JOIN THE HOME GUARD

- Don't choose plants that are invasive weeds for your garden, and control or remove any growing there. Some popular garden plants, aquarium and pond plants can be dangerous pests when they spread from people's properties into nearby natural areas. Some invasive weeds are listed on page 28 but there are many more. Contact your local DoC office or Regional Council for details. Some regions have also produced booklets listing alternative non-invasive plants that could be grown instead.
- Don't bring seeds or cuttings back to New Zealand if you visit overseas. A new plant species could pose a real risk to New Zealand's special places, and even a seemingly innocuous find could be contaminated by unknown seeds, insects or plant diseases.
- Become aware of activities that help to spread invasive weeds—for example the dumping of garden rubbish or water weeds from fish tanks, or through seeds and fragments attached to clothing, cars and boats.
- Support the control of invasive weeds where this is necessary to protect important protected natural areas nearby.
- Bring unusual new plants you find growing in the wild to the attention
 of DoC or regional council weed staff. The best time to eradicate a
 new weed species is when it first appears, and this can happen any
 where and any time. Help from the public, tramping clubs, botanical
 societies etc., can be invaluable to a surveillance programme.
- Support DoC's weed plan and other initiatives to control invasive weeds, in particular national and regional pest management strategies.





Japanese honeysuckle (left) and banana passionfruit (right) could be another old man's beard. Susan Timmins



Boats are distributing the invasive seaweed Undaria around New Zealand's coast. Cameron Hay, 1996

Further reading

Atkinson, I.A.E. 1997. *Problem weeds on New Zealand islands*. Science for Conservation No. 45. Department of Conservation.

Clout, M.N. and Lowe, S.J. 1996. Biodiversity loss due to biological invasion: prevention and cure. pp. 29-40 in: "Conserving Vitality and Diversity". Proceedings of the World Conservation Congress Workshop on Alien Invasive Species. Canadian Wildlife Service, Environment Canada, Ottawa, Canada. 96 p.

Department of Conservation 1998. Restoring the Dawn Chorus: Department of Conservation Strategic Business Plan 1998–2002. Department of Conservation, Head Office, Wellington, New Zealand.

Humphries S.E., Groves R.H., and Mitchell D.S. 1993. Plant invasions: homogenising Australian systems. In: *Conservation Biology in Australia and Oceania*. C. Moritz and J. Kikkawa (eds). Surrey Beatty and Sons.

Ministry for the Environment 1997. The State of the New Zealand Environment Report 1997. Ministry for the Environment and GP Publications.

Owen, S-J. 1997. Ecological plant pests on conservation land in New Zealand: a database. January 1997 working draft. Department of Conservation.

Panetta F. D. 1993. Identifying and managing the next century's problem weeds. *In:* Popay A.I. and Hartley M.J.(eds.), *Potential problem weeds.* Proceedings of a New Zealand Protection Society meeting. pp 9-31.

Reid V.A. 1998. *The impacts of weeds on threatened plants*. Science and Research Internal Report No. 164. Department of Conservation.

Timmins, S.M. 1997. *Environmental Weeds Research Plan 1997-2006*. Department of Conservation Research Science and Technology Programme, Science and Research Division.

Williams P.A. 1997. Ecology and Management of Invasive weeds. *Conservation Sciences Publication No.* 7. Department of Conservation (Pub).

Williams P.A. and Timmins S.M. 1990. Weeds in New Zealand protected natural areas: a review for the Department of Conservation. Science and research Series No. 14. Department of Conservation.

Glossary of technical terms

biodiversity The international Convention on Biological Diversity recognises three layers of

biodiversity: genetic variation within and between populations of a species; the diversity

of species; and diversity in ecosystems.

containment Preventing a species spreading beyond a defined distribution. Control usually has to

be ongoing.

eradication The permanent removal of all individuals of a species from a defined area. There must

be little or no likelihood of reinvasion. Control has a definite end-point.

