

Eradicate this weed or not?

Decision-making for weed-led control programmes

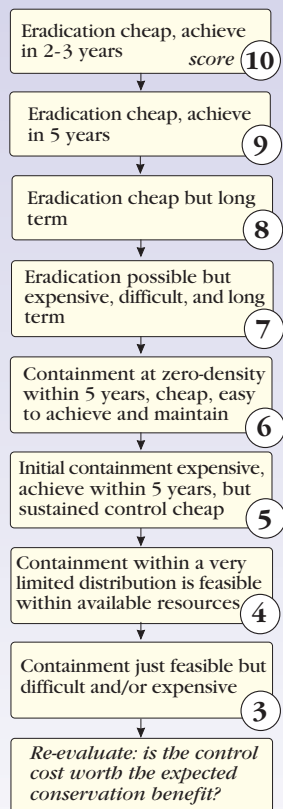
The New Zealand Department of Conservation uses **six steps** to evaluate a species for a weed-led control programme - A **weed-led** programme aims to **eradicate** or contain an invasive weed species in a region, at an early stage of its establishment. To be successful, the programme must be control the weed at all sites, regardless of the land's conservation value or tenure.

These six steps combine the conservation threat posed by the weed species, the feasibility of eradication or containment, and the probability of an outcome useful to conservation. Programmes for species with a presently limited distribution that can be readily controlled are ranked higher than those for species that are already well established. Control of the latter is usually limited to **site-led** programmes to protect specific, high-value sites.

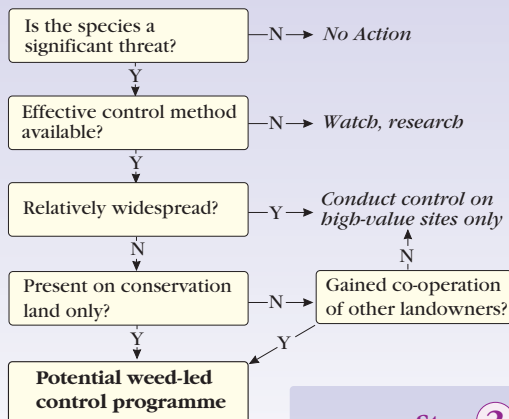


Dipogon lignosus (mille-a-minute) has a weediness score of 23 and is just beginning to spread in some areas of the North Island. It could be a candidate for a weed-led control programme.

Step 5 Assess the 'Practicality of Control'



Step 1 Assess the weed against the criteria for a weed-led programme



Step 2 Calculate the 'Biological Success' score

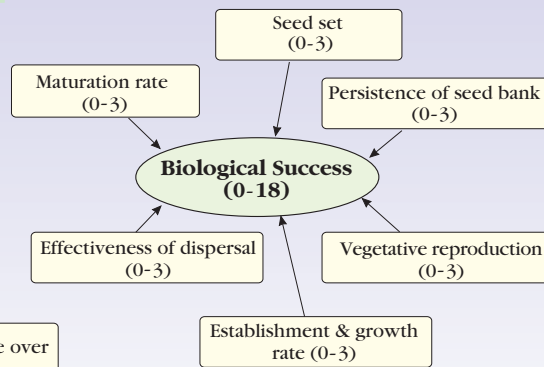
Step 3 Calculate the 'Effect on System' score

Weed effects on composition and structure of native community (0-3)

Effect on System (0-9)

Weed suppresses native regeneration (0-3)

Weed's persistence over time (0-3)



Step 4 Calculate the species 'Weediness Score' and 'Weediness Group'

Weediness Score = Biological Success + (2 x Effect on System)
 Weediness Group A (score 29-36), B (26-28), C (21-25), D (20 or less)

Some examples

	Biological Success Score	Effect on System Score	Weediness Score	Weediness Group
Old man's beard <i>Clematis vitalba</i>	15	9	33	A
Mist flower <i>Ageratina riparia</i>	15	8	31	A
Smilax <i>Asparagus asparagoides</i>	12	9	30	A
Bone-seed <i>Chrysanthemoides monilifera</i>	12	8	28	B
Buddleia <i>Buddleia davidii</i>	12	7	26	B
Brush wattle <i>Paraserianthes lophantha</i>	12	6	24	C
Sweet pea bush <i>Polygala myrtifolia</i>	10	5	20	D



Gunnera tinctoria (Chilean rhubarb) has been widely planted in New Zealand for landscaping. It currently has a limited distribution in protected natural areas but it is spreading quickly on wet seacliffs and river banks in the Wanganui region.

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Cobaea scandens (Cathedral bells), a garden escapee; subject of a weed-led control programme in Wairarapa Plains.



Schoenoplectus californicus currently has small infestations in the Wairoa River in Northland and in the Waikato River.

Step 6 Derive a 'Priority Ranking'

The Weediness Group (A, B, C, or D) is combined with the Practicality of Control score (10-3) to give a Priority Ranking, e.g., A9, B6, C7, D3. These rankings are grouped to establish the relative priority for funding of different weed control programmes.

Priority for funding	Priority Ranking Score
Very High	A6-A10; B7-B10
High	A4, A5; B6; C6-C10; D7-D10
Medium	B5; C5; D10
Low	A3; B3, B4; C3, C4; D3-D5

These ranking scores give priority to controlling weed species that are new incursions with a very limited distribution, where eradication is feasible, quick and cheap. Where weed species are widespread they will generally only be controlled on high-value sites.