

# Conserving Adelaide's BIODIVERSITY

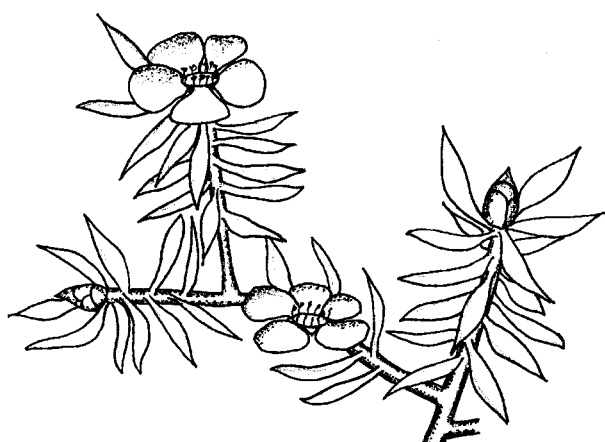
## Project Outline No. 14 Silky tea-tree Closed Shrubland

### Protecting Silky tea-tree Closed Shrubland

Silky tea-tree (*Leptospermum lanigerum*), a shrub reaching up to 5 metres in height, is a moisture-loving species. It is found in areas receiving above 500mm of annual rainfall, and may be a dominant species in places with permanent water, such as swamps and creeklines, providing habitat for other species.

Although the Silky tea-tree itself is not of conservation concern interstate, and is not at risk within South Australia, the plant is considered uncommon within the Southern Mt Lofty Ranges. More importantly, the Silky tea-tree Closed Shrubland vegetation community is classified as endangered in South Australia.

A number of species found within this vegetation community are threatened. Understorey plants found within Silky tea-tree plant communities include: Fishbone water-fern (*Blechnum nudum*), which is rare in South Australia; Soft water-fern (*Blechnum minus*) and Red-fruit cutting-grass (*Gahnia sieberiana*), both uncommon in the Southern Mt Lofty Ranges; Coral fern (*Gleichenia microphylla*), which is rare in South Australia; and the King fern (*Todea barbara*) and Derwent speedwell (*Derwentia derwentiana* ssp. *homalodonta*), both endangered in South Australia and the Southern Mt Lofty Ranges. South of Kuitpo Forest, the damp environments favoured by Silky tea-tree also provide habitat for the nationally endangered Mt Lofty Ranges Southern emu-wren (*Stipiturus malachurus intermedius*).



*Leptospermum lanigerum* (Silky tea-tree)

The best conserved patches of Silky tea-tree communities are found in the Cleland and Scott Creek Conservation Parks, Sturt Gorge Recreation Park, and the Onkaparinga River National Park.

### Pressures (threats)

- Habitat fragmentation, caused largely by land clearing, can leave populations isolated from each other. Inability to interbreed with other populations can reduce genetic diversity and make species vulnerable to environmental changes.
- Most swampy habitats in the Adelaide region have been degraded through processes such as land clearing, draining and stock grazing.
- Introduced plant species such as the blackberry (*Rubus fruticosus* L. agg.) thrive in the moist habitats required by Silky tea-tree.
- Most Silky tea-tree habitats are on private land, and landholders may not realise their conservation value.
- There is a lack of scientific knowledge about the biodiversity of swamp habitats, and how they should be managed. It is difficult to make management decisions without sound knowledge on which to base them.

### Responses (actions)

- Conduct species surveys in damp habitats to locate Silky tea-tree Closed Shrubland and document biodiversity within them.
- Encourage private landholders to identify, retain and conserve Silky tea-tree Closed Shrubland on their properties.
- Where Silky tea-tree habitat has been identified, assess the risks that pressures such as weed invasion, land clearance, draining and stock grazing pose.
- Use information gathered to produce a management plan for the area. Recommendations could include controlling invading weed species, excluding stock by fencing, and revegetating degraded moist habitats.
- Implement management plans, and monitor the effects that work undertaken has on the biodiversity of Silky tea-tree communities. Modify management techniques if necessary.



## Potential Outcomes

- Locating Silky tea-tree Closed Shrubland is the first step towards its conservation.
- Stopping further clearance, drainage and grazing in areas with permanent water reduces the immediate threat to Silky tea-tree habitat, and could lead to the conservation of as yet unrecorded species.
- Surveying the biodiversity of Silky tea-tree communities, and the factors that threaten them, allows us to better understand how we should conserve the species we know to be present.
- Producing management plans for Silky tea-tree communities will inform landholders how to conserve patches of this remnant vegetation on their properties.
- Monitoring the effects of management, and modifying actions where necessary, will lead to greater conservation of biodiversity. It will also allow more appropriate management techniques to be applied in similar areas.
- Conservation measures that lead to the retention of Silky tea-tree communities will help conserve the uncommon, rare or endangered species that live within them. This will help to maintain genetic, species and habitat diversity locally and on a larger scale.

## Some current projects

The SA Urban Forest Biodiversity Program (UFBP) has funded a number of projects on Silky tea-tree sites in the Adelaide region. Vegetation surveys of private properties have revealed stands of Silky tea-tree, increasing our knowledge of the location and plant species diversity of this habitat type.

Weed control and fencing projects have been funded on Silky tea-tree sites on private properties at Ironbank and Kangarilla. The UFBP has also funded weed control, fencing and replanting projects by public bodies in a number of Silky tea-tree swamps. Examples include projects by the City of Onkaparinga at the Lotus Drive Reserve and by National Parks and Wildlife SA at Wilson's Bog in Cleland Conservation Park.

## Getting involved

If you would like to get involved in a conservation project, either as an individual or through a community group, contact a UFBP Project Officer for additional information, contacts for current projects or suggestions for how you might best become involved.

## Sources of information

For further information on conserving Adelaide's biodiversity, see:

- *Conserving Adelaide's Biodiversity: A planned approach* (summary biodiversity plan for the region)
- *Conserving Adelaide's Biodiversity: Resources* (technical document that includes species lists, descriptions of areas of remnant vegetation and priority projects)
- *Garden Plants are Going Bush...and becoming environmental weeds* (brochure with pictures of common weed species, including some proclaimed species).

## SA Urban Forest Biodiversity Program

Natural Resource Centre

5 Fitzgerald Road

Pasadena SA 5042

Telephone (08) 8372 0180 Facsimile (08) 8372 0199

E-mail [info@urbanforest.on.net](mailto:info@urbanforest.on.net)

[www.urbanforest.on.net](http://www.urbanforest.on.net)

## UFBP Project Officers:-

Northern Metropolitan (08) 8406 8506

Southern Metropolitan (08) 8384 0512

Central Metropolitan (08) 8366 4282

Hills Face (08) 8372 0175

Text and drawing by Elen Shute

The UFBP is a collaborative program supported by: The Natural Heritage Trust, The State Government through the Department for Environment and Heritage and the Department of Transport Urban Planning and the Arts, the Torrens, Patawalonga, Onkaparinga and Northern Adelaide and Barossa Catchment Water Management Boards, SA Local Government Association, Local councils and a range of community groups and individuals.

