

## RESEARCH IN PROGRESS

### Grazing impacts on Plains-wanderer habitat and food resources

#### Description:

**The effect of grazing on vegetation structure & food resources: Implications for the Plains-wanderer.**

Funding: NSW DECC (\$30,000 over 3 years 2006-2009) Project Leader: Kylie Eklom Supervisors: Dr Gary Luck (ILWS) & Dr Ian Lunt (ILWS)

Temperate native grasslands are one of SE Australia's most threatened ecological communities. Less than 1% of temperate native grasslands remain today but they support many threatened taxa

including the nationally vulnerable Plains-wanderer (*Pedionomus torquatus*). Plains-wanderers are only found in Australia and are the sole member of the family Pedionomidae. These birds are grassland specialists, preferring a sparse vegetation structure of about 50% bare ground and vegetation height mostly under 5cm. The biggest threats to the species are habitat loss through the conversion of suitable grassland to pasture and



crops, and overgrazing by domestic stock. Although low intensity grazing can be beneficial to grassland biodiversity, it is unclear what impact grazing has on Plains-wanderer food resources.

#### Objectives:

- (1) Examine the effects of sheep grazing on the structure and composition of the grassland habitat inhabited by the Plains-wanderer, with emphasis on food (invertebrate & seed) resources.
- (2) Use current knowledge about Plains-wanderer ecology and results from (1) to make predictions on the effect of grazing induced changes on Plains-wanderer habitat selection.



#### Methods:

The research is based at Oolambeyan National Park, located 81km SE of Hay in the NSW Riverina region. At just under 22 000 ha in area, the park was once a pastoral and cropping property which is now being managed for its cultural, heritage and natural values. There is a particular emphasis on Plains-wanderer conservation, with sheep grazing being used as a management tool to maintain an open grassland structure.

The focus of the research is on the effects of the current management regime. Within the grassland of the NP, grazing enclosures with current sheep stocking rates will be set up. Vegetation characteristics will be recorded and seed and invertebrates collected to look at resource availability. There is scope to include different grazing intensities as well as alternative management options including fire and slashing.

Photos: (Left) Female Plains-wanderer (by T.Wheller) and Ideal Plains-wanderer habitat (above)

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