands. This is about 30% of New Zealand's land area. DoC is responsible for preserving and protecting these areas, including managing threats to them from invasive weeds.

There are many central and local government, community and individual efforts to manage invasive weeds and protect New Zealand's natural heritage—regional and national pest management strategies under the Biosecurity Act are some of the most important. These efforts are vital in the long term, but they do not replace the need for DoC to prioritise and manage weed threats in natural areas that it manages. DoC must also ensure it has the necessary partnerships, information, technology, control techniques and skills to support its weed management.

DoC's weed plan is therefore not intended as a plan for controlling all weeds in New Zealand, or the weeds in whole regions including private land. It also focuses only on invasive weeds. DoC's responsibilities and approaches for managing weeds that affect historic places, neighbouring land, and the quality of visitor facilities are dealt with in other documents.

A growing problem

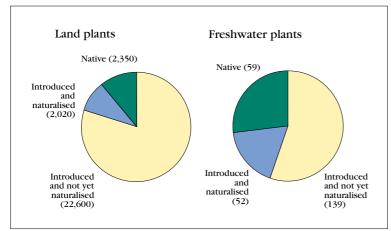
Human introductions of plants are one of the great threats to biodiversity throughout the world. Invasive weeds blur the unique differences of native plant communities, and global biodiversity diminishes as more places become alike. In the USA, for example, experts are increasingly viewing introduced plants and animals as a threat to native species second only to habitat destruction. In Australia, invasive weeds are a principal cause of the decline of native plants.

In New Zealand, failure to manage key weed threats will lead to local and possibly national extinction of native species and the progressive degradation of native communities.

25 000 INTRODUCED PLANTS

Figure 1: Native, introduced and naturalised land and freshwater plants

Almost half of all vascular plant species growing wild in New Zealand are introduced—about 2 068 species. But at least another 22 700 introduced plant species are present



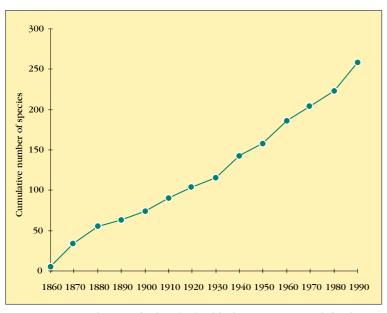


Figure 2: When 258 of today's land and freshwater invasive weeds first became established in the wild

in New Zealand private gardens and collections, or are being used in agriculture, horticulture or forestry (Figure 1). Many of these are also likely to naturalise in the future. DoC's weed database currently lists over 240 naturalised land, wetland, freshwater and marine plants as actual or potential invasive weeds.

More than 70 per cent of invasive weeds were deliberately introduced into New Zealand as ornamental plants. A further 12 per cent were originally introduced for agriculture, horticulture or forestry. Only 11 per cent were introduced accidentally. For instance, seven of New Zealand's most invasive weeds (contorta pine, old man's beard, wild ginger, pampas, heather, and the aquatic weeds egeria and lagarosiphon) were deliberately brought into New Zealand. New plant species continue to enter New Zealand deliberately, accidentally or illegally.

The number of known invasive weeds has grown steadily since the 1960s and this trend shows no sign of slowing (Figure 2). In the Auckland region, more than 615 introduced plant species are known to have naturalised—a figure apparently unmatched by any other city in the world—and four new species naturalise there each year.