
SCIENCE COMMUNICATIONS

May 2001 - July 2001

Science Division Mission: Provide up-to-date and scientifically sound information to uphold effective conservation and land management in WA

Science Communications lists titles of publications, reports etc prepared by Science Division staff. This issue is for the period May 2001 to July 2001. If you require a copy of any listings please contact the authors or Christine Farrell at Science House, Kensington or Lisa Wright at Woodvale

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Journal Publications

Abbott, I. (2001). Aboriginal names of mammal species in south-west Western Australia. *CALMScience* **3**. pp. 433-486.

Abbott, I. (2001). Historic record of Australian pelican, *Pelecanus conspicillatus*, breeding in southwest Western Australia. *Western Australian Naturalist* **23**. pp. 1-7.

Behn, G., McKinnell, F.H., Caccetta, P. and Vernes, T. (2001). Mapping forest cover, Kimberley region of Western Australia. *Australian Forestry* **64**. pp. 80-87.

Burrows, N.D., Ward, B.G. and Robinson, A.D. (2001). Bark as fuel in a moderate intensity jarrah forest fire. *CALMScience* **3**. pp. 405-409.

CALMScience Division, Department of Conservation and Land Management, Western Australia (2001). CALMScience communications. - February 2001-April 2001. Department of Conservation and Land Management, Western Australia, pp. 1-10.

CALMScience Division, Department of Conservation and Land Management, Western Australia (2001). CALMScience: Western Australian journal of conservation and land management. - Vol. 3, no. 4. Department of Conservation and Land Management, Western Australia, pp. 405-626.

Gibson, N., Keighery, G.J. and Lyons, M.N. (2001). Vascular flora of Scott National Park, Camping Reserve 12951 and Gingilup Swamps Nature Reserve, Western Australia. *CALMScience* **3**. pp. 411-432.

Harvey, J.M., Alford, J.J., Longman, V.M. and Keighery, G.J. (2001). A flora and vegetation survey of the islands of the Houtman Abrolhos, Western Australia. *CALMScience* **3**. pp. 521-623.

Kay, W.R., Halse, S.A., Scanlon, M.D. and Smith, M.J. (2001). Distribution and environmental tolerances of aquatic macroinvertebrate families in the agricultural zone of southwestern Australia. *Journal of the North American Benthological Society* **20**. pp. 182-199.

Whitford, K.R. (2001). Dimensions of tree hollows used by birds and mammals in the jarrah forest: improving the dimensional description of potentially usable hollows. *CALMScience* **3**. pp. 499-511.

Whitford, K.R. and Williams, M.R. (2001). Survival of jarrah (*Eucalyptus marginata* Sm.) and marri (*Corymbia calophylla* Lindl.)

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habitat trees retained after logging.
Forest Ecology and Management **146**.
pp. 181-197.

Wilkinson, C.J., Shearer, B.L., Jackson,
T.J. and Hardy, G.E. St. J. (2001).
Variation in sensitivity of Western
Australian isolates of *Phytophthora*
cinnamomi to phosphite *in vitro*. *Plant*
Pathology **50**. pp. 83-89.

Books

McCaw, L., Hagan, R. and Gould, J.
(2001). Managing fire in regrowth
eucalypt forests. *In: Intensive*
Management of Regrowth Forests for
Wood Production in Australia: a
Review of Current Practice and Future
Potential (eds. M.J. Connell, R.J.
Raison & A.G. Brown). CSIRO
Forestry and Forest Products,
Canberra. pp. 39-43.

Conference/Workshop Papers

Keighery, B. and Keighery, G. (2001).
Biology and weed risk of *Euphorbia*
terraccina in Western Australia. *In:*
Euphorbia terraccina (Geraldton
Carnation Weed or Spurge): a Guide to
its Biology and Control and Associated
Safety Issues: Proceedings of a
Workshop Conducted by
Environmental Weeds Action Network,
7 October 2000 Environmental Weeds
Action Network, Perth. pp. 4-7.

Keighery, G., Halse, S. and McKenzie,
N. (2001). Why wheatbelt valleys are
valuable and vulnerable: the ecology of
wheatbelt valleys and threats to their
survival. *In: Conference Papers:*
Dealing With Salinity in Wheatbelt
Valleys: Processes, Prospects and
Practical Options, Merredin, 30 July-1
August 2001 State Salinity Council,
Perth. pp. 55-65.

