

Submission to the Review of the *Flora and Fauna Guarantee Act 1988*

[REDACTED]

[REDACTED]

[REDACTED]

Executive Summary

1. The Flora and Fauna Guarantee Act 1988 (FFG) was a major advance in management and conservation of Victoria's biodiversity when the FFG was first passed in 1988.
2. Many features of the FFG are commendable and should be maintained.
3. However, the FFG has not led to a turnaround in the survival trajectory of most species of threatened flora and fauna, and has not provided the 'guarantee' of survival embedded in its title.
4. Changes are recommended. Amongst the most critical changes are (1) Legal Standing to oblige compliance with the Act (2) the facility of the FFG to bind the Crown. Other procedural changes are recommended.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

¹ reference to DELWP, includes reference to its antecedents DSE, DEPI, CNR, NRE *et al.*

circumstances². THE SAC has wisely recognized that the EVCs data layer (composed as it is of poorly-defined and poorly-curated entities) is not a suitable basis for listing of communities (*c.f.* the SAC's reliance on conventional taxonomy for listing species and the like).

Categorization of listed entities – There have been numerous proposals, including FFG listing proposals, based on IUCN categories and criteria. The IUCN categorization is useful accessory information, but should not be determinative. The determination of the IUCN categories has proved problematic with many species with distinctive life history strategies. The two most problematic life history strategies are:

- Long-lived species – Most eucalypts and other species with long generation times come out of the IUCN categorization process as threatened in some way, regardless of their abundance and security within well-managed reserves.
- Episodic regenerators – Species which regenerate only after rare and unpredictable episodic events³, are difficult to categorize using the IUCN criteria and are often mis-categorized, and certainly misunderstood.

Informed opinion from experienced field workers and based on reliable science are likely to be better indicators of threats than relying solely on the IUCN categorization.

Scientific Advisory Committee – The SAC is appointed by the Minister and its expert composition is carefully maintained. The selection process (and the selected members) have managed to ensure that the SAC operates independently of the political process and has been most effective at ensuring that listing recommendations are considered solely on their scientific merit. The SAC processes should be maintained and supported. The existing secretariat to the SAC has proved exemplary.

Action Statements – Listing impels the production of 'Action Statements', which define what will/must be done to 'guarantee' survival and health of listed entities. To date, Action Statements have been prepared by officers of DELWP. However, the production rate of Action Statements has not kept pace with the listing of entities, and there is now a substantial

² for example, the population of Koalas *Phascolarctos cinereus* on the south-eastern fall of the Strzeleckis in South Gippsland, as the only population in the state not deriving from re-introductions from the Westernport islands. Further examples can be supplied, if requested.

³ such as Notostracan crustaceans of ephemeral pools and fire-dependant ephemeral plants

overhang of listed entities for which there are no Action Statements. Furthermore, recommended reviews of Action Statements have largely not occurred within the approved period.

***Recommendation II** – The SAC oversee the production of a generic and interim Action Statement, couched in terms appropriate to any and all listed entities. This generic Action Statement (which will bind the Crown) will come into effect if a specific Action Statement is not prepared within, say, three years of a proposal for listing being accepted by the SAC or by the Minister.*

Critical Habitat Determinations – There is facility under the FFG to declare certain limited areas as ‘Critical Habitat’ for a listed entity. This facility is potentially valuable as a ‘last ditch’ (? forlorn hope). To my knowledge, there has only been one Critical Habitat determination and that was immediately overturned by the Minister. Critical Habitat determination is potentially useful in very rare circumstances, where the implementation of the Action Statement has been ignored or has failed, but only as an interim measure to hold action until the Action Statement has been revised and implemented.

