ENVIRONMENTAL WEEDS IN TASMANIA

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Summary. A series of workshops in the south, north and north-west of Tasmania identified and prioritised plants considered to be environmental weeds in different land use systems - Bushland reserves, Native forestry, Roadsides, Riparian systems and Agricultural land. The major weeds identified were gorse (*Ulex europeaus*), blackberries (*Rubus fruticosus* agg.), brooms (*Genista monspessulana* and *Sarathamnus scoparius*), pampas grasses (*Cortaderia* spp), ragwort (*Senecio jacobea*) and boneseed (*Chrysanthemoides monilfera*).

INTRODUCTION

Environmental weeds have been defined as "those species that invade native communities or ecosystems, being undesirable from an ecological perspective, but not necessarily an economic one" (1). For this paper the above definition has been slightly altered to cover any community or ecosystem not those that are just native. This is because plants that are considered weeds in one landuse system generally are weeds in other landuse systems. If effective control of weeds in any landuse system is to be achieved, recognition of the status of the concerned plant in neighbouring systems needs to be taken into account and any conflicts need to be resolved prior to implementation of any control strategy. Aims of the workshops were to identify the major environmental weeds in Tasmania across all landuse systems in order to get a co-ordinated community approach into any weed strategy being implemented.

METHODS

Three identical workshops were held in the south, north and north-west of Tasmania during August 1992. The aims of the workshops were to identify major weed problems in different landuse systems and prioritise weed control in these systems. The workshop was divided into three sections:

- plenary session
- identifying environmental weeds of different land use systems (group workshop)
- formulating control strategies for specific weeds (group workshop).

The land use systems that participants worked on were Bushland reserves, Native forestry, Roadsides, Riparian systems and Agricultural land.

Participants classified the area of infestation according to the size of infestation and distribution (Table 1). A control priority rating was also given to the majority of weeds listed. The priority rating used was the same as (1), shown in Table 1.

In the final session, participants worked on control strategies for individual weeds, collating information to form a control strategy - the combination of the three workshops covered 13 weeds being blackberry (*Rubus fruticosus* agg.), boneseed (*Chrysanthemoides monilifera*), brooms (*Genista monspessulana* and *Sarothamnus scoparius*), crack willows (*Salix fragilis*), fennel (*Foeniculum vulgare*), glyceria (*Glyceria maxima*), gorse (*Ulex europeaus*), paspalum

(*Paspalum dilatatum*), pampas grass (*Cortaderia* spp.), sweet pittosporum (*Pittosporum undulatum*), thistles (*Carduus*, *Cirsium* and *Silybum* spp), ragwort (*Senecio jacobea*) and spanish heath (*Erica lusitanica*).

Table 1. Ratings of Weed distribution and urgency for initiating control measures

Weed Distribution Rating	Urgency for initiating control measures[a]
1. Widespread (medium to large population)	1. Critical (as soon as possible)
2. Widespread (small population)	2. Very High (within two years)
3. Limited distribution (medium to large population)	3. High (2-5 years)
4. Limited distribution (small population)	4. Medium (6-10 years)
5. Localised (medium to large population)	5. Management measures in place
6. Localised (small population)	

[a] from (1)

RESULTS AND DISCUSSION

Although both ratings were used, only the ratings on urgency for action is reported. The distribution rating is necessary to determine the amount of resources that will be required to enact effective control methods.

Bushland reserves. This area had the most weeds rated as category 1. Many of these weeds were listed at only one of the workshops, reflecting the need for control of specific plants on a regional basis. Weeds listed as category 1 were blackberry, boneseed, broom, cape ivy (*Senecio millanoides*), cotoneaster (*Cotoneaster* Spp.), gorse, hawthorn (*Crataegus monogyna*), marrum grass (*Ammophila arenaria*), pampas grasses, sweet pittosporum, ragwort, rice grass (*Spartina anglica*), spanish heath and *Urosperma dalechampi*.

Native Forestry. Only two weeds, pampas grasses and ragwort were considered to be in category 1. Other weeds such as gorse, broom, blackberry, and thistles were given rating between 2-4, recognising the impact these weeds have but acknowledging control measuresin practice.

Riparian systems. Weeds listed as requiring urgent action (category 1) were fennel, parrots feather (*Mryiophyllum aquaticum*), ragwort, rice grass, and thistles. Rice grass and ragwort were listed in at least two workshops. Both crack willow and gorse were put in category 2 as it was felt that replacement species were required, prior to or as these species are controlled in order to maintain river bank stability.

Roadsides. Weeds rated in category 1 were broom, cape wattle (*Albizzia lophantha*), cotoneaster, fennel, gorse, glyceria, pampas grasses, paterson's curse (*Echium plantagineum*), ragwort and various thistles. Weeds in this system were generally given a high priority due to the roads being corridors into fragile areas.

Agricultural. As with native forestry only a few species were rated as category 1 being *Amaranthus* spp, glyceria, African feather grass (*Pennisetum macrourum*), ragwort, serrated

tussock (*Nassella trichoma*) and nodding thistle (*Carduus nutans*). Only ragwort was rated in all workshops.

The weeds that are causing problems across most landuse systems throughout Tasmania were gorse, blackberries, broom, pampas grasses, ragwort, and boneseed. Although of these only boneseed is listed as one of Australia's top environmental weeds (1), the problems these weeds cause is being recognised by various community groups. Environmental weeds are the focus of Landcare groups throughout Tasmania, with the majority of groups targeting the major weeds, gorse, blackberries, broom, pampas grasses, ragwort, and boneseed. However, other groups are focusing on specific weed problems such as rice grass and willows that affect their local area. On the west coast of Tasmania, a group is formulating a control strategy involving all users of the area. This area forms a boundary to and dissects the Tasmanian Wilderness World Heritage Area. It is estimated that 30% of Tasmania's flora species are now naturalised plants of which half are invasive species (1).

As weeds tend to ignore human implemented boundaries, weed control programmes need to be managed accordingly. Instead of using land ownership to enforce weed control, control strategies should be planned using the whole water catchment of a district as the starting point. These strategies will require the co-operation and resources of whole communities. When whole communities become involved with weed control not only will present weed problems become less daunting, new weed infestations will be more quickly recognised and bought under control.

ACKNOWLEDGMENTS

Participants and presenters of the workshops are gratefully acknowledged for their willingnEs3, input and continued concern over the spread of weeds in Tasmania. A detailed report of the workshop is available from the author.

REFERENCES

1. Humphries, S.E., Groves, R.H. and Mitchell, D.S. 1991. Kuwari 2, 1-134.