

Locating and recording water trees

The Dahl Trust working in the Great Western Woodlands



A collaborative project between the Dahl Trust, the Wilderness Society, The Goldfields Land and Sea Council, and the Ngadju community.

What will the project do?

This project will locate and map culturally significant 'water trees' in the traditional lands of the Ngadju people, so they might be safeguarded from damage or destruction.

While naturally formed water trees are known in this area and elsewhere, here people have intervened, creating a bowl in the centre to store water, in a way thought to be widely used by Ngadju people in their country. In an area with very little fresh water these trees were essential resources that allowed people to move through and live in this landscape.

The trees are vulnerable, especially to fire, but also to unwitting damage through infrastructure development, which is increasing in this region with a resource development boom underway. Roading, pipelines, seismic lines, drilling programs and power lines all pose threats to these trees.

This project will record the location of known trees and search for others. Traditional knowledge still exists to guide the search, with the trees particularly located along travel routes. By mapping known trees, and then searching 'best bet' locations, it is hoped to build a map of likely areas to guide a second stage search.

All field work will be conducted by the Ngadju people, with in kind support to assist with the collation of data by Goldfields Land and Sea Council and the Wilderness Society.

The intentional modification of the form of the eucalypts, creating a bowl in the centre to store water... is thought to be widely used by Ngadju people in their country.

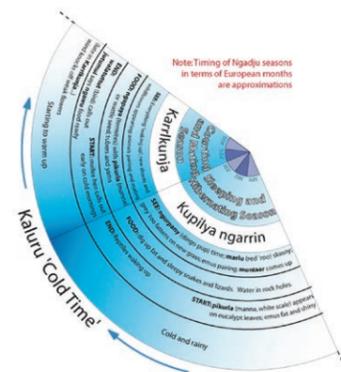


Photos | Michael O'Connor CSIRO

Grant funds will be used to purchase hardware for accurate recording of the locations. This will be done with GPS enabled smartphones that can operate Cybertracker software (www.cybertracker.co.za/). This technology, combining location and camera, has proven successful elsewhere for cultural mapping.

How did the project start?

Traditionally, Indigenous Australians relied on an intimate knowledge of seasonal cycles for ensuring a year-round supply of food, medicines and other resources. They used plants, animals, stars and the weather to indicate when to undertake resource management activities, when to shift camps or to hold cultural events.



A portion of the Ngadju Calendar. Report available at the CSIRO website www.csiro.au/resources/Ngadju-Calendar.html. O'Connor, M.H. and Prober, S.M. (2010). A Calendar of Ngadju Seasonal Knowledge. A report to Ngadju Community and Working Group. CSIRO Sustainable Ecosystems, Floreat, WA.

The Water Tree project grew from work where Ngadju people shared aspects of their knowledge about traditional seasons and indicators with CSIRO scientists, allowing them to document a seasonal calendar. The role of water trees was highlighted in this work as an innovative response to navigating life in a harsh environment.

The calendar project also helps explore the implications for environmental management in the face of climate change, including what impact it might have on traditional activities and land management in the future. In this way the report becomes a tool to assist Ngadju people with their aspirations in relation to land management and their pursuit of cultural activities.

The trees are described in the recent CSIRO Publication: O'Connor, M.H. and Prober, S.M. (2010). *A Calendar of Ngadju Seasonal Knowledge. A report to Ngadju Community and Working Group*. CSIRO Sustainable Ecosystems, Floreat, WA.

Where to from here?

The knowledge gained in this search and mapping exercise will be used to develop a strategy for protecting the water trees. The database will provide ready access to the collected data and enable the Ngadju to monitor risk to the trees from any proposed projects in the area, and allow their incorporation into heritage assessment work.

Importantly, the data will become a component of a planning process for fire ecology work, to reduce fire risk to the trees. This can be used both by the Ngadju themselves, and by government agencies with responsibility for fire preparedness, mitigation and control.

Awareness of the project, through opportunities such as this, help promote the existence and cultural significance of the trees, and the ongoing connectedness of the Ngadju people to their environment.

The project develops additional skills for the Ngadju people in the use of the equipment for surveying and recording of the trees. These skills are transferable to further environmental work, increasing the likelihood of the Ngadju people being able to stay on their country, rather than having to leave to work in other areas.

The Great Western Woodlands

In recent years the Great Western Woodlands of Western Australia have been identified as one of the world's most significant natural areas – the largest remaining temperate woodland on earth, and one of Australia's biologically richest areas. It is a vast area, 16 million hectares bounded on two sides by farming land and then merging with mulga to the north and the Nullarbor in the east.

The intact nature of the Great Western Woodlands presents a rare opportunity for stakeholders to collaborate to maintain and enhance the environmental values of this region. This approach is not new. For tens of thousands of years the Aboriginal people have lived across this area implementing ecological management. Today there remains an important role for Traditional Owners in managing and conserving the natural processes of this rich area.

Significant knowledge and expertise can be brought to bear against threatening processes. Addressing issues of biodiversity loss, contraction of species, feral animals, weeds, changed fire regimes, pollution and overgrazing, are all high priorities. In addition, protection of Aboriginal culture and heritage sites will be important criteria in developing a new management

framework. This project is one small part in that picture. For more information go to www.greatwesternwoodlands.org.au

The Dahl Trust

The Bjarne K Dahl Trust is a philanthropic fund established from a bequest by Bjarne Dahl, a Norwegian Forester who developed a true affinity with the Australian bush and left his entire estate to establish the Trust. The Trust focuses on eucalypts, an Australian icon and a significant aspect of Australia's natural environment and biodiversity.

The Bjarne K Dahl Trust is proud to have supported the Locating and recording water trees project through the 2010-2011 Small Grant Program, that provides up to \$15,000 in funding to organisations or individuals from across Australia to undertake projects related to the protection and enhancement of eucalypts as a significant aspect of the natural environment and the provision of information or education about eucalypts.

For more information on the Trust please visit www.dahltrust.org.au

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