Porter, W.M., Bartle, J. and Cooper, D.
(2001). Fitting perennials into an
annual world. *In: Conference Papers:*
Dealing With Salinity in Wheatbelt
Valleys: Processes, Prospects and
Practical Options, Merredin, 30 July-1
August 2001 State Salinity Council,

Perth. pp. 127-148.

Abstracts

Bartle, J., Olsen, G., Carslake, J. and
Cooper, D. (2001). *Acacia* species as
large scale crop plants in the
Australian wheatbelt (ABSTRACT). *In:*
Acacia Symposium: the Conservation
and Utilisation Potential of Australian
Dryland Acacias: 13-14th July, 2001,
Dalwallinu, Western Australia Shire of
Dalwallinu, Dalwallinu. pp. 1.

Brand, J.E. (2001). Review of the
influence of *Acacia* species on
sandalwood (*Santalum spicatum*)
establishment in Western Australia
(ABSTRACT). *In: Acacia Symposium:*
the Conservation and Utilisation
Potential of Australian Dryland
Acacias: 13-14th July, 2001,
Dalwallinu, Western Australia Shire of
Dalwallinu, Dalwallinu. pp. 1.

Buist, M., Coates, D. and Yates, C.
(2001). Rarity and threat in relation to
the conservation of *Acacia* in Western
Australia (ABSTRACT). *In: Acacia*
Symposium: the Conservation and
Utilisation Potential of Australian
Dryland Acacias: 13-14th July, 2001,
Dalwallinu, Western Australia Shire of
Dalwallinu, Dalwallinu. pp. 1.

Byrne, M. (2001). The role of genetics in
the conservation and utilization of
Acacia. *In: Abstracts: Society for*
Conservation Biology: Macquarie
University, Sydney, July 13-16, 1998
Shire of Dalwallinu, Dalwallinu. pp. 1.

Halse, S., Shiel, R.J., Friend, R.H. and
Cale, D.J. (2001). Biodiversity is
multifaceted: cross-taxon congruence
in species richness patterns in
wetlands (ABSTRACT). *In: Final*
Program & Abstracts: Fenner
Conference on the Environment 2001:
Biodiversity Conservation in
Freshwaters, 5-8 July 2001, Canberra
Australian Academy of Science,
Canberra. pp. 35.

Maslin, B.R. (2001). Australian dryland
acacias with edible seeds
(ABSTRACT). *In: Acacia Symposium:*

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- the Conservation and Utilisation Potential of Australian Dryland Acacias: 13-14th July, 2001, Dalwallinu, Western Australia* Shire of Dalwallinu, Dalwallinu. pp. 1.
- Maslin, B.R. (2001). Is systematics critical for effective utilisation and conservation of *Acacia*? (ABSTRACT). In: *Acacia Symposium: the Conservation and Utilisation Potential of Australian Dryland Acacias: 13-14th July, 2001, Dalwallinu, Western Australia* Shire of Dalwallinu, Dalwallinu. pp. 1-2.
- McCaw, L., Gould, J.S. and Cheney, N.P. (2001). Prediction of high-intensity forest fires in eucalypt forests (ABSTRACT). In: *Conference proceedings: Forests in a Changing Landscape: 16th Commonwealth Forestry Conference jointly with the 19th Biennial Conference of the Institute of Foresters of Australia, Fremantle, Western Australia, 18-25 April 2001* pp. 1.
- Miller, J., Maslin, B.R., Andrew, R. and Bayer, R. (2001). Towards an understanding of variation within the mulga complex (*Acacia anura* and relatives) using nuclear DNA techniques (ABSTRACT). In: *Acacia Symposium: the Conservation and Utilisation Potential of Australian Dryland Acacias: 13-14th July, 2001, Dalwallinu, Western Australia* Shire of Dalwallinu, Dalwallinu. pp. 1.
- Monks, L. and Coates, D. (2001). The translocation of two critically endangered *Acacia* species (POSTER ABSTRACT). In: *Acacia Symposium: the Conservation and Utilisation Potential of Australian Dryland Acacias: 13-14th July, 2001, Dalwallinu, Western Australia* Shire of Dalwallinu, Dalwallinu. pp. 1.
- Patrick, S. (2001). Botanical survey with the aid of volunteers: a study of the vegetation on a Murchison station (POSTER ABSTRACT). In: *Acacia Symposium: the Conservation and Utilisation Potential of Australian Dryland Acacias: 13-14th July, 2001, Dalwallinu, Western Australia* Shire of Dalwallinu, Dalwallinu. pp. 1.
- Pinder, A.M., Halse, S.A., Shiel, R.J., McRae, J.M., Cale, D.J. and Penniford, M.G. (2001). Diversity, endemism and conservation of the invertebrate fauna of saline wetlands in south-western Australia. In: *Book of Abstracts: Societas Internationalis Limnologiae 2001, XXVIII Congress, Monash University, Melbourne, Australia* Monash University, Melbourne. pp. 167.
- Shiel, R.J., Green, J.D. and Halse, S.A. (2001). Copepods of ephemeral waters in arid and temperate Australia. In: *Program & Abstracts: Fifth International Crustacean Congress and Summer 2001 Meeting of The Crustacean Society, 9-13 July 2001, the University of Melbourne, Melbourne, Victoria, Australia* University of Melbourne, Melbourne. pp. 132.

