

SCIENCE COMMUNICATIONS

March 2006-June 2006

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 March 2006 to June 2006. 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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Keighery GJ, Alford JJ, Trudgen ME, Muir WR (2006). Floristics of the Shark Bay world heritage site, Western Australia: vegetation and flora of 34 small islands. *Western Australian Naturalist* **25**, 111-134

Martin R (2006). Supernova 2006bc in NGC 2397. *International Astronomical Union, Circular* **CBET 449**,

Robinson RM (2006). Varying fire regimes to promote fungal diversity across the landscape. *Australasian Plant Conservation* **14(4)**, 16-17

Start AN, Moro D, Adams M, Bencini R (2006). Dunnarts from Boullanger Island: new evidence and a reassessment of a taxonomic issue with resource implications. *Australian Mammalogy* **28**, 51-58

Wege JA (2005). *Stylidium validum* (Stylidiaceae): a new trigger plant from southern Western Australia. *Journal of the Royal Society of Western Australia* **88**, 13-16

Williams AAE, Algar D (2006). First record of *Euchrysops cnejus* (Fabricius) (Lepidoptera: Lycaenidae) on Christmas Island, Indian Ocean. *Australian Entomologist* **33**, 111-112

Wright LJ (ed) (2006). Science communications. - November 2005-February 2006. Department of Conservation and Land Management, Woodvale, WA. 6 p.

Journal Publications

Beaulieu J-P, Bennett DP, Fouqué P, Williams A, Dominik M, Jørgensen UG et al. [Martin R] (2006). Discovery of a cool planet of 5.5 Earth masses through gravitational microlensing. *Nature* **439**, 437-440

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Crayn DM, Hislop M, Heslewood MM (2005). Additions to *Lissanthe* (Styphelioideae: Ericaceae) in Western Australia: *L. synandra* sp. nov. and *L. pleurandroides* comb. nov.. *Australian Systematic Botany* **18**, 555-561

Eberhard SM, Halse SA, Humphreys WF (2005). Stygofauna in the Pilbara region, north-west Western Australia: a review. *Journal of the Royal Society of Western Australia* **88**, 167-176

Books

Biggs J (2005). *Astronomical Almanac 2006*. Perth Observatory, Bickley.

Conference/Workshop Papers

Burrows ND, Ward B, Robinson A, Behn G (2006). Fuel dynamics and fire behaviour in spinifex grasslands of the western desert. In: *Bushfire Conference 2006: Brisbane, 6-9 June 2006: Life in a Fire-Prone Environment: Translating Science into Practice* pp. 1-7. Southeast Queensland Fire and Biodiversity Consortium, Brisbane.

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Keighery G (2006). Documenting kwongan diversity: species, communities and conservation. In: *Kwongan Colloquium: Native Plant Life on the Western Australian Sandplains* University of Western Australia, School of Plant Biology, Crawley. 26 digital slides

Robinson RM (2005). Volume loss in thinned karri (*Eucalyptus diversicolor*) regrowth infected by *Armillaria luteobubalina* in Western Australia. In: *Root and Butt Rots of Forest Trees: Proceedings of the 11th International Conference on Root and Butt Rots* (eds M Manka, P Lakomy). pp. 1-8. August Cieszkowski Agricultural University, Poznan, Poland.

Wardell-Johnson G, Burrows N, Li S (2006). Emergent patterns in the mosaic of patch burning vary with the fire environment and landscape context on south-western Australia. In: *Bushfire Conference 2006: Brisbane, 6-9 June 2006: Life in a Fire-Prone Environment: Translating Science into Practice* pp. 1-6. Southeast Queensland Fire and Biodiversity Consortium, Brisbane.

Wittkuhn R, Hamilton T, McCaw L (2006). Fire interval sequences to aid in site selection for biodiversity studies: mapping the fire regime. In: *Bushfire Conference 2006: Brisbane, 6-9 June 2006: Life in a Fire-Prone Environment: Translating Science into Practice* pp. 1-6. Southeast Queensland Fire and Biodiversity Consortium, Brisbane.

