Merging conservation with production in remnant bush

Anne Morgan
Alison Fuss

Follow this and additional works at: http://researchlibrary.agric.wa.gov.au/journal_agriculture4

Part of the Other Forestry and Forest Sciences Commons, Plant Pathology Commons, and the Sustainability Commons

Recommended Citation
Available at: http://researchlibrary.agric.wa.gov.au/journal_agriculture4/vol35/iss3/7

This article is brought to you for free and open access by Research Library. It has been accepted for inclusion in Journal of the Department of Agriculture, Western Australia, Series 4 by an authorized administrator of Research Library. For more information, please contact jennifer.heathcote@agric.wa.gov.au, sandra.papenfus@agric.wa.gov.au.
IMPORTANT DISCLAIMER

This document has been obtained from DAFWA's research library website (researchlibrary.agric.wa.gov.au) which hosts DAFWA's archival research publications. Although reasonable care was taken to make the information in the document accurate at the time it was first published, DAFWA does not make any representations or warranties about its accuracy, reliability, currency, completeness or suitability for any particular purpose. It may be out of date, inaccurate or misleading or conflict with current laws, polices or practices. DAFWA has not reviewed or revised the information before making the document available from its research library website. Before using the information, you should carefully evaluate its accuracy, currency, completeness and relevance for your purposes. We recommend you also search for more recent information on DAFWA's research library website, DAFWA's main website (https://www.agric.wa.gov.au) and other appropriate websites and sources.

Information in, or referred to in, documents on DAFWA's research library website is not tailored to the circumstances of individual farms, people or businesses, and does not constitute legal, business, scientific, agricultural or farm management advice. We recommend before making any significant decisions, you obtain advice from appropriate professionals who have taken into account your individual circumstances and objectives.

The Chief Executive Officer of the Department of Agriculture and Food and the State of Western Australia and their employees and agents (collectively and individually referred to below as DAFWA) accept no liability whatsoever, by reason of negligence or otherwise, arising from any use or release of information in, or referred to in, this document, or any error, inaccuracy or omission in the information.
Merging conservation with production in remnant bush

By Anne Morgan
Floriculture Research Officer, Manjimup and
Alison Fuss
Floriculture Research Officer, South Perth

Exports of cutflowers and foliage from Western Australia are now worth about $17 million a year. A third of this is picked from the bush, either on Crown Land or areas of remnant bush on private property. While the industry’s future lies in cultivation, bush picking is likely to remain important for some years. This can provide both extra income for farmers and benefit the environment – as long as care is taken.

Cultivation of native species began in the 1980s, with about 5 per cent of export cutflowers obtained from plantations. Their contribution has grown steadily in the last 10 years and now accounts for about 65 per cent of the value of exports. Of the bush-picked flowers and foliage, about two-thirds comes from Crown Land and one-third from private properties. Exports continue to be the mainstay of the industry.

Cultivation is the only long-term path for the industry. Planting in rows and using cloned plants makes management easier and allows a consistent result. However, many plant species still cannot be propagated or established easily. Others may not be commercially profitable in plantations so will continue to be harvested from bush areas.

For the moment, bush picking is important to achieve the range and quantity of native cutflowers and foliages demanded on international markets. However, it must be regulated to minimise its impact on the bush and ensure that harvesting is sustainable.

Regulations
Three government agencies oversee the flora industry in Western Australia: the Department of Conservation and Land Management (CALM), the Department of Agriculture and the Water Authority. CALM is responsible for the conservation and management of flora throughout Western Australia and has authority to impose controls on harvesting. It monitors the industry by issuing licences to people harvesting native flowers, foliage and seed.

Using chemicals to control pests and diseases in remnant bush may have detrimental effects on beneficial organisms such as pollinators. Photo by courtesy of Trevor Valley, CALM.

Fencing is one of the simplest management techniques. It reduces grazing, introduction of weeds and soil compaction by stock, thus encouraging the growth of healthy bush. Photo by courtesy of Penny Hussey, CALM.

Western Australia’s unique floriculture industry started about 40 years ago when enterprising individuals began picking wildflowers from areas of bush. More than 1000 plant species are now picked in the bush for cutflowers and foliage. The main plants harvested are Banksia, Stirlingia, Verticordia, Agonis (titree), Podocarpus (emu bush), Conospermum (smokebush), reeds and rushes. Bush picking occurs predominantly in the lower South-West around Albany and Manjimup and on the northern sandplains.

At first, it was easy to find good supplies of native flowers and foliages on Crown Land. However, it has become increasingly difficult as more people have entered the industry and demand for the product has grown. This has encouraged the establishment of wildflower plantations and the use of remnant vegetation on private property.
Bush management on private property

Some people have begun to manage areas of bush on private property in an attempt to make them more productive. It is anticipated that bush picking from private property will increase because of the need for some farmers to diversify their farming activities as well as the picking restrictions on Crown Land.