Reports

- Abbott, I. (2001). Productivity of biologists in CALMScience Division: a preliminary benchmarking study. - Draft. Department of Conservation and Land Management, Western Australia, pp. 1-9.
- Franke, B., Gurner, R. and Froend, R. (2001). Wetland vegetation monitoring, 2000/2001 (Salinity Action Plan). Edith Cowan University, Centre for Ecosystem Management, Joondalup. pp. 1-260.
- Friend, J.A. (2001). Medium-term radio-tracking of dibblers, Fitzgerald River NP: final report to BankWest Landscape Conservation VisaCard. Department of Conservation and Land Management, Western Australia, pp. 1-7.
- Froend, R.H. and Loomes, R. (2001). Relationships between water level, salinity and the emergent and fringing vegetation of Byenup-Muir wetlands: report to the Dept. of Conservation and Land

(Continued on page 4)

(Continued from page 3)

- Management. Edith Cowan University, Centre for Ecosystem Management, pp. 1-26.
- Kinal, J. (2001). Using ground-based electromagnetic induction to estimate soil salt storage in south west forests: final report on SPP 1999/09. pp. 1-33.
- Prince, R.I.T. (2001). Aerial survey of the distribution and abundance of dugongs and associated macrovertebrate fauna: Pilbara coastal and offshore region, WA: completion report. Department of Conservation and Land Management, Western Australia, pp. 1-39.
- Start, A.N., Handasyde, T. and Barrett, R.L. (2001). Environmental management issues on the Yampi Sound Defence Training Area (YSTA), Derby, Western Australia: recommendations for the Australian Heritage Commission. Department of Conservation and Land Management, Western Australia, pp. 1-9.
- Thomas, N.D. and Whisson, L. (2001). Farewell felines of Faure: follow-up survey of feral cats on Faure Island. Department of Conservation and Land Management, Western Australia, pp. 1-5.
- Wayne, A., Rooney, J., Ward, C., Wheeler, I. and Mellican, A. (2001). Spotlight surveys to investigate the impacts of timber harvesting and associated activities within the jarrah forest of Kingston State Forest, with particular reference to the koomal (*Trichosurus vulpecula*) and ngwayir (*Pseudocheirus occidentalis*): Kingston Project progress report. Department of Conservation and Land Management, Western Australia, pp. 1-30.
- Wayne, A., Wheeler, I., Ward, C., Rooney, J. and Mellican, A. (2001). The impacts of timber harvesting and associated activities on the small terrestrial vertebrates of the jarrah forest: Kingston Project progress report. Department of Conservation and Land Management, Western Australia, pp. 1-37.
- Williams, M.R. (2001). Grasstrees and woody plants as bio-indicators of past growing conditions and the patchiness of past fires: final report to the Department of Conservation and Land Management. Curtin University of Technology, Perth. pp. 1-15.
- Yung, F.H. (2001). Literature review in sustainability, stochastic methods & PVA and nonlinear dynamics (chaos) for ecological modelling. Department of Conservation and Land Management, Western Australia, pp. 1-56.
- Popular (Landscape, Newsletters, Letters, etc.)**
- Burbidge, A. (2001). Bristlebird translocation update. *South Coast Threatened Birds Newsletter* **5**. pp. 1-2.
- Cochrane, A. (2001). Our frozen future. *Landscape* **16(4)**. pp. 23-27.
- De Tores, P. and Rosier, S. (2001). Operation Foxglove reaps rewards. *Western Shield Apr.* pp. 2.
- Friend, T., Anthony, C. and Thomas, N. (2001). Return to Dryandra: marsupials hop away from extinction. *Landscape* **16(4)**. pp. 10-16.
- Gathe, J. (2001). Rottnest acquires herbarium. *CALM News May/Jun.* pp. 7.
- Hingston, B. (2001). Growth plots established in Western Australia. *Agroforestry News* **10(1)**. pp. 17.
- Keighery, G. and Keighery, B. (2001). Perth's bushland plant biodiversity. *In: Skills for Nature Conservation: Seminar Series Program, 2001: Exploring Perth's Unique Natural Environment, 9 June 2001* pp. 1-2.
- McKenna, S. and Burrows, N. (2001). Colin a finalist in top science awards. *CALM News May/Jun.* pp. 5.