***Recommendation III** – The Critical Habitat facility be retained and be strengthened by requiring an ex parte meeting of the SAC (called at the sole discretion of the Chair of the SAC). For this meeting, the SAC will base its considerations substantially on the immediate and likely threats: Critical Habitat to be defined as an interim measure, necessitating immediate revision of the Action Statement. Once Critical Habitat has been determined, the SAC will advise the Minister and publish the SAC’s finding in the Government Gazette.*

Major Revisions of the FFG

The FFG has proven ineffective at ‘guaranteeing’ survival of listed entities. Simple proof is offered by there being no history of removal of listed taxa from the various lists of Rare and Threatened Species as a result of implementation of the Action Statements. The various lists of Rare and Threatened Species are all larger/longer than they were in 1988. It’s a simple, but telling, metric of the failure of the FFG. A couple of major revisions are here recommended.

Legal Standing – There is no explicit legal standing granted under the FFG.

Conventional legal interpretation thus applies in determining whether individuals or organizations can bring an action for compliance with the FFG. In nearly all situations relevant to the FFG, this legal convention excludes all private individuals and societies/corporations from being able to oblige compliance with the FFG. It falls to the Minister to decide whether there is a likely breach of compliance with the FFG, and in most cases that would mean the Minister would be deciding whether to bring an action against him/herself – a legal silliness.

The federal Environment Protection and Biodiversity Conservation Act 1999 (EPBC) explicitly provides standing to oblige compliance with that Act. As a result, the EPBC has proved far more effective at ensuring that proposed works do not threaten the survival of listed entities. For example, when employed by DELWP, I was directed to survey sites for the proposed Alpine Grazing Experiment in 2011/12. Altho this was a state political issue, I was directed to solely consider EPBC-listed entities and I was directed **not** to consider FFG-listed entities. This distinction was presumably due to the facility for external parties to oblige compliance with the EPBC, but not the FFG. The FFG was ineffective.

To avoid vexatious actions, it may be worthwhile to restrict legal standing to incorporated entities or entities with an Australian Business Number or representatives of the universities.

***Recommendation IV** – Explicitly grant legal standing to oblige compliance with the FFG within the (revized) FFG. Legal standing should be available to (a) incorporated entities and (2) holders of ABNs.*

DELWP Compliance – Whilst the FFG has proved very useful to DELWP employees who wish to raise the profile of threatened species and other entities (such as habitats), there has not been deep incorporation of the FFG thruout DELWP. Many parts of DELWP see compliance with the FFG as largely (or even solely) the responsibility of the Threatened Species and Communities sections within DELWP. Policy pronouncements to the contrary have not forced the realization that compliance with the FFG is the responsibility of each and every DELWP employee.

A single example will suffice⁴. *Astelia australiana* (Tall Astelia) is dramatic, tall lily endemic to Victoria (i.e. found nowhere else) in rainforest sites of the Beenak area, and a single population in the Otways. It is listed under the FFG and is rated as vulnerable in

⁴ further examples , from a variety of habitats, can be supplied if requested

Victoria and vulnerable in Australia. Its populations are subject to continuing decline, mainly as a direct result of fires (both wild fires and planned burns). Recent DELWP proposals to burn adjacent to and into the last remaining stand of Tall Astelia in the Yarra River catchment (at Tomahawk Creek, where the plant was formerly locally common) gave scant regard to this highly threatened species, nor to the requirements of the published Action Statement. Submissions by a number of naturalists and others did not remove this planned burning proposal and interested parties who made submissions believed their information, evidence and submissions had little impact on burning plans.

Planned burning across the state can generate similar stories for FFG-listed species likely adversely affected by fires having scant to no impact on the planned burning.

DELWP biologists and planners are either aware of these site-specific occurrences of threatened species, or have access to databases that can be interrogated for threatened species records. Depending on the attitudes of the local fire planners and other regional staff, threatened species occurrences may have a determinative impact on planned burning (rarely) or (more usually) have little impact on planned burning. There is no DELWP planning process that compels giving FFG-listed entities a high and determinative profile when planning burns. There are palliative statements regarding compliance with the FFG, including policy statements, but these have little impact when planning and applying burns.

