



**Threatened
Plant
Action
Group**



Ms Karen Butler
Assistant Director
Environmental Biosecurity Section

PO Box 6100
Parliament House
Canberra ACT 2600

May 16, 2014

Dear Ms Butler,

The Nature Conservation Society of South Australia (NCCSA) and Threatened Plant Action Group (TPAG) welcome the opportunity to provide comments on the review of the key threatening process “Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants”.

As South Australia’s primary nature conservation advocacy organisation, NCCSA has been a long term advocate for the protection of native vegetation and biodiversity in South Australia since its foundation in 1962. TPAG was formed in 1993 and primarily focuses on undertaking in-situ conservation measures to protect threatened plant populations and habitats in the wild, working with government organisations (such as the Department for Environment , Water & Natural Resources) and other community groups to implement on-ground recovery actions. Both NCCSA and TPAG have an active interest in the protection of South Australia’s native vegetation communities, in particular areas that provide habitat for nationally and state listed species and threatened ecological communities. We recognise the major threat that garden escape plants pose to native vegetation with at least 25 EPBC listed species and at least 3 EPBC listed ecological communities in South Australia threatened or adversely affected by a range of invasive plant species that originate from ornamental plantings or gardens.

Please refer to the following pages for our comments on key areas to be addressed by the Committee. If you would like to clarify or discuss any of the points raised please contact me on (08) 7127 4633 or via email at nicki.depreu@ncssa.asn.au

Yours sincerely,

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NCSSA & TPAG Comments on review of the key threatening process: “Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants”.

Point 1: Whether having and implementing a threat abatement plan for this key threatening process would now be a feasible, effective or efficient way to abate the process

We consider that a national threat abatement plan would provide a more robust and transparent framework to abate this KTP however the implementation phase of such a plan and adequate resourcing will be critical if long-term benefits are to be maintained. There would obviously be a urgent need to undertake (or continue) extensive consultation with relevant industry groups such as Nursery and amenity horticulture associations as well as Commonwealth and State agencies who have regulatory and enforcement responsibilities (i.e. AQUIS). Community groups and other organisations that are effectively controlling garden escape weeds also need more support and improvements of networks with active field botanists is also required to enhance surveillance and monitoring capacity and to reduce lag time between detection and management responses. Also it needs to be ensured that threat abatement methods and weed control operations do not themselves threaten the EPBC listed or other native species and communities affected by garden escapes as this can easily occur if non-selective, ‘agricultural’ control techniques are employed, such as broad acre spraying of weed infestations in native vegetation.

Point 2: Whether the management arrangements in place at the time of listing, and any subsequent management arrangements, have been effective in abating the process

We acknowledge that, at the time of listing of this KTP, existing measures in place at national and state and territory levels provided a framework for a broad range of actions for border protection and weed management and control. These measures also provide for coordination and leadership in the event of new incursions however, there is an urgent need for further management effort given the extent and severity of this KTP. Existing arrangements have assisted in prioritising species of garden escape plants that pose a significant risk to native vegetation including threatened species and ecological communities but there has been limited progress in abating this KTP. In South Australia, garden escape plants continue to threaten or adversely affect at least 25 EPBC listed species and at least 3 EPBC listed ecological communities in South Australia and without further sustained effort these figures will only increase. Appendix 1 contains a list of some of the species and ecological communities that are currently threatened by this KTP.

In South Australia the impact of garden escape weeds on EPBC and state listed species and communities is being managed to some extent by public and private landholders as well as community-based organisations such as Friends of Parks groups and specialist organisations such as the TPAG. For example, a specific program of annual working bees has been implemented since 1994 for the Leafy Greenhood (*Pterostylis cucullata*) in Belair National Park in the Mount Lofty Ranges southeast of Adelaide by TPAG, Friends of Belair, and the Native Orchid Society of South Australia. These working bees have resulted in substantial reductions in weed density, cover and biomass for targeted areas of critical habitat and importantly, enabled the regeneration of indigenous understorey flora including *Pterostylis cucullata*. Response of the vegetation communities has been monitored with improvements in condition for two managed sites (Jury & Croft 2007). The flowering and numbers of at least one population of *Pterostylis cucullata* has increased from levels known prior to management of weed threats.

Point 3: Any activities that should be included in a threat abatement plan, if a plan were to be considered warranted.

Priority actions for a national threat abatement plan could include:

- increased surveillance for early detection
- more informed and impartial (apolitical) scientific screening of potential garden escape weed species
- increased restrictions on the availability of new ornamental species (particularly those from homoclimatic countries or regions)
- improved networks with active field botanists and those most likely to detect emerging weed species

The enormity of the task facing implementers will mean that program resourcing may need to focus first on priority assets such as habitat for matters of national environmental and state conservation significance, the protected area system, and other priority biodiversity assets in abating the impacts of the nominated process.

An alternative approach to development of a national threat abatement plan would be to properly resource an online national weed spotting network to enable accurate identification and early detection of new incursions by escaped garden plants and aquatic plants.