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- Moore, R. (2001). Eucalypts for sawlogs: a pilot project in Western Australia. *Agroforestry News* **10(1)**. pp. 16.
- Robinson, R. (2001). Fruits of fire. *Landscape* **16(4)**. pp. 48-53.
- Ryan, P. and Brand, J. (2001). Sandalwood: a lucrative solution to salinity problem. *CALM News* **Jan/ Feb.** pp. 6.
- Vernes, T. (2001). Preliminary results from *Santalum macgregorii ex situ* conservation planting. *Sandalwood Research Newsletter* **13**. pp. 6-7.
- Vernes, T. (2001). Sandalwood research newsletter. - Issue 13. Department of Conservation and Land Management, Western Australia, pp. 1-8.
- Williams, A. (2001). Long-tailed peab-blue (*Lampides boeticus*). *Newsletter of the Western Australian Insect Study Society* **Feb.** pp. 2-3.
- Williams, M. (2001). More on wedge skippers. *Newsletter of the Western Australian Insect Study Society* **Jun.** pp. 8.

Management plans (Prescriptions, Guidelines, Recovery Plan Reports)

- Craig, G.F. and Coates, D.J. (2001). Declared rare and poorly known flora in the Esperance District. *Department of Conservation and Land Management, Western Australia, Wildlife Management Program* **21**. pp. 1-474.
- Patrick, S. (2001). Declared rare and poorly known flora in the Geraldton District. *Department of Conservation and Land Management, Western Australia, Wildlife Management Program* **26**. pp. 1-664.
- Patrick, S.J. and Brown, A.P. (2001). Declared rare and poorly known flora in the Moora district. *Department of Conservation and Land Management, Western Australia, Wildlife Management Program* **28**. pp. 1-639.

Submitted

- Broadhurst, L., Coates, D. and Maslin, B. Genetic diversity within and divergence between rare and geographically widespread taxa of the *Acacia acuminata* (Mimosaceae) complex. *Heredity*
- Broadhurst, L., Coates, D.J. and Tan, B.H. Patterns of morphological variation and allelic distribution across a zone of overlap between subspecies of *Geleznovia*. *Australian Journal of Botany*
- Burbidge, A.H. Quail and button-quail in southern Western Australia. *Western Australian Bird Notes*
- Burbidge, A.A. and Morris, K.D. Introduced mammal eradications for nature conservation on Western Australian islands: a review. *In: Conference Proceedings*
- Byrne, M. and Coates, D. DNA sequence variation in the declared rare species *Tetratheca aphylla*, *T. paynterae* and *T. harperi* (Tremandraceae): report to Portman Iron Ore.
- Cochrane, A. Threatened Flora Seed Centre (POSTER ABSTRACT). *In: Seed Conservation Conference*
- Cochrane, A., Lally, T., Monks, L. and Brown, K. The potential for weed invasion in native plant communities: a soil seedbank analysis of East Yornaning Nature Reserve, Western Australia. *Ecological Management and Restoration*
- Crane, C. and Shearer, B. (2001). Impact of *Omphalotus nidiformis* in a climax *Banksia speciosa* community (POSTER ABSTRACT). *In: Fungimap National Conference 22-26 Jun 2001, Denmark, W.A.*
- Cranfield, R.J. *Grevillea bipinnatifida* subsp. *pagna* (Proteaceae), a new subspecies from south-west Western Australia. *Nuytsia*

