



managing native  
vegetation  
and biodiversity

improving farm profits  
through biodiversity

# LandWater & Wool

## Shaping the future



Australian Government  
Land & Water Australia

another australian wool innovation  
• limited



### WOOL PRODUCTION & BIODIVERSITY

Triple bottom line focus for wool production at 'The Hill'

Jon and Vicki Taylor's management of their NSW New England properties 'The Hill' and 'East Oaks' reflects the principles of the 'triple bottom line'.

Through their revegetation program and property management the Taylors' feel good about their achievements, they have a comfortable lifestyle and they have a range of economic options.

Furthermore, the farm environment is steadily improving, and biodiversity has increased under their management - all of which is moving them towards social, economic and environmental sustainability.







The Taylors are one of 25 farms participating in the Northern Tablelands Project, under the *Native Vegetation and Biodiversity* Sub-Program of *Land, Water & Wool*. By working with woolgrowers, the project is showing that biodiversity has a range of values, can add wealth to a business and can be managed as part of a productive and profitable commercial wool enterprise.



Photo courtesy of Matt Cawood.

*Land, Water & Wool* (LWW) is a joint investment between the wool industry's peak research and development body, Australian Wool Innovation Limited, and the nation's premier investor in natural resource management research, Land & Water Australia.

*Native Vegetation and Biodiversity* is one of eight *Land, Water & Wool* sub-programs. The others include:

-  Benchmarking and Evaluation
-  Sustainable Grazing on Saline Land (SGSL)
-  River management and water quality
-  Managing climate variability
-  Managing pastoral country
-  Future woolscapes
-  Sustainable Grazing Systems Harvest Year

More detailed information is included in the full version of the *Wool Production & Biodiversity Case Study on the Taylors' property* (see back page for details).

Jon and Vicki Taylor live near Uralla on the NSW New England Tablelands. Their chief enterprise is fine wool (17.5 - 18 micron). In good seasons, cattle constitute about a quarter of livestock.

The history of vegetation management between 1840 and 1956 at 'The Hill' was largely one of progressive tree clearing and regrowth management on the most productive country to make room for more pasture. The most dramatic changes to occur at 'The Hill' in Jon's lifetime were pasture improvement and New England dieback.

After the worst of the dieback was over, Jon and Vicki pioneered a tree planting movement that continues today. Jon and Vicki have planted about 400,000 trees since 1979, mostly on 'The Hill', which has brought tree cover up to almost 20 per cent of the property. Only a fraction of this is remnant native tree cover.

They now plant about three hectares per year, of which half is radiata pine and the rest a diverse mix of native and other species. Whole-paddock contour plantings consist of two lines of trees, one of pines for commercial timber, and the other of native trees and tall shrubs to continue to provide shelter and biodiversity benefits after the harvest of the pines.

"We want as much diversity as we can get," says Jon. "To reduce tree loss, we want species with good survival and that provide a habitat for a diverse range of insects and birds in order to beat the beetles and their defoliation."



**Farm management**

About 30 per cent of 'The Hill' and 65 per cent of 'East Oaks' is native pasture, dominated by tussock poa and has never been cultivated. The remainder has been sown to pasture since 1967.

**“At the very least, the extra grazing production resulting from the shade, shelter, biodiversity and cleaner water, compensates for the land taken out of production with trees.”**

Jon and Vicki Taylor, 'The Hill'

“We sow about 20 hectares of pasture every two to three years. Even when I spray, I don't take out everything - I will often deliberately leave strips of poa. A shotgun mix of introduced species is good so that there's something for every season. In drought, the tough old natives hang on; in really good seasons, we've got softer species and the exotic species are likely to be more productive.”

Groundcover is also important to Jon: “If you graze pasture too hard, you are more likely to have a problem later. Black

thistle is a problem if we have bare ground: it's hard to handle the sheep at shearing, because the spines get in the wool.”

Jon grazes rotationally but is flexible depending on circumstances.

**Wildlife**

Jon and Vicki are proud of the benefits their tree planting has had for wildlife, particularly the return to 'The Hill' of koalas, which were hunted out by fur trappers during the 1860s. The frequency of echidna sightings has also increased.

**Trees save money**

Having more than 11 per cent of 'The Hill' and 'East Oaks' out of production in the past decade has had little, if any, impact on wool production.

During both the 1994 and 2002 droughts, Jon was able to graze tree planted paddocks that contained large bodies of feed because they had been excluded from stock access.

Paradoxically, the Taylor's tree planting and conservation program has paid for itself two or three times since they began.

**fast facts**

**Location:**

Uralla, New England Tablelands NSW, Macleay River Catchment

**Area:**

'The Hill' - 650 ha  
'East Oaks' - 400 ha

**Mean annual rainfall:**

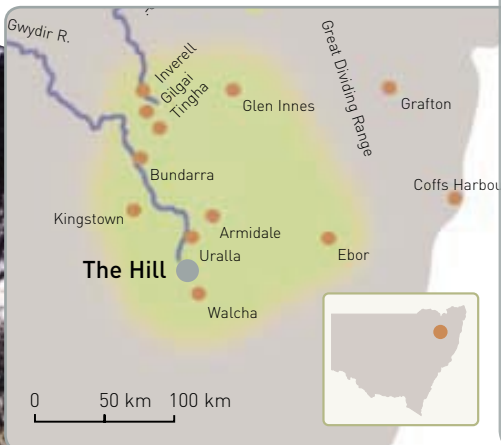
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**Enterprises:**

Fine wool (17.5 - 18 micron), Stock numbers 5500 Merino sheep (7250 DSE), up to 150 cattle (2100 DSE)

**Soil types:**

'The Hill' - traprock 'East Oaks' - 50 per cent traprock, 40 per cent basalt, 10 per cent granite



1. Fencing a remnant area can encourage hundreds of volunteer seedlings that you don't have to plant!
2. Remnant paddock trees can improve in health if included in 'revegetation corridors'.
3. Contour and whole paddock plantings are a good way of combining productivity (timber and grazing), biodiversity and shelter.
4. Grazing planted areas is possible with careful observation and management.
5. Species selection - incorporating shrubs with paddock plantings is difficult as stock will preferentially graze them. These can survive in 'special' conservation areas on the property such as rocky knobs, wildlife corridors and around permanently-fenced dams.
6. Remnants and whole paddock plantings save stock and money during droughts.
7. Reticulating water to troughs from fenced farm dams and riparian zones provides stock with clean water, which they prefer.
8. Fencing farm dams provides niche areas where native shrubs and a wide variety of trees are planted away from the grazing effects of stock.

**For further information, contact:**

**Ms Karen Forge**

Southern New England Landcare Ltd  
Tel: (02) 6772 9123  
Email: snelcc@bigpond.com

**Assoc Prof Nick Reid**

University of New England (UNE)  
Ecosystem Management  
Tel: (02) 6773 2759  
E-mail: nrei3@une.edu.au

Visit us on-line at [www.landwaterwool.gov.au](http://www.landwaterwool.gov.au)



**Wool Production & Biodiversity Case Study**

PLEASE POST ME:

- One copy of the Taylors' 'The Hill' Case Study
- Other fact sheets and case studies in the Land, Water & Wool Northern Tablelands Project series

Name \_\_\_\_\_

Postal Address \_\_\_\_\_

Fax this page to (02) 6771 2656.

**project partners:**



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PRODUCT NUMBER: PF050839