References

DotE (2014a) Approved Conservation Advice for *Correa calycina* (s266B of the Environment Protection and Biodiversity Conservation Act 1999). Department for Environment, Water, Heritage and the Arts, Australian Government. <http://www.environment.gov.au/biodiversity/threatened/species/pubs/7226-conservation-advice.pdf>

DotE (2014b) Approved Conservation Advice for *Spyridium coactilifolium* (s266B of the Environment Protection and Biodiversity Conservation Act 1999). Department for Environment, Water, Heritage and the Arts, Australian Government. <http://www.environment.gov.au/biodiversity/threatened/species/pubs/6572-conservation-advice.pdf>

DotE (2014c) Species Profile and Threats Database. Department of the Environment. <http://www.environment.gov.au/topics/biodiversity/threatened-species-ecological-communities/threatened-ecological-communities-4>

Jury, T. & S. Croft (2009) Comparison of managed with unmanaged Grassy Woodlands at Belair National Park. *Xanthopus*. Nature Conservation Society of South Australia, Adelaide.

Quarmby, J. (2006) Recovery Plan for Twelve Threatened Orchids in the Lofty Block Region of South Australia 2007-2012. Department for Environment and Heritage.

Quarmby, J.P. (2010) Recovery Plan for Twelve Threatened Orchids in the Lofty Block Region of South Australia 2010. Department of Environment and Natural Resources, South Australia.

Appendix 1: Selected examples of EPBC listed species and ecological communities in South Australia threatened by “Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants” key threatening process.

Species/Ecological Community	Common Name	EPBC Rating	Garden escape species currently considered to be a key threat*
<i>Caladenia argocalla</i>	White Beauty Spider-orchid	Endangered	Briar Rose, Cape Tulip, Soursob, Sparaxis, Topped Lavender
<i>Caladenia behrii</i>	Pink-lip Spider-orchid	Endangered	Broom, Three-cornered Garlic, Watsonia, Boneseed, Tree Heath
<i>Caladenia gladiolata</i>	Bayonet Spider-orchid	Endangered	Tree Heath, Boneseed
<i>Caladenia intuta</i>	Ghost Spider-orchid	Critically Endangered	Bridal Creeper, Sparaxis
<i>Caladenia rigida</i>	White Spider-orchid	Endangered	Broom, Tree Heath, Bulbil Watsonia, Boneseed
<i>Prasophyllum pruinatum</i>	Plum Leek-orchid	Endangered	Boneseed, Bridal Creeper, European Olive, Sweet Pittosporum & <i>Ursinia</i> sp.
<i>Pterostylis bryophila</i>	Hindmarsh Valley Greenhood	Critically Endangered	Bridal Creeper, Arum Lily, Montpellier Broom, Sweet Pittosporum, Bulbil Watsonia,
<i>Pterostylis cucullata</i>	Leafy Greenhood	Vulnerable	Boneseed, Montpellier and English Broom, Soursob, Sweet Pittosporum, Three-cornered Garlic, Blackberry, Gorse, Cape Tulip, European Olive, Hawthorn, <i>Prunus</i> spp., Briar Rose, South African Daisy, Sallow Wattle, Cootamundra Wattle, Freesia, Sparaxis, Bulbil Watsonia, Ivy, and Bridal Creeper.
<i>Pterostylis lepida</i>	Halbury Greenhood	Endangered	Bridal Creeper & Soursob
<i>Allocasuarina robusta</i>	Mount Compass Oak-bush	Endangered	Blackberry, Briar Rose, <i>Pinus</i> spp.
<i>Veronica derwentiana</i>	Mount Lofty Speedwell	Critically Endangered	Blackberry, Montpellier Broom, Briar Rose & Hawthorn
<i>Correa calycina</i>	Hindmarsh Correa	Vulnerable	Blackberry, Montpellier Broom, Willows
<i>Glycine latrobeana</i>	Clover Glycine	Vulnerable	Blackberry, Boneseed, Gorse, Montpellier and English Broom, <i>Pinus</i> spp., Olive, Sweet Pittosporum & Hawthorn
<i>Spyridium coactilifolium</i>	Butterfly Spyridium	Vulnerable	Boneseed, Bridal Creeper, Bridal Veil
Iron-grass Natural Temperate Grassland		Critically Endangered	Aleppo Pine, non-indigenous Eucalypts, Scabious, Statice and Briar Rose
Peppermint Box Grassy Woodland		Critically Endangered	European Olive, Rice Millet and Fountain Grass, Briar Rose, Soursob, Cape Tulip & Scabious
Swamps of the Fleurieu Peninsula		Critically Endangered	Blackberry, Arum Lily, Montpellier Broom, <i>Pinus</i> spp.

Note: EPBC Threatened orchid information are from Quarmby (2006), Quarmby (2010) and Jury & Croft (2009); information for non-orchid species and ecological communities from DotE (2014a), DotE (2014b) & DotE (2014c).