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- Cranfield, R.J. Two new species of *Brachyloma* (Epacridaceae), from the South West Botanical Province of Western Australia. *Nuytsia*
- D'Souza, N.K., Colquhoun, I.J., Shearer, B.L., and Hardy, G.E. St. Biological control of *Phytophthora cinnamomi*: the potential of Western Australian native legume species to reduce inoculum in soil.
- Davis, J.A., Halse, S.A. and Froend, R.H. (2001). Factors influencing biodiversity in coastal plain wetlands of southwestern Australia. In: *Biodiversity in Wetlands: Assessment, Function and Conservation. Volume 2* (eds B. Gopal, W.J. Junk & J.A. Davis). Elsevier, Amsterdam.
- Elliott, C.P., Yates, C.J., Ladd, P.G. and Coates, D.J. Morphometric, genetic and population studies used to clarify the conservation status of a rare *Acacia* in Western Australia. *Australian Journal of Botany*
- Friend, T. Dalgytes are on the way back. *Western Wildlife*
- Friend, T. Tools of the trade. *Landscape*
- Friend, T., Anthony, C. and Thomas, N. Marsupials hop away from extinction. *Landscape*
- Friend, T. and Thomas, N. Numbats forever. *Landscape*
- Gibson, N. and Lyons, M. Flora and vegetation of eastern goldfields ranges. Part 5, Hunt Range, Yendilberin and Watt Hills. *Journal of the Royal Society of Western Australia*
- Gould, J.S., Cheney, N.P. and McCaw, L. Project Vesta: research into the effects of fuel structure and fuel load on behaviour of moderate to high-intensity fires in dry eucalypt forest: progress report.. In: *Proceedings of Bushfire 2001 conference, Christchurch, NZ July 3-6 July*
- Halse, S.A., Scanlon, M.D. and Cocking, J.S. Do springs provide a window to the groundwater fauna of the Australian arid zone? (ABSTRACT). In: *Conference abstracts: International Groundwater Conference, Darwin 2002*
- Jarman, P., Friend, T., and Dovey, L. Bridled nailtail Wallaby recovery program. Report to funding body
- Kearney, M., Shine, R., Comber, S. and Pearson, D. Why do geckoes group?: an analysis of social aggregations in two species of Australian lizards. *Herpetologica*
- Keighery, G. A new species of *Blennospora* A.Gray (Asteraceae) from the Swan and Scott Coastal Plains. *Nuytsia*
- Keighery, G.J. A new subspecies of *Laxmannia* R.Br. (Anthericaceae) from Western Australia. *Nuytsia*
- Keighery, G.J. Reinstatement of *Burchardia congesta* Lindl. (Anthericaceae). *Nuytsia*
- Maslin, B.R. Wattle: Acacias of Australia. pp. 1 CDROM.
- McCaw, L., Gould, J., and Cheney, N. Consumption of bark fuel on jarrah (*Eucalyptus marginata*) trees during experimental summer fires in southwestern Australia. In: *Proceedings of Bushfire 2001 Conference, Christchurch, NZ, July 3-6*
- McKenzie, N.L., Start, A.N. and Bullen, R.D. Foraging ecology and structure of a desert bat fauna. *Australian Journal of Zoology*
- Pearson, D. Greetings from the Western Desert. *Brush-Tailed Rock-Wallaby Newsletter*
- Pearson, D., Shine, R. and Williams, A. Geographic variation in sexual size dimorphism within a single snake species. *Oecologia*

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Van Leeuwen, S.J. and Bromilow, R.B.
Survey site descriptions: final report to
funding organisation.

Van Leeuwen, S., Fuller, P. and
Bromilow, B. Birds: report to Heritage
Council.

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