Listing of inappropriate fire regimes as a Potentially Threatening Process under the FFG has had negligible impact on planned burning by DELWP.

Recommendation V –

- *Explicitly state that the FFG binds the Crown, including prospectively.*
- *Encourage the SAC to invite DELWP experts to contribute to discussions of particular proposals for listing by attending the relevant SAC meetings as an invited contributor.*
- *Empower the SAC secretariat to contact any DELWP section or region requesting whether the requirements of any entity proposed for listing or already listed has been properly considered in land management plans and actions, including in fire plans. If the response is inadequate, then the SAC is to advise the Minister and the Departmental Secretary.*

Appendix

Only publications in the scientific literature are included here. Other publications (e.g. popular articles for external magazines and newspapers, articles for Departmental web pages, brochures and other internal publications) are not listed here.

1. **Cheal, D. C.**, Lee, A. K. & Barnett, J. L. (1976) Changes in the Haematology of *Antechinus stuartii* (Marsupialia) and their Association with Male Mortality. *Australian Journal of Zoology* 24, 299-311.
2. **Cheal, D. C.** (1978) The Vegetation at Walkerville, Victoria. A further application of the Zürich-Montpellier technique. *Proceedings of the Royal Society of Victoria* 90(2), 315-326.
3. **Cheal, D. C.** (1979) Vegetation analysis - an essential part of small mammal studies. *Bulletin of the Australian Mammal Society* 6, 46-47.
4. **Cheal, D. C.**, Day, J. C. & Meredith, C. W. (1979) *Fire in the National Parks of North-West Victoria*. Report to Australian National Parks & Wildlife Service, Canberra.
5. **Cheal, D. C.** (1980) Additional records of plants from the Mallee. *Victorian Naturalist* 97(2), 73-75.
6. **Cheal, D. C.** (1981) Ecological Effects of Fire - North-West Victoria. in *Fire Ecology in Semi-Arid Lands* eds. A. Heislors, P. Lynch & B. Walters (Nat. Parks Service, Victoria)
7. **Cheal, D. C.** (1981) *Acacia notabilis* - first records for Victoria. *Victorian Naturalist* 98(2), 58-59.
8. **Cheal, D. C.** (1983) Fire in the Dry Country in *Fighting Fire...with fire, a symposium on fuel reduction burning in forests* ed. E. H. M. Ealey, Graduate School of Environmental Science, Monash University.
9. **Cheal, D. C.** (1983) The Effects of Fire on Animal Life. *Trees and Victoria's Resources* 24(4), 12-13.
10. **Cheal, D. C.** (1986) A park with a kangaroo problem. *Oryx* 20(2), 95-99. Reprinted in *Parks* 11 (1986).
11. **Cheal, D. C.** (1987) The Diets and Dietary Preferences of *Rattus fuscipes* and *Rattus lutreolus* at Walkerville in Victoria. *Australian Wildlife Research* 14, 35-44.
12. **Cheal, D. C.** (1987) Vegetation Management in Parks & Reserves. *Australian Ranger Bulletin* 4(2), 23-24.
13. **Cheal, D. C.** (1987) Habitat of Gunn's Orchid (*Sarcochilus australis*) from the Northern Strzeleckis, Victoria. *Victorian Naturalist* 104(6), 176-177.
14. **Cheal, D. C.** (1988) *Botanical Assessment of Grasslands, Merri Creek-Somerton-Cooper Street*. Resource Assessment Report 88-1, Conservation, Forests & Lands.
15. **Cheal, D. C.** & Parkes, D. M. (1989) Mallee Vegetation in Victoria, Chapter 8 in *Mediterranean Landscapes in Australia* eds. J. C. Noble & R. A. Bradstock (CSIRO, East Melbourne)
16. **Cheal, D. C.** (1989) Strategies for Conserving Communities and Species, Chapter 33 in *Mediterranean Landscapes in Australia* eds. J. C. Noble & R. A. Bradstock (CSIRO, East Melbourne)
17. Molnar, C. M., Dickins, M. J. & **Cheal, D. C.** (1989) *Vegetation Survey and Sites of Botanical Significance in the Plenty Valley Growth Corridor*. Ecological Survey Report No. 37 (Department of Conservation, Forests and Lands, Melbourne)
18. **Cheal, D. C.**, Robinson, R. W., Cameron, D. G., Ellis, J. E., Reid, J. & Walsh, N. G. (1989) Mapping by J. A. Lau *Floristic Vegetation Map of the Melbourne Area*. Scale 1:100000 (Department of Conservation, Forests and Lands, Melbourne)