Abstracts

Bougher NL (2005). Fungal partners (ABSTRACT). In: *Proceedings of the 23rd Biennial Conference of the Association of Societies for Growing Australian Plants: October 2005, Perth, WA*

Bougher NL (2005). Fungibank: using native fungi in wheatbelt bush revegetation (ABSTRACT). In: *Proceedings of the Australasian Mycological Conference May 2005, Gowrie Park, Tasmania*

Bougher NL (2005). Perth urban bushland fungi (ABSTRACT). In: *Proceedings of the Fungimap Third National Conference. May 2005, Gowrie Park, Tasmania*

Bougher NL (2005). Perth Urban Bushland Fungi Project (ABSTRACT). In: *Proceedings of the Fungi Conference. 5th Nov. 2005, Brisbane, Queensland*

Bougher NL (2005). Using native fungi in bush revegetation : WA wheatbelt (ABSTRACT). In: *Proceedings of the Fungi Conference. 5th Nov. 2005, Brisbane, Queensland*

Burbidge A, Morris K (2005). Introduced animal eradications for nature conservation on Western Australian islands: a review (ABSTRACT). In: *Australian Mammal Society: 51st Scientific Meeting Program and Abstracts, Albany, Western Australia, 4-8 July 2005* p. 27. Australian Mammal Society, Perth.

Cancilla D, Johnson B (2005). Status and ecology of *Pseudomys shortridgei* in Western Australia (ABSTRACT). *Newsletter of the Australian Mammal Society* **Oct**, 17

Cochrane JA, Friend JA, Hill SJE (2005). Endozoochory and the Australian bluebell: consumption of *Sollya fusiformis* seed by mammals at Two Peoples Bay Nature Reserve, Western Australia (POSTER ABSTRACT). *Newsletter of the Australian Mammal Society* **Oct**, 38

Friend JA, Collins P (2005). Male die-off in the dibbler: no evidence in mainland populations (POSTER ABSTRACT). *Newsletter of the Australian Mammal Society* **Oct**, 39

Friend JA, Hill SJE, Button TA (2005). Trial translocation of Gilbert's potoroo to Bald Island, Western Australia (ABSTRACT). *Newsletter of the Australian Mammal Society* **Oct**, 20

Gibson L, McKenzie N (2005). Species composition of small ground dwelling mammals in the Pilbara region of Western Australia (ABSTRACT). *Newsletter of the Australian Mammal Society* **Oct**, 20-21

Hetherington C, Mills HR, Algar D, Bencini R (2005). Capsule consumption by feral cats (*Felis catus*) and non-target species in the field (ABSTRACT). *Newsletter of the Australian Mammal Society* **Oct**, 22-23

Hill S (2005). Historical occurrence of a wart-like syndrome affecting western barred bandicoots (POSTER ABSTRACT). *Newsletter of the Australian Mammal Society* **Oct**, 40

McKenzie NL, Burbidge AA, Baynes A, Brereton R, Dickman CR, Gordon GG et al. (2005). Regional patterns in the attrition of Australia's mammal fauna (ABSTRACT). *Newsletter of the Australian Mammal Society* **Oct**, 25

Neaves L, Prince R, Zanger K, Cooper D (2005). Genetic variation in the western grey kangaroo (ABSTRACT). *Newsletter of the Australian*

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Mammal Society **Oct, 27**

Pearson DJ, O'Neill J, Rodda K (2005). Mulgaras and mining: research and management to mitigate impacts (ABSTRACT). *Newsletter of the Australian Mammal Society* **Oct, 30**

Stead-Richardson EJ, Bradshaw SD, Friend JA (2005). Monitoring reproduction and stress in the critically endangered marsupial Gilbert's potoroo (*Potorous gilbertii*: Potoroidae): non-invasive faecal steroid analysis (ABSTRACT). *Newsletter of the Australian Mammal Society* **Oct, 34**

Stewart A, Bencini R, Bradshaw D, Friend T (2005). Population dynamics of an endangered marsupial (*Parantechinus apicalis*) and feral house mice (*Mus domesticus*) on the Jurien Bay island in Western Australia (ABSTRACT). *Newsletter of the Australian Mammal Society* **Oct, 34-35**

Thomas N, Marlow N, Friend T (2005). Reintroduction of the boodie (*Bettongia lesueur*) into Dryandra Woodland (ABSTRACT). *Newsletter of the Australian Mammal Society* **Oct, 35**

Reports

Bougher NL, Hart R, Weaver J (2005). PUBF fungi reports 2004: feedback fungi packages to community groups: report for LotteryWest.

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Bougher NL, Hart R, Weaver J (2005). Regional parks fungi report 2005: consultancy report for the WA Dept. Conservation and Land Management (CALM).

Bougher NL (2005). Fungi survey: Bold Park 2005: report for the Botanic Gardens and Parks Authority. Perth Urban Bushland Fungi Project, Perth.

