# **SCIENCE COMMUNICATIONS**

## March 2005-May 2005

Science Division Mission: The provision of up-to-date and scientifically sound information to uphold effective conservation and land management in Western Australia http://calmweb.calm.wa.gov.au/drb/science/index.html

Science Communications lists titles of publications, reports etc prepared by Science Division staff. This issue is for the period March 2005 to May 2005. If you require a copy of a **submitted** paper please contact the author. For all other titles please contact Lisa Wright at Woodvale.

Neil Burrows Director

#### AB - Journal Publications

- Abbott, I. (2005). An overlooked record of the malleefowl in the interior of Western Australia. *Western Australian Naturalist* **24.** p. 253
- Barrett, S.R., Shearer, B.L. and Hardy, G.E. St. J. (2004). Phytotoxicity in relation to *in planta* concentration of the fungicide phosphite in nine Western Australian native species. *Australasian Plant Pathology* **33.** pp. 521-528.
- Broadhurst, L.M. and Coates, D.J. (2004). Genetic divergence among and diversity within two rare *Banksia* species and their common close relative in the subgenus *Isostylis* R.Br. (Proteaceae). *Conservation Genetics* **5.** pp. 837-846.
- Burbidge, A.A. and Fuller, P.J. (2004). Numbers of non-burrowing breeding seabirds of the Houtman Abrolhos: 1991-1993 and 1999. *Corella* **28.** pp. 96-103.
- Burbidge, A.H., Rolfe, J.K., McKenzie, N.L. and Roberts, J.D. (2004). Biogeographic patterns in small ground-dwelling vertebrates of the Western Australian wheatbelt. *Records of the Western Australian Museum Supplement* **67.** pp. 109-137.
- Gibson, N. (2004). Flora and vegetation of the eastern goldfields ranges. Part 6, Mt Manning Range. *Journal of the Royal Society of Western Australia* **87.** pp. 35-47.
- Gibson, N. (2004). 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* 87. pp. 49-62.

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- Gibson, N., Keighery, G.J. and Lane, J.A.K. (2004). Five years monitoring of the Lake Muir-Unicup wetland system, south western Australia. *Journal of the Royal Society of Western Australia* 87. pp. 29-33.
- Gibson, N., Keighery, G.J., Lyons, M.N. and Webb, A. (2004). Terrestrial flora and vegetation of the Western Australian wheatbelt. *Records of the Western Australian Museum Supplement* **67.** pp. 139-189.
- Guevara, M.A., Chagné, D., Almeida, M.H., Byrne, M., Collada, C., Favre, J.M., Harvengt, L., Jeandroz, S., Orazio, C., Plomion, C., Ramboer, A., Rocheta, M., Sebastiani, F., Soto, A., Vendramin, G.G. and Corvera, M.T. (2005). Isolation and characterization of nuclear microsatellite loci in *Pinus pinaster* Ait.. *Molecular Ecology Notes* pp. 57-59.
- Hayward, M.W. (2005). Diet of the quokka (Setonix brachyurus) (Macropodidae: Marsupialia), in the northern jarrah forest of Western Australia. Wildlife Research 32. pp. 15-22.
- Hayward, M.W., de Tores, P.J., Augee, M.L., Fox, B.J. and Banks, P.B. (2004). Home range and movements of the quokka, *Setonix brachyurus* (Macropodidae: Marsupialia), and its impact on the viability of the metapopulation on the Australian mainland. *Journal of Zoology* **263.** pp. 219-228.
- Keighery, G.J. (2004). State Salinity Strategy biological survey of the Western Australian wheatbelt: background. *Records of the Western Australian Museum Supplement* **67.** pp. 1-6.

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Nguyen, V.P., Needham, A.D. and Friend, J.A. (2005). A quantitative dietary study of the critically endangered Gilbert's potoroo, *Potorous gilbertii. Australian Mammalogy* **27.** pp. 1-6.

