

## Living & working with macadamias – answers to common questions

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Processing and handling of nut produced by other growers may also require the consent of Council.

Rural landholders should make themselves aware of the zoning of their land and the land use controls that apply to this zoning by contacting their local council.

### Introduction

The macadamia industry is one of the largest primary industries on the NSW North Coast. The farm gate value of production is in the order of \$70 million per annum. Approximately 7000 ha are presently planted to macadamias.

Production of macadamias involves a wide range of machinery and equipment. Typical farm operations include mowing or slashing between rows, application of fertiliser, application of pesticides to control pest and disease, and harvesting of the nut. Post harvest operations include dehusking, nut sorting, nut storage and subsequent transport of nut to processors.

This Primefact is aimed at providing simplified answers to the most common questions asked of NSW DPI by people living and working with macadamias. The information contained in this publication is limited and can become outdated quite quickly. Due to this, you are encouraged to obtain the latest information and more comprehensive advice from the information sources suggested at the end of this publication.

### Does growing macadamias require council approval?

If the land is zoned for rural activities and agriculture, council consent for growing macadamias is generally not required. Council approval for macadamia production may be necessary in some circumstances, such as where clearing of land is required and where a shed is to be built for dehusking and on farm processing operations.



*A young macadamia orchard at the interface with urban development*

### Can land be cleared of vegetation to plant macadamias?

There is no simple answer to this question as the regulations and requirements that apply are circumstance specific and many different pieces of legislation cover this issue. Landholders should act on the side of caution and assume until they are formally advised otherwise by the appropriate regulatory authorities that the clearing of vegetation is likely to require an approval.

The clearing and management of vegetation and cutting down of trees is regulated by the *Native Vegetation Act 2003*, *Native Vegetation Regulation 2005*, *Threatened Species Conservation Act 1997*, *Noxious Weeds Act 1993*, local government tree preservation orders and local development controls administered by Councils. Native flora, fauna and



Aboriginal sites and features are protected under the *National Parks and Wildlife Act 1974*.

Specific concerns and queries in relation to the clearing of land and damage or harm to native vegetation should be directed to the Department of Environment and Climate Change (DECC), the Northern Rivers Catchment Management Authority or your local council. Any land clearing or land preparation that may involve works on steep land or near waterways should only be undertaken after consultation with DECC and the NSW DPI.

### **Does a macadamia grower need to notify a neighbour before planting macadamias?**

There is no formal requirement for a landholder who wishes to grow macadamias to consult with their neighbours. It is good practice to discuss new developments or changes in land use with neighbours. Similarly, non-farmers may outline their plans to develop their property, build a dwelling, shed or cabins etc with their farming neighbours.

Effective communication between neighbours is important. Often, early and regular communication is the key to a successful neighbour to neighbour relationship. This includes growers outlining development and farm management plans to neighbours and neighbours indicating concerns or questions they have with farming operations. If there is a change of ownership on either side, an informal introduction between neighbours can create a positive starting point for building effective communication and managing expectations and complaints.

If you have concerns or questions and an adjoining farmer has not approached you to discuss activities or operations near the boundary, be proactive and approach the farmer or manager to discuss the situation. Pre-planting consultation (especially when plantings are near boundaries) can reduce anxiety associated with a change in land use on adjoining lands and provides an opportunity for new (and old neighbours) to meet and talk about their plans for their properties.

### **Does a macadamia grower need to provide a buffer between the orchard and adjoining land uses?**

There is no formal requirement for a macadamia grower to provide a buffer between the orchard and adjoining land unless a buffer is required as a condition of consent. It is however considered good practice to do so, especially where there is incompatibility between land uses.

It is good practice for macadamia growers to provide a buffer between an orchard and adjoining dwellings, any adjoining public areas (eg school or road) and environmentally sensitive areas such as waterways. Similarly, it is good practice for a new

rural dwelling owner to provide a buffer between themselves and adjoining macadamia orchards as macadamia production involves the use of farm chemicals and operations that can create noise and odour.



*Vegetation buffer (left) adjacent to a macadamia orchard*

Buffers should be part of a broader farm management plan aimed at managing potential off-farm impacts and compliance with all relevant regulations and industry standards. Buffers should also be part of broader strategic plan for a locality particularly where additional urban development is being planned.

An effective buffer is one that protects the rights of all parties, provides an agreeable quality of living for neighbours, enables agriculture to undertake legitimate lawful activities and minimises the potential for conflict. Buffers do not take the place of sound orchard practice and cannot be expected to eliminate all problems or complaints.