Bougher NL, Hart R, Zappia R, Weaver J (2006). PUBF fungi reports 2005: fungi surveys and community participation in Perth bushlands, 2005. Perth Urban Bushland Fungi Project, Perth. 165 p.

Burrows N, Hamilton T (2006). Field trip report: Queen Victoria Springs and Plumridge Lakes nature reserves, 7-14 May 2006. Department of Conservation and Land Management, Kensington, WA. 5 p.

Grieg T (2006). Perth Observatory astrometry manual. Perth Observatory, Bickley.

Hamilton NA, Withnell B (2006). Assessment of feral cat abundance and control options at Fortescue Metals Group Limited: August/September 2005. Department of Conservation and Land Management, Woodvale, WA. 24 p.

Huisman J, Parker C (2005). How to collect and document marine plants. Western Australian Herbarium, Kensington, WA. 18 p.

McCaw L Round-Turner R (2004). Blackwood District fire 18, Bridgetown 27 December 2003: fire narrative. Department of Conservation and Land Management, Manjimup. 22 p.

Stukely M (2005). Report on mass plant deaths near Bluff Knoll, Stirling Range National Park. Department of Conservation and Land Management, Kensington, WA. 2 p.

Stukely M, Webster J, Ciampini, J (2005). Vegetation health service: annual report 2004-2005. Department of Conservation and Land Management, Kensington, WA. 9 p.

Stukely M, Wills A (2005). Observations of marri and jarrah crown decline near North Bannister. Department of Conservation and Land Management, Kensington, WA. 5 p.

Popular (Landscape, Newsletters, Letters, etc.)

Alcroft J (ed) (2005). Vollie news: newsletter of the Perth Observatory Volunteers Group Inc., July 2005. Perth Observatory, Perth.

Alcroft J (ed) (2005). Vollie news: newsletter of the Perth Observatory Volunteers Group Inc., Nov/Dec 2005. Perth Observatory, Perth.

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Alcroft J (ed) (2006). Vollie news: newsletter of the Perth Observatory Volunteers Group Inc., Apr/May 2006. Perth Observatory, Perth.

Alcroft J (ed) (2006). Vollie news: newsletter of the Perth Observatory Volunteers Group Inc., Jan/Feb 2006. Perth Observatory, Perth.

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Burbidge A, McKenzie N, van Leeuwen S, Gibson L, Doughty P, Guthrie N, Durrant B, Pearson D (2006). Between rock and a hard place: rich biological patterns amongst ancient red rocks. *Landscape* **21(3)**, 13-19

Chapman A (2006). Perth plants: a field guide to the bushland and coastal flora of Kings Park and Bold Park, Perth, Western Australia: authors, Russell Barrett and Eng Pin Tay (BOOK REVIEW). *For People & Plants* **52**, 25

Halse S, Pinder A, Powling J, McRae J (2006). Wetlands of the Pilbara. *Landscape* **21(3)**, 24-29

Hoffman H, Bougher NL (2005). Recognising edible mushrooms. *GardenNote* **47**,

Huisman J, Parker C (2006). The menace below: invasive seaweeds. *Landscape* **21(4)**, 22-29

Johnson B, Reaveley A, Morris, K (2006). Julimar: turning full circle. *Landscape* **21(4)**, 56-61

McCaw L (2006). Farewell to 72 years service. *Conservation News* **Jun**, 6

Scanlon M, Cocking J, McRae J, Barron H (2006). Beasts of the underworld. *Landscape* **21(3)**, 51-55

Submitted

Abbott I Extension of the known geographic range of the Princess Parrot: a record from Eucla, 1872. *Western Australian Naturalist*

Abbott I Historical perspectives of the ecology of

some conspicuous vertebrate species in south-west Western Australia. *Conservation Science Western Australia*

Abbott I Islands of Western Australia: changing human use over time. *Early Days*

Abbott I, Cranfield R, van Heurck P, Middleton T The vegetation, flora and fauna of Saddle Island, near Walpole, Western Australia. *Western Australian Naturalist*

Bennett MD, Woolford L, O'Hara AJ, Nicholls PK, Warren K, Swan R et al. [Friend JA] *Klossiella quimrensis* (Apicomplexa: Klossiellidae) causes renal coccidiosis in western barred bandicoots, *Perameles bougainville* (Marsupialia: Peramelidae) in Western Australia. *Journal of Parasitology*

Burbidge AH, Rolfe J, McNee S, Newbey B, Williams M Monitoring population change in the cryptic and threatened western ground parrot. *Emu*

Byrne M Phylogeography informs the conservation of a diverse and ancient flora in south-western Australia. *Australian Journal of Botany*