### B - Books

- Abbott, I. (2005). Appendix 4: Fauna. Western Australian Exploration. Volume One, December 1826-December 1835: the Letters, Reports & Journals of Exploration and Discovery in Western Australia (ed. J. Shoobert). Hesperian Press, Perth. pp. 556-558.
- Graham, G. and McKenzie, N.L. (2004). A conservation case study of Western Australia's Mitchell subregion (North Kimberley 1) in 2003. Department of Conservation and Land Management, Western Australia, 56 p.
- Perth Observatory (2004). Western Australian astronomy almanac 2005. Perth Observatory, 120 p.

### C - Conference/Workshop Papers

- McCaw, L., Hamilton, T. and Rumley, C. (2004). Application of fire history records to contemporary management issues in southwest Australian forests. In: A Forest Conscienceness: Proceedings 6th National Conference of the Australian Forest History Society Inc., 12-17 September 2004, Augusta, Western Australia (eds M. Calver, H. Bigler-Cole, G. Bolton, A. Gaynor, P. Horwitz, J. Mills & G. Wardell-Johnson). Millpress Science, Rotterdam. pp. 555-564.
- Patrick, S.J. (2005). Georgiana Molloy and early forest botany in the Augusta to Busselton area of Western Australia. *In: A Forest Conscienceness: Proceedings 6th National Conference of the Australian Forest History Society Inc., 12-17 September 2004, Augusta, Western Australia* (eds M. Calver, H. Bigler-Cole, G. Bolton, A. Gaynor, P. Horwitz, J. Mills & G. Wardell-Johnson). Millpress Science, Rotterdam. pp. 131-141.

### D - Abstracts

Eberhard, S.M. (2004). Ecology and hydrology of a threatened groundwater-dependent ecosystem: the Jewel Cave karst system in Western Australia (ABSTRACT). In: XVII International Symposium on Biospeleology: Raipur, India, 25-30 November, 2004: Abstracts (eds A.K. Pati, R.K. Pradhan, A. Parganiha & A. Agrawal). Pt Ravishankar Shukla University, Raipur. p. 43

- Eberhard, S. and Halse, S. (2004). Assessment and conservation of aquatic life in the subsurface of the Pilbara region in Western Australia (ABSTRACT). In: Symposium on World Subterranean Biodiversity: Villeurbanne, 8, 9 and 10 December 2004: Programme and Abstracts Université Claude Bernard, Lyon. p. 29
- Finston, T., Johnson, M., Eberhard, S. and Halse, S. (2004). Allozyme and haplotype diversity in Pilbarus millsi, a widespread groundwater species of amphipod from the Pilbara, Western Australia (ABSTRACT). In: Symposium on World Subterranean Biodiversity: Villeurbanne, 8, 9 and 10 December 2004: Programme and Abstracts Université Claude Bernard, Lyon. p. 32

### E - Reports

- Burbidge, T. and Wills, A. (2005). Northern extent of jarrah leafminer infestation: survey November 2004. Department of Conservation and Land Management, Western Australia, 9 p.
- Richardson, J., Keighery, G. and Manson, W. (2005). A baseline of vegetation health for the Buntine Marchagee recovery catchment. Department of Conservation and Land Management, Western Australia, 70 p.

# F - Popular (Landscope, Newsletters, Letters, etc.)

- Barrett, B. (2004). Finding the cryptic western ground parrot: a needle in a haystack. *South Coast Threatened Birds News* **9.** pp. 5-6.
- Burbidge, A. (2005). The mystery of the Jarnadup bristlebird. South Coast Threatened Birds News **9.** p. 2
- Burbidge, A. and Mather, S. (2005). Western Australian bird notes: quarterly newsletter of Birds Australia Western Australia Inc. - No. 113, March 2005. 36 p.
- Cochrane, A., Barrett, S. and Gilfillan, S. (2005). The feather-leaved banksia. *Landscope* **20(3)**. pp. 22-28.
- Comer, S., Burbidge, A. and Danks, A. (2005). Mt Manypeaks fires: impacts on threatened birds. *South Coast Threatened Birds News* **9.** pp. 1, 13.
- Comer, S., Danks, A. and Burbidge, A. (2005). Noisy scrub-birds, western whipbirds and wildfire at Mt Manypeaks. *Western Australian Bird Notes* **113.** pp. 16-17.
- Keighery, G. and Keighery, B. (2004). Not all thistles are weeds. *Wildflower Society of Western Australia Newsletter* **43(1).** pp. 14-17.

