SCIENCE COMMUNICATIONS

April 2004-June 2004

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 April to June 2004

If you require a copy of a **submitted** paper

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

Journal Publications

Algar, D., Angus, G.J., Brazell, R.I., Gilbert, C. and Tonkin, D.J. (2003). Feral cats in paradise: focus on Cocos. *Atoll Research Bulletin* **505.** pp. 1-12.

Cale, D., Halse, S. and Walker, C. (2004). Wetland monitoring in the wheatbelt of southwest Western Australia: site descriptions, waterbird, aquatic invertebrate and groundwater data. *Conservation Science Western Australia* **5.** pp. 20-136.

Craven, L.A., Lepschi, B.J., Broadhurst, L. and Byrne, M. (2004). Taxonomic revision of the broombush complex in Western Australia (Myrtaceae: *Melaleuca uncinata* s.l.). *Australian Systematic Botany* pp. 255-271.

D'Souza, N.K., Colquhoun, I.J., Shearer, B.L. and Hardy, G.E. St. J. (2004). The potential of five Western Australia native *Acacia* species for biological control of *Phytophthora cinnamomi*. *Australasian Plant Pathology* **52**. pp. 267-279.

Eldridge, M.D.B., Kinnear, J.E., Zenger, K.R., McKenzie, L.M. and Spencer, P.B.S. (2004). Genetic diversity in remnant mainland and pristine island populations of three endemic Australian macropodids (Marsupialia): Macropus eugenii, Lagorchestes hirsutus and Petrogale lateralis. Conservation Genetics 5. pp. 325-338.

Harper, R.J. and Gilkes, R.J. (2004). The effects of clay and sand additions on the strength of sandy topsoils. *Australian Journal of Soil*

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Research 42. pp. 39-44.

Keighery, G. and Longman, V. (2004). The naturalized vascular plants of Western Australia. I, checklist, environmental weeds and distribution in IBRA regions. *Plant Protection Quarterly* **19.** pp. 12-32.

Lee, K.M. and Abbott, I. (2004). Precautionary forest management: a case study from Western Australian legislation, policies, management plans, codes of practice and manuals from the period 1919-1999. *Australian Forestry* **67.** pp. 114-121.

Prince, R.I.T. (2003). Successful translocation of a mature female ridge-back trapdoor spider (Idiopidae: *Idiosoma sigillatum* (Cambridge)). *Western Australian Naturalist* **24.** pp. 101-103.

Science Division, Department of Conservation and Land Management, Western Australia (2004). Conservation science Western Australia. - Vol. 5, no. 1. Department of Conservation and Land Management, Western Australia, 136 p.

Smith, J.A., Wright, L.J. and Morris, K.D. (2004). BiblioChuditch: the chuditch, *Dasyurus geoffroii* (Gould 1841): a Wildlife Science Library bibliography. *Conservation Science Western Australia* **5.** pp. 6-19.

Conference/Workshop Papers

Burrows, N.D. (2004). Fire management strategies for a south west Australian biodiversity hotspot: TNC, WWF, IUCN Global Fire Partnership Experts Workshop: Sigrisvil, Switzerland, 15-18 May 2004. Department of

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Conservation and Land Management, Western Australia, pp. 1-4.

Reports

- Algar, D., Angus, G.J., Williams, M.R. and Mellican, A.E. (2004). An investigation of bait uptake by feral cats on Peron Peninsula, Western Australia. Department of Conservation and Land Management, Western Australia, 66 p.
- Burrows, N.D. (2004). Proposed new organizational structure for the Science Division. Draft. Department of Conservation and Land Management, Western Australia, 16 p.
- Burrows, N.D. (2004). Workforce planning in the Science Division. Department of Conservation and Land Management, Western Australia, 13 p.
- Friend, T. (2004). Gilbert's potoroo recovery: nutrient analysis of hypogeal fungi: final report, BankWest Landscope Conservation Visa Card Trust Fund grants. Department of Conservation and Land Management, Western Australia, 17 p.
- Handasyde, T., Start, A.N. and Done, C. (2004). Distribution, abundance and taxonomic status of *Typhonium* species (Araceae) in the east Kimberley: report pertaining to \$2000 BankWest Landscope Conservation Visa Card grant. Department of Conservation and Land Management, Western Australia, 30 p.
- Keighery, G.J. (2003). Flora of Lake Nowergup Nature Reserve. Department of Conservation and Land Management, Western Australia, 12 p.
- Maslin, B.R. and McDonald, M.W. (2004). *Acacia* search: evaluation of *Acacia* as a woody crop option for southern Australia. Rural Industries Research and Development Corporation, Canberra. 267 p.
- Parker, C. (2004). Databasing Western Australia's marine plant herbarium specimens. Stage 1, final report. Department of Conservation and Land Management, Western Australia, 28 p.

