

# SCIENCE COMMUNICATIONS

July 2003-September 2003

Science Division Mission: The provision of up-to-date and scientifically sound information to uphold effective conservation and land management in Western Australia  
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*Science Communications* lists titles of publications, reports etc prepared by Science Division staff. This issue is for the period July to September 2003.

If you require a copy of a **submitted** paper please contact the author. For all other titles please contact Lisa Wright at Woodvale.

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## Journal Publications

Abbott, I., Mellican, A., Craig, M.D., Williams, M., Liddelow, G. and Wheeler, I. (2003). Short-term logging and burning impacts on species richness, abundance and community structure of birds in open eucalypt forest in Western Australia. *Wildlife Research* **30**. pp. 321-329.

Burne, H.M., Yates, C.J. and Ladd, P.G. (2003). Comparative population structure and reproductive biology of the critically endangered shrub *Grevillea althoferorum* and two closely related more common congeners. *Biological Conservation* **114**. pp. 53-65.

Byrne, M. (2003). Phylogenetics and the conservation of a diverse and ancient flora. *Comptes Rendus Biologies* **326**. pp. S73-S79.

Dobrowolski, M.P., Tommerup, I.C., Shearer, B.L. and O'Brien, P.A. (2003). Three clonal lineages of *Phytophthora cinnamomi* in Australia revealed by microsatellites. *Phytopathology* **93**. pp. 695-704.

Dumbrell, I.C. and McGrath, J.F. (2003). Growth and nutrient relationships of juvenile *Pinus pinaster* grown on ex-farmland in Western Australia. *Australian Forestry* **66**. pp. 137-144.

Hickey, R., Piersma, T. and Pearson, G. (2003). Maps, mud and birds. *Geospatial Solutions* **Jul**. pp. 1-4.

McKenzie, N.L. and Bullen, R.D. (2003). Identifying Little Sandy Desert bat species from their echolocation calls. *Australian Mammalogy* **25**. pp. 73-80.

Pinder, A.M. (2003). New species and records of Phreodrilidae (Annelida: Clitellata) from Western Australia. *Records of the Western Australian Museum* **21**. pp. 307-313.

Science Division, Department of Conservation and Land Management, Western Australia (2003). Science communications. - April 2003-June 2003. Department of Conservation and Land Management, Western Australia, 4 p.

Wheeler, J. (2003). *Hibbertia cuneiformis*, Dilleniaceae. *Curtis's Botanical Magazine* **20**. pp. 66-68.

Yates, C.J., Hopper, S.D., Brown, A. and Van Leeuwen, S. (2003). Impact of two wildfires on endemic granite outcrop vegetation in Western Australia. *Journal of Vegetation Science* **14**. pp. 185-194.

## Books

Diels, L., Grieve, B.J., Lamont, B.B., Hellmuth, E.O. and Gibson, N. (2003). The plant life of Western Australia: south of the tropics. N. Gibson, Woodvale. 1 CD-ROM

## Conference/Workshop Papers

Dumbrell, I. and McGrath, J. (2003). Plantation water use prevents contamination of groundwater following application of biosolids. *In: Proceedings: Innovations in Water: Ozwater Conventions and Exhibition, Perth, Western Australia, April 2003* Australian Water Association, Sydney. pp. 1-12.

## Abstracts

Byrne, M. (2003). Phylogeography reveals historical fragmentation in an ancient landscape. *In: Consequences of Habitat Fragmentation Workshop, 4th-5th July 2003* Royal Botanic Gardens and Domain Trust, Sydney. pp. 14-15.

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Byrne, M., Yates, C., Elliott, C. and Coates, D. (2003). Genetic and ecological consequences of population fragmentation in *Eucalyptus wandoo* in Western Australia (POSTER ABSTRACT). In: *Abstracts & Posters: XIX International Congress of Genetics: Genomes, the Linkage to Life: 6-11 July, 2003: Melbourne Exhibition & Convention Centre, Victoria, Australia* Genetics Society of Australia, Melbourne. p. 275

Coates, D.J., Byrne, M., Gage, C., Yates, C. and Elliott, C. (2003). Genetic and ecological consequences of habitat fragmentation in two woody shrubs (*Calothamnus quadrifidus* and *Eremaea pauciflora*) and the tree (*Eucalyptus wandoo*) in the Western Australian wheatbelt. In: *Consequences of Habitat Fragmentation Workshop, 4th-5th July 2003* Royal Botanic Gardens and Domain Trust, Sydney. pp. 18-19.

Coates, D., Yates, C., Elliott, C. and Byrne, M. (2003). Genetic and ecological consequences of population fragmentation in the bird pollinated woody shrub *Calothamnus quadrifidus* (POSTER ABSTRACT). In: *Abstracts & Posters: XIX International Congress of Genetics: Genomes, the Linkage to Life: 6-11 July, 2003: Melbourne Exhibition & Convention Centre, Victoria, Australia* Genetics Society of Australia, Melbourne. p. 275

Wheeler, M. and Byrne, M. (2003). Variation in cpDNA haplotypes of *Eucalyptus marginata* (POSTER ABSTRACT). In: *Abstracts & Posters: XIX International Congress of Genetics: Genomes, the Linkage to Life: 6-11 July, 2003: Melbourne Exhibition & Convention Centre, Victoria, Australia* Genetics Society of Australia, Melbourne. p. 153

## Reports

Burrows, N.D. (2003). Workforce planning in the Science Division. Department of Conservation and Land Management, Western Australia, 13 p.