19. Gullan, P. K., **Cheal, D. C.** & Walsh, N. G. (1990) *Rare or Threatened Plants in Victoria*. (Department of Conservation and Environment, Melbourne)
20. Parkes, D. M. & **Cheal, D. C.** (1990) Perceptions of Mallee Vegetation in *The Mallee Lands A Conservation Perspective* (CSIRO, Melbourne)
21. **Cheal, D. C.** (1991), though published as an unauthored Government document *Remnant Native Grasslands and Grassy Woodlands of the Melbourne Area An Action Plan for Conservation based on Biological Values*. (Department of Conservation and Environment, Melbourne)
22. **Cheal, D. C.** (1991) Threatened Plants in Victoria. *Trees and Natural Resources* 33(2), 22-23.
23. **Cheal, D. C.** (1991) The impact of environmental weeds on rare or threatened plants in Victoria. *Plant Protection Quarterly* 6(3), 123-125.
24. **Cheal, D. C.** (1992) *Acacia enterocarpa : Astelia australiana : Carex tasmanica : Lepidium monoplocoides : Rutidosia leptorhynchoides* Case studies for Leigh, J. H. and Briggs, J. D. (eds.) *Threatened Australian Plants Overview and Case Studies* Pub. Aust. Nat. Parks & Wildlife Service, Canberra
25. **Cheal, D. C.**, Parkes, D., Parsons, R. F. and Sluiter, I. R. K. (1992) Vascular Plants and Communities in *Endangered Species and Communities and threatening processes in the Murray Mallee* Pub. Aust. Nat. Parks & Wildlife Service and the Murray-Darling Basin Commission, Canberra
26. **Cheal, D. C.** (1993) Effects of Stock Grazing on the Plants of Semi-arid Woodlands and Grasslands. *Proceedings of the Royal Society of Victoria* 105(1), 57-65.
27. Adams, M. A., Iser, J., Keleher, A. D. & **Cheal, D. C.** (1994) Nitrogen and phosphorus availability and the role of fire in heathlands at Wilsons Promontory. *Australian Journal of Botany* 42, 269-281.
28. **Cheal, D. C.** (1996) Fire Succession in Heathlands and Implications for Vegetation Management. pp. 67-79 in *Fire and Biodiversity The Effects and Effectiveness of Fire Management* Pub. Biodiversity Unit, Biodiversity Series, Paper No. 6 (also published online at http://www.environment.gov.au/life/general_info/biodivser_8/paper6.html).
29. **Cheal, D. C.** (1997) Survival of Desert Banksia *Banksia ornata* Seed in Detached Cones. *Victorian Naturalist* 114(4), 190-191.
30. **Cheal, D. C.** (1997) Drooping Sheoke (*Casuarina verticillata*) in the Mallee. *Victorian Naturalist* 114(6), 282-284.
31. **Cheal, D. C.** and Fisher, A. (2000) Split-wing Bluebush *Maireana dichoptera*: first record for the Northern Territory. *Northern Territory Naturalist* 16, 24-25.
32. **Cheal, D. C.** (2000) Seed Regeneration in Long-unburnt and Recently-burnt Heathland at Wyperfeld National Park. *Proceedings of the Royal Society of Victoria* 112(2), 111-118.
33. **Cheal, D. C.** (2000) Threats to Native Plants of the Top End. *The Web ...The Newsletter of the Threatened Species Network (NT)* 3, 1-2.
34. Woinarski, J. C. Z., Brock, C., Armstrong, M., Hempel, C., **Cheal, D.** and Brennan, K. (2000) Bird distribution in riparian vegetation in the extensive natural landscape of Australia's tropical savanna: a broad-scale survey and analysis of a distributional data base. *Journal of Biogeography* 27, 843-868.
35. Newell, G., Griffioen, P. and **D. Cheal** (2001) The Potential Effects of 'Greenhouse' Climate-warming Scenarios upon Selected Victorian Plant Species and Vegetation Communities. Pub. Arthur Rylah Institute for Environmental Research, Heidelberg, Victoria; also subsequently published as Effects of 'greenhouse' warming scenarios upon selected Victorian plants and vegetation communities. pp. 53-54 in *Climate change impacts on biodiversity in Australia*

