

How Woolgrowers Manage native vegetation & biodiversity on New England wool properties

Introduction

In 2003, the Land, Water & Wool Northern Tablelands Project (NSW) conducted a survey of woolgrowers in southern New England.

The survey aimed to find out what woolgrowers thought about biodiversity in relation to wool production, how woolgrowers manage their farms in ways that affect biodiversity, and what it would take for them to adopt management practices that would enhance biodiversity.

A one-page questionnaire was mailed to 934 growers, with two follow-up mailings shortly after. The final mailing was a shortened version of the questionnaire designed to see if growers who hadn't responded initially, varied in their responses to the earlier respondents. In all, 347 questionnaires (37%) were returned, results being adjusted for non-response bias detected by the third mailing.

Attitudes towards native vegetation, biodiversity & water quality

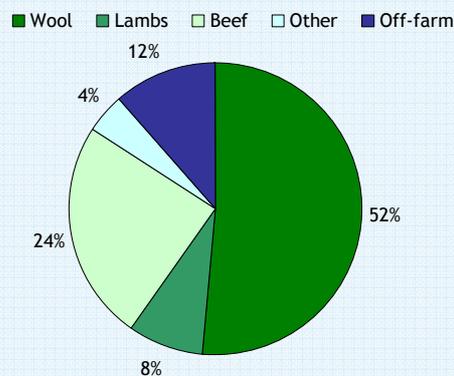
- About 45% of woolgrowers thought that native plants and animals are important for ecological balance and sustainability of wool production, whereas one-third (35%) didn't think this was the case.
- Most woolgrowers (81%) thought that

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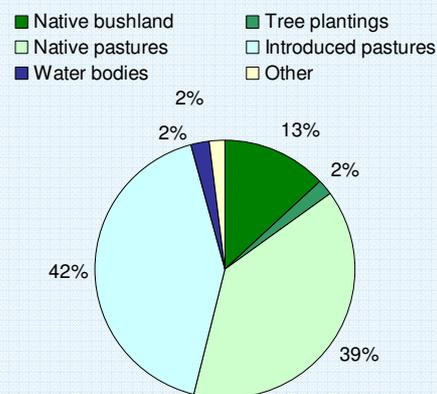
The woolgrowing properties at a glance

Average area	1101 ha
Average number of sheep shorn each year	3896
Average micron of the Southern New England wool clip.....	18.8 µm

Below—Income sources (average across all properties)



Below—Types of country (average across all properties)



Highlights

- 4% of properties are solely dependent on wool income
- 85% of woolgrowers have income from beef production
- 77% of properties have some native bushland
- 61% of properties have tree plantings
- 86% of properties have some native pastures
- 94% of properties have sown pastures

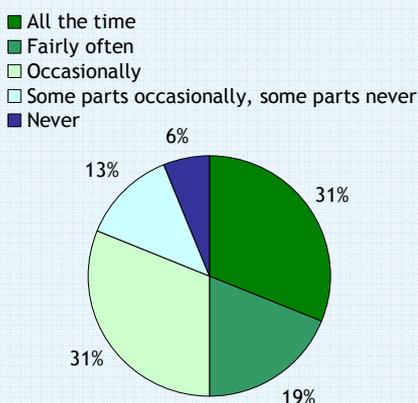
(Note the figures above do not necessarily correspond to those in the diagrams).

Implications

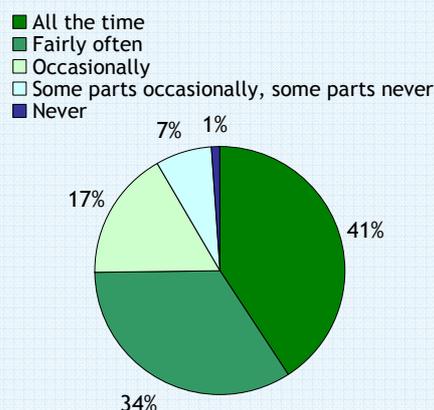
- About half of the total area of New England wool properties is native vegetation (39% native pasture and 13% bushland).
- The area of native vegetation managed by New England woolgrowers is equivalent to one third of the national park estate in NSW.

Grazing bushland & creek banks

Below—Percentage of woolgrowers who graze native bushland



Below—Percentage of woolgrowers who graze creeks and river banks



Highlights

- 61% of the *area* of bushland is only occasionally, or never, grazed.
- 20% of the *area* of native bushland is grazed all the time.

Implications

- Half of woolgrowers exclude livestock from bushland most of the time, which is positive for grazing-sensitive plants.
- Almost one-quarter of woolgrowers exclude livestock from their river banks and streams most of the time, which is positive for water quality and downstream users.

well managed improved pastures are the key to profitable wool production.