Hearn, R., Stoneman, G.L., Keighery, G., Burrows, N., Yates, C. and Hopper, S. (2003). Advice to the Conservation Commission's Forest Management Plan Steering Committee in relation to the management of significant flora values. - Draft. Department of Conservation and Land Management, Western Australia, 65 p.

McNee, S. and Newbey, B. (2003). Search for the western ground parrot in Cape Arid National Park and nearby areas May 2003: a project of Birds Australia Western Australian Inc.: a report to the WA South Coast Threatened Birds Recovery Team. Department of Conservation and Land Management,

Western Australia, 28 p.

Monks, L. (2003). Threatened flora translocations. In: *Plant Conservation: Approaches and Techniques from an Australian Perspective* (eds C.L. Brown, F. Hall & J. Mill). Australian Network for Plant Conservation, Canberra. 8 p.

Morris, K., Sercombe, N. and Chant, A. (2003). A report on the management of tammar wallabies on North Island, Houtman Abrolhos. Department of Conservation and Land Management, Western Australia, 25 p.

OSA Group (2003). Science Division, Department of Conservation and Land Management: attitudinal survey: recommendations, final report. Department of Conservation and Land Management, Western Australia, 55 p.

Williams, M.R. (2003). Effect of fire on day-flying Lepidoptera: progress report 2, June 2003. Department of Conservation and Land Management, Western Australia, 21 p.

## Submitted

Byrne, M. and Hines, B. Phylogeographical analysis of cpDNA variation in *Eucalyptus loxophleba* (Myrtaceae). *Australian Journal of Botany*

Courtenay, J. and Friend, T. Gilbert's Potoroo recovery plan.

Dumbrell, I.C. and McGrath, J.F. Phosphorus requirements of young *Pinus pinaster*. In: *Proceedings: Phosphorus Dynamics in the Soil-Plant Continuum: 2nd International Symposium, Perth 21-26 Sept 2003*

Friend, T. Dibbler recovery plan.

George, N., Byrne, M., Maslin, B. and Yan, G. *Acacia saligna*, a new crop plant to manage dryland salinity. In: *PURSL Conference Proceedings*

Gibson, N. Flora and vegetation of the eastern goldfields ranges. Part 6, Mt Manning Range. *Journal of the Royal Society of Western Australia*

Gibson, N. Flora and vegetation of the eastern goldfields ranges. Part 7, middle and south Ironcap, Digger Rock and Hatter Hill. *Journal of the Royal Society of Western Australia*

Gibson, N., Keighery, G.J., Lyons, M.N. and Keighery, B.J. Argillaceous vernal pools of south-west Australia. *Austral Ecology*

Gibson, N., Keighery, G.J., Lyons, M.N. and Webb, A. Terrestrial flora and vegetation of the

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wheatbelt of south-western Australia. *Records of the Western Australian Museum Supplement*

Gunn, R.J.M., Pinder, A.M. and Walker, B.M. Phreodrilidae (Annelida: Oligochaeta), a family new to Europe. *Irish Naturalists' Journal*

Halse, S. Putting science into wetland management: lessons from recovery catchments in saline landscapes (ABSTRACT). *In: Bill Williams Memorial Symposium*

Marlow, N.J., Thomson, P.C., Rose, K. and Kok, N.E. Compensatory responses to artificial reduction by a fox population in a rangeland area in Western Australia. *Wildlife Research*

McCaw, L., Gould, J. and Cheney, N. Research delivers new insights into forest fire behaviour. *Australian Forest Grower*

Newbey, B., McNee, S. and Burbidge, A.H. Western ground parrot : a parrot in peril. *Eclectus*

Patrick, S. Awash in colour: painting a path through the Murchison Aug 9th-18th, 2002. *Department of Conservation and Land Management, Western Australia, Landscape Expeditions*

Patrick, S. Botanical treasures in an everlasting landscape : Muggon Station, Murchison region, Aug 31st-Sept 7th 2002. *Department of Conservation and Land Management, Western Australia, Landscape Expeditions*

Shearer, B.L., Crane, C.E. and Cochrane, A. Quantification of the susceptibility of the flora of the South-West Botanical Province, Western Australia to *Phytophthora cinnamomi*. *Australian Journal of Botany*

Shearer, B.L., Crane, C.E. and Fairman, R.G. Phosphite reduces disease extension and the rate of extension of *Phytophthora cinnamomi* in *Banksia* woodland, even after fire. *Australasian Plant Pathology*

Smith, J. and Morris, K. Animal ethics. *Landscape*

Thomas, N. and Friend, T. The western barred bandicoot: warts and all. *Landscape*

Wheeler, M.A., Byrne, M. and McComb, J.A. Little genetic differentiation within the dominant forest tree, *Eucalyptus marginata* (Myrtaceae) of south-western Australia. *Silvae Genetica*

Williams, A. Arid bronze azure : *Ogyrus subterrestris petrina*. *Newsletter of the Western Australian Insect Study Society*

Wright, L. WCLMs contribution to the NBD. *Gateways*

#### Science Project Plans

The following was recently approved:  
Supervising Scientist: Bruce Maslin  
Project: Acacia biology, conservation and utilisation

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