The low set-up costs make wildflower production through bush management on private property an attractive option. Sole (scarlet banksia) and B. baxteri (bird's nest banksia) is banned from Crown Land, and picking quotas are in place for Boronia megastigma (brown boronia).

Access to some Crown Land is restricted for quarantine reasons, and some areas are being converted into Nature Reserves and National Parks. This effectively reduces the area available for bush picking, putting greater pressure on the remaining areas of bush.

**Bush management on private property**

Some people have begun to manage areas of bush on private property in an attempt to make them more productive. It is anticipated that bush picking from private property will increase because of the need for some farmers to diversify their farming activities as well as the picking restrictions on Crown Land.

The low set-up costs make wildflower production through bush management on private property an attractive option. Sole (scarlet banksia) and B. baxteri (bird's nest banksia) is banned from Crown Land, and picking quotas are in place for Boronia megastigma (brown boronia).

Access to some Crown Land is restricted for quarantine reasons, and some areas are being converted into Nature Reserves and National Parks. This effectively reduces the area available for bush picking, putting greater pressure on the remaining areas of bush.

**Bush management on private property**

Some people have begun to manage areas of bush on private property in an attempt to make them more productive. It is anticipated that bush picking from private property will increase because of the need for some farmers to diversify their farming activities as well as the picking restrictions on Crown Land.

The low set-up costs make wildflower production through bush management on private property an attractive option. Sole (scarlet banksia) and B. baxteri (bird's nest banksia) is banned from Crown Land, and picking quotas are in place for Boronia megastigma (brown boronia).

Access to some Crown Land is restricted for quarantine reasons, and some areas are being converted into Nature Reserves and National Parks. This effectively reduces the area available for bush picking, putting greater pressure on the remaining areas of bush.
Management techniques used to encourage cutflower and foliage production.

The techniques used depend on the situation and the species being managed. Resprouter species such as titree regenerate from underground storage organs called lignotubers. Such plants can respond well to severe management techniques like slashing and burning. In contrast, seeder species such as Banksia baxteri and B. coccinea regenerate from seed only. This usually occurs after fire. They therefore require different management.

The long-term consequences of managing remnant bush for flower and foliage production is unknown. Some practices may not be sustainable and may result in plant deaths, degradation of soils and waterways or other adverse effects on the ecosystem. For example, burning is important for plant survival, but if fires are too frequent they may contribute to a decline in plant numbers. Over-picking may also reduce plant numbers if insufficient flowers are left to produce seeds.

Burning can be an important technique in managing remnant bush. It is used to encourage regeneration of seeder species and regrowth of resprouter species. Burning at the right time, intensity and frequency, can benefit the health of the bush.
Managing bush for flower picking, however, may be a means of preventing the clearing of private land if farmers can obtain some income from their remnant vegetation. If it is done responsibly, this may help to reduce many forms of land degradation, such as rising water-tables, salinity and soil erosion. It may also reduce the impact of harvesting flowers on Crown Land. Pickers on private property are more likely to look after the land and should fence the remnants to protect the plants from grazing and assist in controlling the spread of weeds.

The future
Production of quality flowers and foliage from well maintained plantations is the aim of the floriculture industry. However, plantations are not the solution to the immediate problems caused by restricted access to Crown Land. Managing bush on private property for both flowers and foliage is an interim measure until the current cultural difficulties are overcome and more plantations are established.

In the meantime, if management of bush areas is to continue, a responsible attitude about the well-being of the natural bush and the consequences of management practices is needed. For healthy bush areas to exist in the future, it is very important to merge conservation issues with those of commercial production.

The diversity of plants present in remnant bush is important as a genetic resource. Selection of plants which have superior traits (such as disease resistance, longer stems, bigger flowers) from these areas will be an ongoing process in the development of the floriculture industry.

Remnant bush is extremely important not only in reducing land degradation, but also as a habitat for our native flora and fauna. Commercial harvesting of flora can reduce the incidence of clearing while still allowing the land to provide a monetary return to its owners. Management techniques such as fencing to exclude stock, or weed and disease control, will help sustain areas of remnant vegetation. Thus, sustainable harvesting of flora will assist in conserving remnant bush and provide economic and landcare benefits. However, flower harvesting may adversely affect the local ecosystem, for example by reducing the build-up of a seed bank.

The Government of Western Australia, through CALM, the Department of Agriculture and the Water Authority, has an important role in regulating bush harvesting on private property to ensure sustainable management for the conservation of flora and soil and protection of water systems. Production and conservation issues must be balanced when considering management of native bush for cutflower and foliage production.