- Outcomes of a workshop sponsored by the Biological Diversity Advisory Committee, 102 October 2002 (CSIRO Sustainable Ecosystems, Canberra, June 2003)
36. Russell-Smith, J., Ryan, P. G. and **D. C. Cheal** (2002) Fire regimes and the conservation of sandstone heath in monsoonal northern Australia: frequency, interval, patchiness. *Biological Conservation* 104, 91-106.
37. **Cheal, D.** (2002) *Acacia obtusifolia* - Introduction and spread in Native Bush. *Victorian Naturalist* 119(5), 231-232. (summary reprinted in *Growing Australian* – Aust. Plants Soc., Victorian Newsletter, December 2002)
38. Parkes, D. M., Newell, G., and **Cheal, D.** (2003) Assessing the quality of native vegetation: The 'habitat hectares' Approach. *Ecological Management and Restoration* 4(supplement), S29-S38
39. **Cheal, D.** and Coman, B. (2003; 2nd edition 2006) Pest Plants and Animals. Chapter 28 in *Ecology: An Australian Perspective* eds. Attiwill, A. and Wilson, B. Pub. Oxford Uni Press, Melbourne
40. Carter, O., Murphy, A. M. and **Cheal, D. C.** (2003) *Natural Temperate Grassland*. Pub. Environment Australia, Biodiversity Unit, Biodiversity Series, online at <http://www.ea.gov.au/biodiversity/publications/grasslands/index.html>.
41. **Cheal, D.** (2003) Palmiers du Territoire du Nord de l'Australie. *Le Palmier* 36, 10-15.
42. **Cheal, D.** (2003) Bogong High Plains After the 2004 Fires. *Victorian Naturalist* 120, 201-203.
43. White, M., Oates, A., Brown, J., Barlow, T., McMahon, A., Rosengren, N., **Cheal, D.**, Sutter, G., Sinclair, S., Chesterfield, E., Frood, D. and Pelikan, M. (2003) *Vegetation Mapping North-West Victoria*. (Arthur Rylah Institute for Environmental Research, Department of Sustainability & Environment, Heidelberg, Victoria)
44. **Cheal, D.**, Newell, G. and Griffioen, P. (2003) Climate Change and Weeds: Can we predict future problems. pp. 39-42 in *Climate Impacts on Australia's Natural Resources Current and Future Challenges* (Queensland Government Natural Resources and Mines, Brisbane; also published in *Ecological Management and Restoration* 5(3), 234 and online at <http://www.longpaddock.qld.gov.au/ClimateChanges/pub/Workbook.pdf>).
45. **Cheal, D.** (2004) Plant Responses to Fires. *Victorian Naturalist* 121, 107-115.
46. Carter, O. and **Cheal, D.** (2004) *Recovery of Rare and Threatened Flora after the 2002 Wildfire and Vital Attributes to Assist Ecological Fire Management in the Big Desert, Western Victoria*. Arthur Rylah Institute Technical Paper Series No. 150 Pub. ARI, Heidelberg
47. Luck, J., Crnov, R., Czerniakowski, B., Smith, I. W., Sinclair, S., **Cheal, D.**, Thomson, F., Franz, P. and Moran, J. (2004) *Mundulla Yellows in Eucalyptus An abiotic or biotic disorder? A multidisciplinary investigation of an unknown etiology*. Report to the SA Department for Environment and Heritage and the Federal Department of Environment and Heritage Department of Primary Industries, Victoria
48. **Cheal, D.** (2004) A Consideration of Victoria's Proposals for Ecological Burning, using Mallee Heathlands as a case study. *Bushfire 2004 Conference, Earth, Wind & Fire Fusing the elements* Adelaide, South Australia (available at http://www.environment.sa.gov.au/biodiversity/pdfs/bushfire/cheal_david.pdf)
49. **Cheal, D.** (2005) Damage by the Feral Goat *Capra hircus* to Mallee in Murray-Sunset National Park. *Victorian Naturalist* 122(2), 108-111.
50. Mansergh, I., **Cheal, D.** and Amos, N. (2005) Biolinks the journey. *The Great Greenhouse Gamble Conference*, September 2005, Sydney, New South Wales (available online at http://www.nccnsw.org.au/index.php?option=com_content&task=view&id=1159&Itemid=528)

