

## Perth Urban Bushland Fungi Project

By Roz Hart and the PUBF team

The Perth Urban Bushland Fungi (PUBF) project was started four years ago by the Western Australian Naturalists' Club in collaboration with the Urban Bushland Council and DEC's WA Herbarium. Through the involvement of community groups in fungi forays in local bushlands, the project has produced reports and collected many fungi specimens for the WA Herbarium. Despite thousands of fungi being documented in the Perth area during this time, there is still a good chance of encountering fungi which have not yet been named. It is estimated that there are 140,000 fungi in WA and fewer than 10 per cent that have been discovered and named.

The 'fungiperth' website was updated and launched in May. The website has an improved, easier-to-use version of the Fungi Field Book to help budding mycologists identify local fungi. Bushland fungi survey reports by PUBF are available which document approximately 3,000 fungi for 48 bushland areas in the Perth region. News items and information about free public events to be held in local bushland this winter are also listed.

The original website was designed by volunteer John Weaver and has been upgraded by DEC's Brett Glossop and Sarah de Bueger from PUBF with input from DEC mycologist Dr Neale Bougher. Visit [www.fungiperth.org.au/](http://www.fungiperth.org.au/).



## Decline of tuart in the Yalgorup region



Decline and death of tuart (*Eucalyptus gomphocephala*) in the Yalgorup region. Photo – Paul Barber

By Paul Barber, Katinka Ruthrof, Bernard Dell and Giles Hardy

Tuart (*Eucalyptus gomphocephala*) is an icon of the Swan Coastal Plain and is one of a few eucalypts that is adapted to calcareous soils. The largest intact stand of tuart occurs in the Yalgorup region immediately south of Mandurah, where it is suffering a serious decline in health from an unknown cause or causes.

The Tuart Health Research Group (THRG) based at Murdoch University and comprising members from universities, industry, agencies and local government, has been conducting research into the cause or causes and management of tuart decline for the past five years. THRG has demonstrated strong correlations between crown health of tuart, levels of micro-nutrients in the foliage, abundance and diversity of soil microbes, and soil chemistry. Recently a new species of *Phytophthora* was found within declining stands, however, it is not known at this stage whether this is an aggressive pathogen or a latent pathogen contributing to the decline in crown health which may be initiated by other factors.

The ultimate outcome for THRG will be finding effective methods for managing the decline of tuart to save these iconic trees as well as developing restoration strategies to increase their abundance. Trials with a range of treatments, including stem injections with nutrients and phosphite, have proven successful in reversing canopy decline in trees. THRG has held native tree decline workshops in collaboration with Green Skills Inc., Bemax Cable Sands and Alcoa Alumina Australia to advise landholders how to effectively treat trees. More information can be found at [www.tuarthealth.murdoch.edu.au](http://www.tuarthealth.murdoch.edu.au).

## Learning opportunities



**Courses to help you care for country:** day and evening classes in native animals; wildflower identification and surveys; wetlands; Indigenous culture; seed collecting; bush restoration and weed control; and propagation. Enrolments 2–3 July. Classes start 21 July at Swan TAFE, Midland. Contact Anne Taylor on 9374 6314 or [anne.taylor@swantafe.wa.edu.au](mailto:anne.taylor@swantafe.wa.edu.au) or Ted Johnson on 9374 6314 or [ted.johnson@swantafe.wa.edu.au](mailto:ted.johnson@swantafe.wa.edu.au).

**Help create a better Earth** by becoming a conservation volunteer in and around Perth. In May, teams of volunteers from Conservation Volunteers Australia (CVA) worked on Rottne Island to help reduce visitor impact by stabilising dunes, revegetating and

recycling old fencing and building materials. CVA completes more than 2,000 conservation projects across Australia every year. It is a great way to enjoy the outdoors, meet new people and learn new skills. To get involved freecall 1800 032 501 or visit [www.conservationvolunteers.com.au](http://www.conservationvolunteers.com.au).

**Ecological risk assessment in wetland management** course by Wetlands.edu at Cockburn Wetlands Centre, Bibra Lake. 26–27 August 2008. Enrolments close 31 July. Cost \$700. Visit [www.wetlandsedu.org.au](http://www.wetlandsedu.org.au) or contact Bill Phillips on 02 6281 7470 or [coordinator@wetlandsedu.org.au](mailto:coordinator@wetlandsedu.org.au).