Buffers can consist of clumps of trees and shrubs, wide grassed areas or an area of an orchard which receives special treatment compared to the rest of the orchard. Buffers provide physical separation between the orchard and adjoining land.

### **Does a macadamia grower have to notify neighbours prior to carrying out chemical spraying operations?**

At present, notification of neighbours before carrying out chemical spray operations is not mandatory but doing so can assist in neighbour relations and forms part of demonstrating duty of care and good practice.

Macadamia growers and persons using farm chemicals and pesticides are encouraged to discuss planned chemical spraying operations with neighbours. Such discussion should assist in identifying a mutually agreeable notification process that will advise or indicate to neighbours when to expect spraying operations.

The macadamia industry uses a range of registered pesticides for weed control as well as pest and disease management. Non-conventional and organic growers use alternative products and techniques to manage their orchards.

Farm chemicals and pesticides are applied via various means including hand-held equipment, boom sprays and air blast sprayers that are tractor driven.

The macadamia industry has a code of practice for the control of spray drift and use of chemicals in macadamia orchards and it sets out standards for safe and responsible chemical use.

All persons using pesticides as part of their job must have undertaken recognised chemical user training. Further detailed information and advice should be sought from DECC as required (refer Further Information).



*Macadamia growers undertaking training in sprayer technology*

It is the responsibility of the person carrying out the spraying and their supervisor to be aware of the safe and responsible use of spray equipment, adjoining land uses, wind conditions, climatic conditions and the potential for spray drift. It is mandatory that a record of all spray operations is maintained as a formal record of the spraying undertaken and conditions at the time of spraying.

The use and application of pesticides (including insecticides, fungicides and herbicides) in NSW is regulated by the *Pesticides Act 1999* and associated regulations which are administered by DECC Department of Environment and Climate Change (which incorporates the former NSW Environmental Protection Authority). Occupational Health and Safety regulations also apply and these are regulated by WorkCover in NSW.

**It is mandatory for persons using pesticides to follow the label instructions that are printed on or provided with a pesticide container and any permit conditions if an off-label use has been approved by the Australian Pesticides and Veterinary Medicines Authority (APVMA).**

Some farmers install weather monitoring stations on farm so as to keep an ongoing account of weather conditions. A coloured flag or tape attached to a pole which is at least as high as the tallest trees in the orchard and located at strategic locations on the property boundary can also be a low cost but effective indicator of wind direction and wind strength for the information of both spray operators and adjoining neighbours. Handheld climatic data instruments can also be used to measure changes in conditions over time and in different areas of an orchard.

### **What are the health implications associated with the use of farm chemicals and pesticides?**

The greatest health risk posed by pesticides is exposure to concentrates. Workers concerned about the health effects of pesticides should consult a WorkCover authorised medical practitioner.

People who adjoin macadamia orchards and are concerned about risks to their health should discuss their concerns with a health professional. In addition, people who move into macadamia and farming areas should assess the suitability of the farming environment to their individual situation and expectations.

Neighbours who have concerns about chemical application on an adjoining property should firstly raise these concerns with the owner / manager of the adjoining property and/or DECC.

Occupational health and safety (OH&S) requirements must be complied with to safeguard chemical users. Regulations and requirements must be adhered to including the use of appropriate personal protective equipment (PPE). The health and safety of workers, family, visitors and neighbours must be a consideration and priority. Residences and child play areas should be located away from spray areas.

People should not enter macadamia orchards without prior permission and arrangement with the manager or owner.

It is an offence under the *Pesticides Act 1999* and associated regulations to use pesticides in a manner that cause or is likely to cause injury to another person, damage to property or harm to a non-target plant or animal.

The use of pesticides has become increasingly regulated and this, combined with the cost of pesticides, the importance of using pesticides responsibly and a better understanding of pest and disease management, is leading to reduced chemical use in agriculture.

All pesticides used in New South Wales have to be registered for the intended use by APVMA. This is

a national body that approves the supply of pesticides and the manner in which the pesticides are to be used. Pesticide is a collective term for herbicides, insecticides, fungicides and the like.