Popular (Landscope, Newsletters, Letters, etc.)

- Barrett, B. (2004). Hit the ground running!. South Coast Threatened Birds Newsletter 8. p. 8
- Barrett, B. (2004). Western ground parrot recovery project. *Western Australian Bird Notes* **109.** pp. 13-14.
- Burbidge, A. and Mather, S. (2004). Western Australian bird notes: quarterly newsletter of

- Birds Australia Western Australia Inc. No. 109, March, 2004. 36 p.
- Burbidge, A. and Mather, S. (2004). Western Australian bird notes: quarterly newsletter of Birds Australia Western Australia Inc. No. 110, June 2004. 36 p.
- Cochrane, A., Barrett, S. and Byrne, M. (2004). A rare hybrid beauty: Albany woollybush. *Landscope* **19(3).** pp. 6-8.
- Friend, T. (2004). Even more dibblers released at Peniup!. Western Wildlife: Newsletter of the Land for Wildlife Scheme 8(2). p. 15
- Friend, T. (2004). Tracking shows potoroos are on the move. *Conservation News* **May.** p. 2
- Hayward, M. (2004). Mainland quokkas. *Nature Australia* **27(12).** pp. 26-33.
- Pearson, D. (2004). Last bastion: the battle to save a desert rock-wallaby population. *Landscope* **19(3).** pp. 20-26.
- Pinder, A.M. (2004). Australian faunal directory: superclass: Clitellata (Internet URL: http://www.deh.gov.au/cgi-bin/abrs/abif-fauna/details.pl?
 pstrVol=OLIGOCHAETA:pstrTaxa=2:pstrChecklistMode=1. Department of the Environment and Heritage, Australia,
- Powell, R. and Williams, M. (2004). Butterfly gardening. *Landscope* **19(4).** pp. 40-45.
- Prince, R.I.T. (2004). Stranding of small juvenile leatherback turtle in Western Australia. *Marine Turtle Newsletter* **104.** pp. 3-5.
- Robinson, R. (2004). Keeping our forests in check. *Landscope* **19(3).** pp. 56-61.
- Rogers, D., Piersma, T., Lavaleye, M., Pearson, G. and de Goeij, P. (2004). Crabbing around at Roebuck Bay. *Landscope* **19(4).** pp. 18-23.
- Smith, J. and Morris, K. (2004). Animal ethics. *Landscope* **19(4).** pp. 6-8.

Submitted

- Burbidge, A.H., Rolfe, J.K., McKenzie, N.L. and Roberts, J.D. Biogeographic patterns in small ground-dwelling vertebrates of the Western Australian wheatbelt. Records of the Western Australian Museum Supplement
- Byrne, M. Eucalypt genetics in Western Australia. *In: 2nd Symposium on Molecular Genetics of Eucalypts*
- Byrne, M. and Miller, M. Genetic systems and issues in the development of woody perennials for revegetation. *In: Salinity CRC Conference, Bendigo*