51. Mansergh, I., **Cheal, D.** and Amos, N. (2005) Greenhouse Climate Change and Adaptation Response for Biodiversity and Ecosystem Health in South-eastern Australia. *International Climate Change Conference, Action on Climate Change*, 13 – 17 November, 2005 Melbourne, Australia (available online at <http://www.greenhouse2005.com/Program.html>)
52. **Cheal, D. C.** (2007) Fire ... a standard management tool that still frightens us. *Proceedings of the Royal Society of Victoria* **118**(2), 379-393.
53. Mansergh, I. and **D. Cheal** (2007) Protected area planning and management for eastern Australian temperate forests and woodland ecosystems under climate change – a landscape approach, pp. 58-72 in *Protected areas: buffering against climate change* Proceedings of a WWF and IUCN World Commission on Protected Areas symposium, 18 – 19 June, 2007 Canberra, Australia
54. **Cheal, D. C.** (2008) Repeatability of cover estimates? *Ecological Management and Restoration* **9**(1), 69-71.
55. Mansergh, I., **Cheal, D.** & Fitzsimons, J. A. (2008) Future landscapes in south-eastern Australia: the role of protected areas and biolinks in adaptation to climate change. *Biodiversity* **9** (3 & 4), 59-70.
56. Adair, R., **Cheal, D.**, White, M. (2008) *Advisory list of environmental weeds in aquatic habitats of Victoria*. <http://www.dse.vic.gov.au/>
57. Adair, R., **Cheal, D.**, White, M. (2008) *Advisory list of environmental weeds in coastal plains and heathy forest bioregions of Victoria*. <http://www.dse.vic.gov.au/>
58. Adair, R., **Cheal, D.**, White, M. (2008) *Advisory list of environmental weeds in the Inland Plains bioregions of Victoria*. <http://www.dse.vic.gov.au/>
59. Adair, R., **Cheal, D.**, White, M. (2008) *Advisory list of environmental weeds in the Mallee bioregions of Victoria*. <http://www.dse.vic.gov.au/>
60. Adair, R., **Cheal, D.**, White, M. (2008) *Advisory list of environmental weeds in the Ranges bioregions of Victoria*. <http://www.dse.vic.gov.au/>
61. Ainsworth, N., Adair, R. and **Cheal, D.** (2008) *A method of monitoring biodiversity for changes associated with invasive plants* Department of Sustainability and Environment, East Melbourne, Victoria. 28 pp.
62. Platt, S. J., Adair, R., White, M., **Cheal, D.** and Ainsworth, N. (2008) *A Strategic Framework for Managing the Environmental Impacts of Weeds on Public Land in Victoria, Australia* pp. 376–378 in van Klinken, R. D., Osten, V. A., Panetta, F. D. and Scanlan, J. C., editors. Proceedings of the 16th Australian Weeds Conference, Queensland Weeds Society, Brisbane (available at <http://www.australisbiological.com.au/publications/>)
63. Bennett, A. F., Haslem, A., **Cheal, D. C.**, Clarke, M. F., Jones, R. N., Koehn, J. D., Lake, P. S., Lumsden, L. F., Lunt, I. D., Mackey, B. G., McNally, R., Menkhorst, P. W., New, T. R., Newell, G. R., O’Hara, T., Quinn, G. P., Radford, J. Q., Robinson, D., Watson, J. E. M., Yen, A. L. (2009) Ecological processes: A key element in strategies for nature conservation. *Ecological Management and Restoration* **10**(3), 192-199.
64. **Cheal, D.** (2009) Twenty Years of Grazing Reduction in Semi-arid Woodlands. *Pacific Conservation Biology* **15**(4), 268-277.
65. **Cheal, D.** (2010) Velvet Thread-petal *Stenopetalum velutinum* rediscovery in Victoria. *Victorian Naturalist* **127**(1), 19-22.
66. **Cheal, D.** (2010) *Growth stages and tolerable fire intervals for Victoria’s native vegetation data sets Report no. 84 Fire and adaptive management* Department of Sustainability and