### **What hours can a macadamia grower operate their tractor and machinery?**

There are no specific hours within which macadamia machinery can be operated, except where an on-farm operation is limited by a condition of approval or where an Environmental Protection Notice has been issued under the *Protection of the Environment Operations Act 1997* (POEO Act)

Macadamia farm operations must operate within the environmental legislation that applies. Under the POEO Act, all businesses must show due diligence and duty of care towards protection of the environment. This includes the taking of reasonable measures to prevent pollution and protect the environment.

Most macadamia farming operations are carried out during daylight hours though some operations will be carried out periodically in the evening, early morning and on weekends. The timing of operations will depend on factors such as weather, soil moisture, availability of machinery and labour.

Some spraying operations may be carried out in the evening to limit spray drift and hot weather problems. Dehusking may occur on weekends and beyond daylight hours to match availability of labour and to get nut to processors as required.

The macadamia industry has a code of practice for noise management of on farm processing of macadamia nuts (2003). This is a recommended reference in planning and siting dehusking facilities. It should be followed in managing potential noise impacts by all growers.

Some noise is to be expected when living in and adjacent to macadamia production areas. Both macadamia growers and neighbours should discuss noise issues if they have the potential to be an issue. In cases of offensive and excessive noise and where local neighbour to neighbour communication and negotiation has not worked, neighbours can contact their local council for advice and investigation as may be necessary.

Offensive and potential noise issues are best dealt with at the strategic planning stage and at the development design stage. Dwellings built too close to a boundary with an adjoining property or macadamia farm are creating a risk of noise impacts. In addition, macadamia growers who do not take account of the location of adjoining dwellings when planning their orchard run the risk of creating noise complaints.

Neighbourhood noise is regulated by the *Protection of the Environment Operations Act 1997*, the *Protection of the Environment Operations (Noise Control) Regulation 2000* and the *Industrial Noise Policy*. These are administered by the DECC. Local councils are the regulatory authority for noise associated with smaller scale developments and typical neighbourhood noise issues. Local noise issues should be discussed first with your neighbour and if not resolved then with your local council.



*Example of a finger wheel harvester used in the macadamia industry*

### **Conclusions**

Macadamia growers have the right to carry out routine farm management practices provided the farming activities undertaken meet the relevant legislation, land use planning and codes of practice that apply.

Undertaking agricultural activities has an associated responsibility to self, family, workers, visitors, neighbours, consumers and the environment. Similarly, people living in rural areas should be aware that macadamia production is an important regional primary industry that involves the use of chemicals, fertilisers, manures, tractors, harvesters, mowers and nut processing equipment.

Some people may find some aspects of routine farm operations offensive. Persons purchasing and renting properties in rural areas should carefully consider their situation and expectations before making a commitment.

Effective land use and farm planning is critical to minimising conflict between macadamia production and the use of adjoining lands. Effective communication between growers and neighbours and responsible farm operations is also critical in averting and addressing neighbourhood issues.

## Further information

NSW Department of Primary Industries

[www.dpi.nsw.gov.au](http://www.dpi.nsw.gov.au)

T. 02 6626 1200 – Wollongbar

T. 02 6626 2400 - Alstonville

Department of Environment and Climate Change  
(incorporates former NSW Environmental  
Protection Authority and NSW Department of  
Natural Resources)

[www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)

T. 131 555 or 02 6640 2500

Australian Pesticides and Veterinary Medicines  
Authority (APVMA)

[www.apvma.gov.au](http://www.apvma.gov.au)

T. 02 6272 5852

Australian Macadamia Society

[www.macadamias.org](http://www.macadamias.org)

T. 02 6622 4933

Local Councils

[www.dlg.nsw.gov.au](http://www.dlg.nsw.gov.au)

T. refer white pages

WorkCover

[www.workcover.nsw.gov.au](http://www.workcover.nsw.gov.au)

T. 131 050 or 02 6627 4300

Northern Rivers Catchment Management Authority

[www.northern.cma.nsw.gov.au](http://www.northern.cma.nsw.gov.au)

T. 02 6642 0622

Department of Health

[www.ncahs.nsw.gov.au](http://www.ncahs.nsw.gov.au)

T. 02 6620 2100

TAFE

[www.nci.tafensw.edu.au](http://www.nci.tafensw.edu.au)

T. 131 601

Environmental Defenders Office (NSW) Northern  
Rivers

[http://www.edo.org.au/edonsw/site/northern\\_rivers\\_edo.php](http://www.edo.org.au/edonsw/site/northern_rivers_edo.php)

T. 1300 369 791

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (May 2007). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of New South Wales Department of Primary Industries or the user's independent adviser.