

# EARLESS, LEGLESS, HOMELESS??

## MITIGATION MEASURES THREATENED REPTILES AND GRASSLAND BOCO ROCK WIND FARM

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# LOCATION: BOCO ROCK WIND FARM

FIGURE 2.1: GENERAL LOCATION OF THE BOCO ROCK WIND FARM

2009



## STATS: BOCO ROCK WIND FARM

- Monaro Tablelands
- Elevation 900 to 1,100 metres
- 122 turbines, 114 MW
- Predicted capacity 350 GW hrs
- Stage 1 currently under construction comprises 67 turbines
- Boco Rock Wind Farm Pty Ltd is the developer
- GE Energy and Downer EDI consortium constructing stage 1
- Total project cost \$361m (AUD)

## APPROVAL: BOCO ROCK WIND FARM

- Received approved in 2010
- Large areas of the Endangered Ecological Community - Natural Temperate Grassland
- Provides habitat to the threatened;
  - Grassland Earless Dragon
  - Striped Legless lizard
  - Little Whip Snake

# NATURAL TEMPERATE GRASSLAND





Grassland Earless Dragon



Striped Legless Lizard



Little Whip Snake

Photos provided by  
Allison Brunott, Downer

# APPROVAL: CONDITIONS

## Conditions of approval

- Biodiversity offset package
- Pre-construction surveys
- No ground breaking works November to January
- Develop harm minimisation/relocation strategy in consultation with OEH

## Reptile Management Plan

- Grassland reptiles required pre-construction surveys
- Scalping of the top 10-20 cm
- Release captured reptiles
- Dragons captured in colder months sent to University Canberra





# RESULTS

- Project ecologists have captured;
  - Ten (10) Grassland Earless Dragons
  - Three (3) Little Whip Snakes
  - Two (2) Striped Legless Lizards
- 500 workdays by ecologists by completion of the Stage 1



Photo provided by Allison  
Brunott, Downer

## DRIVERS OF EXTINCTION

- Seven (7) of the Grassland Earless Dragons held by University of Canberra
- Australian Research Council 'drivers of extinction'
- Goal of reducing risk of extinction:
  - Captive breeding program
  - Evolutionary relationship between populations
  - Contribute to a release program?



# CHALLENGES

- Scalping following preclearance survey within:
  - 3 weeks, May and November
  - 3 days, February and May
- November to January exclusion of ground breaking works



## ENVIRONMENTAL RISKS

- Large areas scalped prior exclusion period
- Resulting environmental risks:
  - Erosion and sediment control
  - Over-clearing
  - Weed and pathogen ingress.
  - Prolonged stockpiling impacting soil health.











## SUCCESSFUL?

- Minimised extent of clearing
- Prescriptive mitigations measures increased risk of impact
- Reduced harm
- Success of release program unknown
- Providing Dragons to the UC Drivers of Extinction program is a measurable outcome



## ALTERNATIVE APPROACHES

- Prescriptive mitigation measures reduced options
- Additional methods and strategies exist:
  - Alternative methods to remove habitat
  - Utilisation of grazing
  - Provide option of funding research?

## LESSONS LEARNT

- Mitigation strategies can introduce risk
- Approval conditions and mitigation strategies
  - Less prescriptive
  - Adaptive
  - Objective-orientated

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