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- Clarke, A.G. and Lane, J.A.K. A waterbird census of selected wetlands along the coastal margins of the Esperance District, Feb.-Mar. 2003.
- Coates, D.J. and Byrne, M. Genetic variation in plant populations: assessing cause and pattern. *In: Diversity and Evolution of Plants: Genotypic and Phenotypic Variation of Higher Plants*
- Coates, D., Byrne, M. and Elliott, C. Gene flow and outcrossing in a fragmented landscape: implications for provenance collections and seed sourcing from small remnants (ABSTRACT). In: 5th National Native Seed Biology Workshop
- Cochrane, A., Crawford, A., Coates, D., Dixon, K., Sweedman, L. and Batty, A. The Millennium Seed Bank Project in Western Australia: achievements 2001-2004 (ABSTRACT). *In: 5th National Native Seed Biology Workshop*
- Cochrane, A. and Yates, C. Seed bank dynamics, germination, fire and the population structure of a critically endangered shrub *Cyphanthera odgersii* (F.Muell.) Haegi subspecies *occidentalis* Haegi (Solanaceae) (ABSTRACT). *In: 5th National Native Seed Biology Workshop*
- Crawford, A., Cochrane, A., Sweedman, L. and Batty, A. The Millennium Seed Bank Project in Western Australia: ensuring the long term survival of species at risk (POSTER ABSTRACT). *In: Seed Ecology Conference*, 2004
- Friend, T. Gilbert's potoroo update. Newsletter of the Australian Mammal Society
- Friend, J.A., Hill, S.J.E. and Reinhold, L.
 Demography of the only known population of
 Gilbert's potoroo (*Potorus gilbertii*)
 (ABSTRACT). *In: Meeting of the Australian Mammal Society*
- George, N., Byrne, M. and Yan, G. Preliminary observations of the reproductive biology of Acacia saligna. In: Salinity CRC Conference, Bendigo
- Halse, S.A. and Massenbauer, T. Putting science into wetland management: lessons from recovery catchments in saline landscapes. Hydrobiologia
- Halse, S.A., Pearson, G.B., Hassell, C., Collins,
 P., Scanlon, M.D. and Minton, C.D.T.
 Waterbirds of Mandora Marsh, north-western
 Australia, and the role of arid zone wetlands in
 maintenance of Australian populations. *Emu*
- Keighery, G.J. A new species of Amblysperma

- Benth. (Asteraceae). Compositae Newsletter
- Monks, L. Case studies and lessons learnt: case 2. In: Australian Network for Plant Conservation Translocation Workshop
- Monks, L. Pre-translocation assessment, planning and preparation. *In: Australian Network for Plant Conservation Translocation Workshop*
- Nguyen, V., Needham, A. and Friend, J.A. A quantitative dietary study of the critically endangered mammal, Gilbert's potoroo (*Potorous gilbertii*). *Australian Mammalogy*
- Pinder, A. Biodiversity of wetlands with organic sediments on the Swan Coastal Plain. *In:*Proceedings of Workshop on Preventing Organic Soils Burning on the Swan Coastal Plain
- Pinder, A.M., Halse, S.A., McRae, J.M. and Shiel, R.J. Occurrence of aquatic invertebrates of the wheatbelt region of Western Australia in relation to salinity. *Hydrobiologia*
- Stewart, A., Bencini, R., Bradshaw, D. and Friend, J.A. Water and sodium turnovers of dibblers (*Parantechinus apicalis*) and house mice (*Mus domesticus*) on islands in Jurien Bay (ABSTRACT). *In: Meeting of the Australian Mammal Society*
- Wardell-Johnson, G.W., Williams, M.R., Mellican, A.E. and Annells, A. Floristic patterns and disturbance history in karri forest, southwestern Australia. 1, species richness and origin. Forest Ecology and Management
- Wardell-Johnson, G.W., Williams, M.R., Mellican, A.E. and Annells, A. Floristic patterns and disturbance history in karri forest, southwestern Australia. 2, growth form and fire response. *Australian Journal of Botany*
- Wills, A. Crown decline in wandoo: update for 2004: observations from Wundabiniring Brook, 1999-2004.

Science Project Plans

The following were recently approved:

Supervising scientist: Ian Abbott Project: Native earthworms (Oligochaeta) of the Swan Coastal Plain: biodiversity, distribution and threatening processes

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