- Almost two-thirds of woolgrowers (62%) thought that some areas need to be protected from stock to allow grazing-sensitive plants to survive on grazing properties.
- Almost two-thirds of woolgrowers (63%) thought they could manage water quality by controlling livestock access to water ways and farm dams.
- Just over half of woolgrowers (54%) thought they could do something about dying paddock trees.
- On the proposition that wool from native pastures is whiter, finer and has less yolk than wool from improved pastures: slightly more than one-third of woolgrowers were in agreement, slightly less than one-third disagreed, and just under one-third were neutral.

Types of wool properties

Wool properties fell into four main types based on income and types of country:

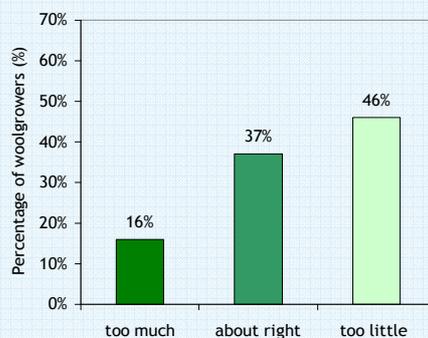
1. Half of wool properties had a high dependence on wool income and relatively large amounts of native pasture (rangeland managers)—properties in this category averaged 1336 ha in size, sheared 4287 sheep each year, and wanted an average annual payment of \$291 per hectare to manage bushland for conservation.
2. A quarter of properties had a relatively high dependence on lamb and beef income, and a high proportion of introduced pastures (meat producers)—properties in this category averaged 1052 ha in size, sheared 3386 sheep each year, and wanted an average annual payment of \$166 per hectare to manage bushland for conservation.
3. Just over 10% of properties had a

high dependence on wool income, a very high proportion of introduced pastures and little bushland (high-input woolgrowers)—these properties averaged 1230 ha in size, sheared 8136 sheep each year, and wanted an average annual payment of \$855/ha to manage bushland for conservation.

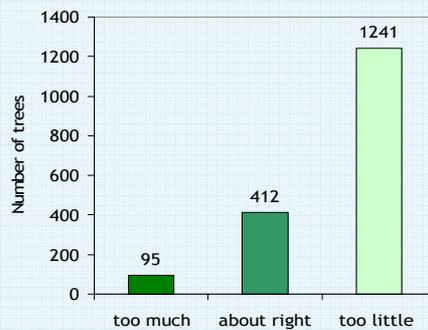
4. Just over 10% of properties were mainly dependent on off-farm income, with high proportions of native pasture and bushland (lifestylers)—these properties averaged 613 ha in size, sheared 955 sheep each year, and wanted an average annual payment of \$54/ha to manage bushland for conservation.

Tree cover & tree planting

Woolgrowers who thought the amount of tree cover on their property was:



Average number of trees planted each year by woolgrowers who thought the amount of tree cover on their property was:

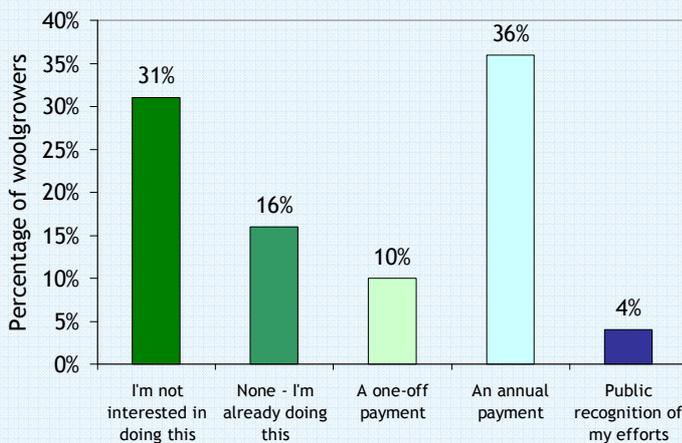


Support for managing native bushland for conservation

To support the 36% of woolgrowers in southern New England who would accept an annual payment to largely exclude livestock from areas of native bushland and manage these areas for conservation, it would cost \$1,413,400 per annum.

This would result in 9300 ha of bushland being managed for conservation.

Below—What encouragement or support would you need to largely exclude livestock from native bushland and manage it for conservation?



Land, Water & Wool (LWW) is the most comprehensive natural resource management research and development program ever undertaken for the Australian wool industry. LWW is a partnership between Australian Wool Innovation Limited and Land & Water Australia, and has seven core sub-programs. The Native Vegetation and Biodiversity sub-program is working with woolgrowers, and demonstrating that biodiversity has a range of values, can add wealth to the farm business and can be managed as part of a productive and profitable commercial wool enterprise.

The Land, Water & Wool Northern Tablelands Project is led by Associate Professor Nick Reid, University of New England, in collaboration with Southern New England Landcare Ltd, and the Centre for Agricultural and Regional Economics.

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