Byrne M, Elliott CP, Yates C, Coates DJ Extensive pollen dispersal in *Eucalyptus wandoo*, a dominant tree of the fragmented agricultural region in Western Australia. *Molecular Ecology*

Cochrane JA, Friend JA, Hill SJE The role of endozoochory in alleviating seed dormancy in the Australian bluebell, *Billardiera fusiformis* (Labill.) Payer (Pittosoraceae). *Journal of the Royal Society of Western Australia*

Crawford A, Steadman K, Plummer J, Cochrane A, Probert R Analysis of seed bank data confirms suitability of international seed storage standards for the Australian flora. *Australian Journal of Botany*

Halse S, Scanlon M, Cocking J, Smith B, Kay W Factors affecting river health and its assessment over broad geographic ranges: the Western Australian experience. *Environmental Monitoring and Assessment*

Keighery BJ, Dell J, Keighery GJ, Madden S, Longman V, Green B et al. A preliminary report on the vegetation, flora, fauna and natural areas of the Peel Harvey eastern estuary area catchment, (Swan Coastal Plain).

Keighery GJ, Gibson N, van Leeuwen S, Lyons MN, Patrick S Biological survey and setting priorities for flora conservation in Western

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Martin P, Martinez-Ansemil E, Pinder A, Timm T, Wetzel MJ A global assessment of the oligochaetous clitellate diversity in freshwater. *Hydrobiologia*

McCaw L *Asplenium aethiopicum* re-colonises karri forest following timber harvesting and burning. *Journal of the Royal Society of Western Australia*

Monks L Bringing them back from the brink, or Our last best hope.

Monks L Translocation summary sheet for *Grevillea althroferorum*, *Synaphea quartziticia* and *Lambertia orbifolia* subsp.. *Reintroduction Specialist Group (Oceania) Newsletter*

Robinson RM *Cotylidia undulata*: a rare species in Europe finds life in Australia to its liking. *Fungimap Newsletter*

Robinson RM, Tunsell V Preliminary list of macrofungi recorded in burnt and unburnt *Eucalyptus diversicolor* regrowth forest in the south-west of Western Australia: 1998-2002. *Conservation Science Western Australia*

Stukely MJC, Crane CE, McComb JA, Bennett IJ Field survival and growth of clonal, micropropagated *Eucalyptus marginata* selected for resistance to *Phytophthora cinnamomi*. *Forest Ecology and Management*

Van Heurck P, Friend GR, Williams MR Fire and beetle biodiversity: short-term responses in the composition, structure and function of forest floor beetle communities to experimental fires in dry sclerophyll forest of south-west Western Australia. *Austral Ecology*

Wayne AF, Knapp SO, Ward CG, Vellios CV, Rooney JF, Lindenmayer DB Habitat selection for hollow-bearing trees by arboreal marsupials in the Mediterranean-type jarrah (*Eucalyptus marginata*) forest, Western Australia. I, the koomal (*Trichosurus vulpecula hypoleucus*). *Forest Ecology and Management*

Wayne AF, Knapp SO, Ward CG, Vellios CV, Rooney JF, Lindenmayer DB Habitat selection for hollow-bearing trees by arboreal marsupials in the Mediterranean-type jarrah (*Eucalyptus marginata*) forest, Western Australia. II, the ngwayir (*Pseudocheirus occidentalis*). *Forest Ecology and Management*

Williams AAE, Powell RJ A visit to Middle Island. *Landscape*

Williams AAE, Williams M Records of butterflies (Lepidoptera) from inland and southern Western Australia. *Victorian Naturalist*

New Science Project Plans

Project: SPP 2006/004 – Impact of cane toads on biodiversity in the Kimberley: Modelling the spread of toads, identification of susceptible taxa and documentation of Kimberley frog/reptile assemblages.
Supervising scientist: David Pearson

Project: SPP 2006/005 – The importance of fox, cat and native predator interactions to sustained fauna recovery in the northern jarrah forest: is there a mesopredator release effect?
Supervising scientist: Paul de Tores

Project: SPP 2006/006 – Translocation outcomes and monitoring of naturally occurring populations of the western ringtail possum, *Pseudocheirus occidentalis*.
Supervising scientist: Paul de Tores

Project: SPP 2006/007 – Sustained fauna recovery in a fragmented landscape (Dryandra Woodland and Tutanning Nature Reserve).
Supervising scientist: Nicky Marlow

Project: SPP 2006/008 – Identification of seed collection zones for rehabilitation.

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