- Environment, East Melbourne, Victoria. 244 pp. (available online at <http://www.dse.vic.gov.au/fire-and-other-emergencies/publications-and-research/fire-research-reports/research-report-84-growth-stages-and-tolerable-fire-intervals-for-victorias-native-vegetation-data-sets>>).
67. Zimmer, H., Green, P., **Cheal, D.** and Clarke, M. F. (2010) *Reconstructing Mallee fire history using Callitris verrucosa tree rings ARI Technical Report Series no. 215* Department of Sustainability and Environment, Melbourne, Victoria. 24 pp.
68. Lunt, I. D., Zimmer, H. C. and **Cheal, D. C.** (2011) The tortoise and the hare? Post-fire regeneration in mixed *Eucalyptus–Callitris* forest. *Australian Journal of Botany* 59, 575-581.
69. **Cheal, D.**, White, M., Machunter, J. and Kohout, M. (2011) *The Vegetation of East Gippsland - III* Department of Sustainability and Environment, Melbourne, Victoria. 188 pp.
70. Zimmer, H., **Cheal, D.** and Cross, E. (2012) *Post-fire weeds triage manual Black Saturday Victoria 2009 – Natural Values fire recovery program* Rebuilding Together Statewide Bushfire Recovery Plan no. 23 Department of Sustainability and Environment, East Melbourne, Victoria. 70 pp.
71. Zimmer, H., **Cheal, D.**, Lunt, I. and Johnson, G. (2012) *Black Cypress-pine Callitris endlicheri fire-sensitive vegetation recovery following high intensity bushfire. Rebuilding Together series, no. 10* Department of Sustainability and Environment, Melbourne, Victoria. 23 pp. (available online at http://www.dse.vic.gov.au/__data/assets/pdf_file/0016/150307/VBRRRA-P10-web.pdf)
72. **Cheal, D.** (2012) A Biological Basis for Planned Burning. *Proceedings of the Royal Society of Victoria* 124(1), 7-19.
73. **Cheal, D.**, Moxham, C., Kenny, S. and Millet-Riley, J. (2013) Rare plant recovery in Mallee woodlands. *Victorian Naturalist* 130(3), 96-108.
74. **Cheal, D.** Prioritization of environmental weed works. Submitted for publication to *Plant Protection Quarterly* (2015).