



## THREATENED SPECIES AND COMMUNITIES OF THE ACT

# Natural Temperate Grassland

An endangered ecological community

Issued: 18 May 2006

When European settlers first arrived in Australia they found large areas of natural grassland—naturally open areas covered with grass and other herbs but with few or no trees. In temperate southern Australia most of the original grassland has been replaced by cereal crops, pasture grasses, towns and cities. These natural temperate grassland communities are now probably the most threatened ecosystem in Australia. Only 0.5% remains in good condition.



Natural temperate grassland occurs in areas where few trees grow because of factors such as low temperatures, low rainfall and infertile or clay soils. In the ACT they generally occur in valleys below 625 m in altitude.

Perennial tussocks that may grow up to 1 m in height give a characteristic appearance to natural temperate grassland. Below and between these tussocks grow other grasses, wildflowers and sometimes mosses and lichens. Many grassland plant species are rare or uncommon and two (the Button Wrinklewort *Rutidosis leptorrhynchoides* and the Ginninderra Peppergrass *Lepidium ginninderrense*) have been declared as threatened in the ACT under the *Nature Conservation Act 1980*.

The fauna found in natural temperate grasslands of the southern tablelands typically includes a rich diversity of invertebrates, reptiles, amphibians and birds. Grasslands in the ACT provide critical habitat for four animal species declared as threatened in the ACT under the *Nature Conservation Act 1980*. These are:

- Striped Legless Lizard (*Delma impar*);
- Grassland Earless Dragon (*Tympanocryptis pinguicolla*);
- Golden Sun Moth (*Synemon plana*); and
- Perunga Grasshopper (*Perunga ochracea*).

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## CONSERVATION THREATS

Following European settlement, a number of factors have been responsible for the loss of natural temperate grassland and degradation of the remnants in the ACT and region. These factors generally remain as ongoing threats and may be categorised as follows:

- pastoral and agricultural development;
- urban and infrastructure development;
- weed invasion;
- changed and inappropriate fire regimes; and
- other forms of disturbance associated with land management or feral animals.

## ACTIONS TO IMPROVE CONSERVATION OF LOWLAND NATIVE GRASSLAND IN THE ACT

Significant early actions to improve grassland conservation in the ACT were:

- Developing and implementing (from 1993) the *Recovery Plan for Lowland Native Grasslands in the ACT*.
- Protecting about 400 ha of natural temperate grassland and other grassland habitat in the Gungahlin grassland reserves (Mulangarri, Crace, Gungahderra) (1995).

Since the first action plans for natural temperate grassland and component threatened species were adopted (beginning in 1997), there have been several government decisions implementing some of the priority actions identified in these plans. These are:

- Removing about 82 ha of natural temperate grassland, including some wet *Themeda* grassland from the Dunlop residential estate and adding it to Dunlop Nature Reserve (1997).
- Establishing Memoranda of Understanding with Commonwealth managers of National Land.
- Announcing (July 2004) protection in nature reserves of over 300 ha of nature temperate grassland and other grassy habitat for threatened species in the Jerrabomberra Valley.

Priority tasks to improve the protection of natural temperate grassland and the six threatened plant and animal species are:

- Completing planning studies of those parts of the ACT where the long-term land use has yet to be defined, including identifying those areas that are best used as nature reserves.
- Protecting all grasslands assessed as being the core conservation areas, either as part of the ACT's nature conservation estate or through equivalent, secure management.
- Including in the protected area system, grassland habitat for threatened species not yet adequately protected.
- Providing for improved habitat connectivity for wildlife movement between grasslands and woodlands or other adjacent habitats.
- Reviewing management of native grassland areas in ACT nature reserves to ensure ecological condition is improved.
- Assessing grasslands and threatened species habitats for their potential for listing on the ACT Heritage Places Register.
- Establishing mechanisms to assist in the application of best practice management (Conservation Management Networks, voluntary management agreements, guidelines), to facilitate conservation outcomes on reserve and off-reserve land.

### FURTHER INFORMATION

The primary source of information for this information sheet is the ACT Lowland Native Grassland Conservation Strategy—Action Plan No. 28, where a full bibliography is available.

Action plans are available online at [www.environment.act.gov.au](http://www.environment.act.gov.au) or by calling Canberra Connect on 13 22 81.

### Acknowledgements

The illustration is modified from illustrations by Bev Bruen and Liz Faull.