ERMA Environmental Risk Management Authority New Zealand, established under the

Hazardous Substances and New Organisms Act 1996.

natural community A naturally occurring group of organisms inhabiting a common environment and

interacting with each other.

naturalised A species that is established in self-sustaining populations in the wild without direct

and deliberate human help, and which persists over time (in the absence of unforeseen catastrophic events or successful eradication efforts). In contrast, some species are

found only in cultivation.

taxa Includes species, subspecies, and varieties.

vascular plant Includes ferns, flowering plants and conifers; but does not include mosses, liverworts,

lichens, fungi, seaweeds or other algae.

Common and scientific names used in the text

NATIVE PLANTS AND ANIMALS

| COMMON NAME | COMMON NAME | SCIENTIFIC NAME | SCIENTIFIC NAME |
|-----------------------|----------------------------|-------------------------|-------------------------|
| banded dotterel | Charadrius bicinctus | kauri | Agathis australis |
| beech | Nothofagus species | kowhai | Sophora |
| bidibid | Acaena rorida | pingao | Desmoschoenus spiralis |
| black stilt | Himantopus novaezealandiae | Poor Knights spleenwort | Asplenium pauperequitum |
| Chatham Island toetoe | Cortaderia turbaria | sand bidibid | Acaena pallida |
| climbing broom | Carmichaelia kirkii | sand daphne | Pimelea arenaria |
| coastal peppercress | Lepidium banksii | shore spurge | Euphorbia glauca |
| freshwater mussels | Hyridella menziesii | spider orchid | Corybas carsei |
| kahikatea | Dacrycarpus dacrydioides | wrybill plover | Anarhynchus frontalis |
| | | | |

INVASIVE WEEDS

| COMMON NAME | SCIENTIFIC NAME | COMMON NAME | SCIENTIFIC NAME |
|-------------------------|-----------------------------|-----------------------|-------------------------------|
| Austrian pine | Pinus nigra subsp. nigra | maritime pine | Pinus pinaster |
| banana passionfruit | Passiflora mollissima | marram | Ammophila arenaria |
| boneseed | Chrysanthemoides monilifera | mistflower | Ageratina riparia |
| | monilifera | moth plant | Araujia sericifera |
| boxthorn | Lycium ferocissimum | mountain pine | Pinus mugo |
| broom | Cytisus scoparius | old man's beard | Clematis vitalba |
| buddleia | Buddleja davidii | pampas | Cortaderia selloana |
| Chilean flamecreeper | Tropaeoleum speciosum | pampas, purple | Cortaderia jubata |
| Christmas berry | Schinus terebinthifolius | phragmites | Phragmites australis |
| climbing asparagus | Asparagus scandens | pink ragwort | Senecio glastifolius |
| climbing spindleberry | Celastrus orbiculatus | radiata pine | Pinus radiata |
| contorta pine | Pinus contorta | rowan | Sorbus aucuparia |
| Darwin's barberry | Berberis darwinii | reed sweetgrass | Glyceria maxima |
| Douglas fir | Pseudotsuga menziesii | Russell lupin | Lupinus polyphyllus |
| egeria | Egeria densa | salvinia / water fern | Salvinia molesta |
| elodea | Elodea canadensis | Scots pine | Pinus sylvestris |
| evergreen buckthorn | Rhamnus alaternus | smilax | Asparagus asparagoides |
| gorse | Ulex europaeus | spartina | Spartina anglica |
| gunnera | Gunnera tinctoria | spartina, American | Spartina alterniflora |
| hawkweeds | Hieracium pilosella | spartina hybrid | Spartina x townsendii; |
| hawthorn | Crataegus monogyna | sycamore | Acer pseudoplatanus |
| heather | Calluna vulgaris | wandering Jew | Tradescantia fluminensis |
| hornwort | Ceratophyllum demersum | water poppy | Hydrocleys nymphoides |
| hydrilla | Hydrilla verticillata | white bryony | Bryonia cretica subsp. dioica |
| Japanese honeysuckle | Lonicera japonica | wild ginger (yellow) | Hedychium flavescens |
| Japanese kelp / Undaria | Undaria pinnatifida | wild ginger (kahili) | Hedychium gardnerianum |
| lagarosiphon | Lagarosiphon major | willow, crack | Salix fragilis |
| larch | Larix decidua | willow, grey | Salix cinerea |
| Manchurian rice grass | Zizania latifolia | yellow flag | Iris pseudacorus |