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### Records of the Western Australian Museum

### S - Submitted

- Abbott, I. Epizootic disease associated with mammalian faunal collapse in Western Australia, 1875-1925: symptoms, origin and pattern of spread, species affected, source, mode of transmission and inferred ecosystem impacts. *Wildlife Research*
- Abbott, I. Epizootic disease associated with mammalian faunal collapse in Western Australia (ABSTRACT). *In: Abstracts of the* 2005 Australian Mammal Society Conference
- Burbidge, A., Comer, S. and Danks, A. Threatened birds and wildfire in south-west Western Australia. *Wingspan. Supplement*
- Cochrane, A. and Schreck, S. Salt tolerance in six conservation significant species from south western Australia (ABSTRACT). *In: 8th International Seeds Germinating New Ideas*
- Crawford, A. Post-harvest conditions: do they affect plant longevity. *The Good Seed*
- De Tores, P., Hayward, M., Dillon, M. and Brazell, R. Review of the distribution, causes for the decline and recommendations for management of the quokka, *Setonix brachyurus* (Macropodidae: Marsupialia), an endemic macropod marsupial from south-west Western Australia. *Conservation Science Western Australia*
- Eberhard, S.M., Halse, S.A. and Humphreys, W.F. Stygofauna in the Pilbara region, northwest Western Australia: a systematic review. *Journal of the Royal Society of Western Australia*
- Eberhard, S.M., Halse, S.A., Scanlon, M., Cocking, J. and Barron, H. Assessment and conservation of aquatic life in the subsurface of the Pilbara region, Western Australia. *In: Proceedings of Symposium on World Subterranean Biodiversity: Lyon, France, 8th-*10th December, 2004
- Elliott, C.P. and Byrne, M. Isolation and characterisation of microsatellites in the woody shrub *Calothamnus quadrifidus* (Myrtaceae). *Molecular Ecology Notes*
- George, N., Byrne, M., Maslin, B. and Yan, G. Genetic differentiation in *Acacia saligna* and its implications for domestication of the species as a fodder crop. *Tree Genetics and Genomes*
- Guthrie, N.A. A new species of *Gnathoxys* (Coleoptera: Carabidae: Carabinae) from an urban bushland remnant in Western Australia.

- Menu-Marque, Adamowicz, de Waard, Zemlak, Halse, S. and Hebert The evolutionary diversification of the Centropagidae: a history of habitat shifts (ABSTRACT). *In: Abstracts of* the 9th International Conference on Copepods
- Patrick, S. Peer review of four surveys conducted in the Mt Gibson area: requested by ATA Environmental for Mt Gibson Iron Ltd.
- Start, A.N. Western pebble-mound mouse: Pseudomys chapmani, Kitchener, 1980. In: Mammals of Australia. - 3rd ed.
- Start, A.N. and McKenzie, N.L. Western false pipistrelle, *Falsistrellus mackenziei* (Kitchener, Caputi and Jones, 1986). *In: Mammals of Australia. 3rd ed.*
- Start, A.N., Moro, D., Adams, Bencini Taxonomy and the conservation of island populations: an Australian case study involving a dasyurid marsupial. *Animal Conservation*
- Wayne, A.F., Ward, C.G., Rooney, J.F., Vellios, C.V. and Lindenmayer, D.B. Life history of koomal (*Trichosurus vulpecula hypoleucus*) within the southern jarrah forest, Western Australia. *Australian Journal of Zoology*
- Wheeler, M. and Byrne, M. Congruence between phylogeographic patterns in cpDNA variation in *Eucalyptus marginata* (Myrtaceae) and geomorphology of the Darling Plateau. *Australian Journal of Botany*
- Whitford, K. and Murray, P. Formal surveys of soil disturbance. *In: Workshop on Soil Management, Bunbury*
- Williams, A.A.E. and Powell, R.J. The butterflies (Lepidoptera) of Middle, Woody, Sandy Hook and Goose islands in the Recherche Archipelago, Western Australia. *Australian Entomologist*

#### **Science Project Plans**

No Science Project plans have been recently approved.

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