

## Technical Bulletin # 8

# Survey for the Hooded Scaly-foot west of Mildura



Above: Hooded Scaly-foot located at Ranfurly. Photo: Wildlife Profiles Pty Ltd, Peter Robertson.

**This technical bulletin summarises the findings of field research conducted in February 2010 to determine the distribution of the Hooded Scaly-foot (*Pygopus schraderi*) within the Mallee CMA region.**

The project aimed to identify new sites of Hooded Scaly-foot, in the chenopod shrublands west of Mildura and to improve the understanding of the habitat requirements of this species.

### **Background**

The Hooded Scaly-foot is a large, legless lizard growing up to 475mm in length. Within Victoria, the species is restricted to the north of the state, where it appears to

be associated with red clay-loam soils and native grasslands or chenopod shrublands. Prior to this study, the Hooded Scaly-foot was known to exist at only five sites in Victoria:

- Terrick Terrick National Park grasslands;
- Korrak Korrak grasslands;
- Lake Bael Bael, north-central Victoria;
- Lake Ranfurly west of Mildura; and
- A broad area within Ned's Corner.

Knowledge of the distribution and habitat requirements of the species in the region is urgently required to guide and inform management. This project aimed to address this knowledge gap through targeted surveys of Hooded Scaly-foot within areas of suitable habitat west of Mildura.

### **Method**

To guide the selection of survey sites, existing modelling of the distribution of the species was examined, and proved useful in identifying areas of potential habitat for survey.

Three broad areas were examined within the north-western section of the Mallee CMA area, with 12 survey sites selected:

- Yarrara Flora and Fauna Reserve (two sites);
- Sunset plains - Pink Lakes area of Murray-Sunset National Park (two sites);
- West of Merbein - public land under grazing licence (eight sites).

### **At a glance**

- Hooded Scaly-foot is listed as threatened under the Flora and Fauna Guarantee Act 1988.
- A research survey was undertaken to determine the distribution of the Hooded Scaly-foot within the Mallee CMA region and to improve the understanding of the habitat requirements of this species.
- Four individual Hooded Scaly-foot were found during the survey, representing a newly discovered population of the species.



Above: Hooded Scaly-foot located at Terrick Terrick. Photo: Wildlife Profiles Pty Ltd, Peter Robertson.

Surveys of potential habitat were undertaken during nocturnal spotlight traverses on foot in February 2010, when weather conditions were warm. This technique has proven the best to locate this cryptic species, which is not readily detected by other means.

Information on habitat structure was collected within 10 metre by 10 metre quadrats at each location where Hooded Scaly-foot were recorded during the survey. Habitat features recorded included height and cover of vegetation life form strata, soil characteristics, number of invertebrate burrows and levels of grazing apparent.

### Results

Four individual Hooded Scaly-foot were found during the current survey, all west of Merbein within public land that was recently declared under VEAC and is currently licensed for grazing. The survey effort required to detect Hooded Scaly-foot averaged approximately eight person hours per individual lizard, or one found on average every 21.5 kilometres traversed. These records of the Hooded Scaly-foot, comprising a newly-discovered population of the species, span approximately three kilometres, and are in an area of potential

habitat of approximately 400 hectares. While similar habitat extends much further southwards and westwards, it is severely degraded, and no records of the Hooded Scaly-foot were obtained during traverses there.

Common habitat characteristics at the four sites included a lack of tree and large shrub cover and a moderate cover of small shrubs to 0.3m high, usually a high cryptogram cover and a moderate extent of bare ground.

Much of the habitat of this species may now be in secure land tenure due to the removal of grazing in the Murray River Park by 2014. However, at only one population (Ned's Corner Station) may the extent of habitat currently be considered sufficient to support a large and hence viable population in the long term. Further studies in Terrick Terrick National Park and in the shrublands west of Merbein are also required to determine if those areas are large enough to support viable populations.

The challenge remains to manage conservation areas to ensure the specific habitat requirements of the Hooded Scaly-foot are maintained and enhanced.

### Recommendations

Management and research recommendations from this project include:

- Remove stock grazing from Hooded Scaly-foot habitat;
- Control Ward's Weed in Hooded Scaly-foot habitat, and prevent its spread;
- Control foxes and cats in Hooded Scaly-foot habitat;
- Avoid rabbit warren ripping in Hooded Scaly-foot habitat;
- Exclude fire from Hooded Scaly-foot habitat;
- Undertake detailed investigation of the habitat at known Hooded Scaly-foot sites;
- Determine the extent of occupied habitat at each known Hooded Scaly-foot site;
- Examine the diet of the Hooded Scaly-foot along with factors affecting the distribution and occurrence of prey items;
- Devise and implement monitoring programs of all known populations;
- Investigate the ecology of the species.

### Acknowledgments

The Mallee CMA engaged Wildlife Profiles Pty Ltd to undertake this project, with funding provided by the Victorian Government.

### Further information

The information for this bulletin has been taken from 'Survey for the threatened Hooded Scaly-foot (*Pygopus schraderi*) west of Mildura, February 2010', a report for the Mallee CMA by Wildlife Profiles Pty Ltd.

For further information about the Hooded Scaly-foot survey, please contact the Mallee CMA on (03) 5051 4377.

## Project Partners



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