Coonawarra Grapegrowers
Environmental Management Plan

Introduction

The Coonawarra Grapegrowers Association is pleased to provide you with your associations Environmental Management Plan (EMP for short). This plan will provide us with some guidelines for Best Management Practices, objectives to achieve Key Environmental Performance Indicators and demonstrate our commitment to Sustainable Viticulture, all which form part of the wider industries vision detailed in the Sustaining Success 2020 document.

Growing winegrapes in a sustainable manner provides many advantages to a grape grower that include:

♦ Costs; an environmental management system often identifies areas where costs can be saved in areas of waste management, energy use etc
♦ Income; many buyers, especially in Europe, are starting to ask for evidence of “clean & green” grape growing.
♦ Legal; there is an increasing legal requirement for producers to prove that they have systems in place which help prevent damage to the environment.
♦ Sustainability; grape growing practices which are sustainable will ensure that our vineyards are still profitable for future generations.

The Coonawarra Grapegrowers Association have written an environmental management plan to provide the above advantages, this process has involved commissioning a legal review to identify our legal requirements in regard to the environment and then through a process of grower consultation identifying the five most critical topics which need to be addressed to improve our vineyard management. The topics identified and addressed in this plan are:

♦ Waste management
♦ Water extraction
♦ Biodiversity and conservation
♦ Chemical storage and use
♦ Phylloxera control

This environmental management plan identifies how each of the five topics will be addressed in a way that improves our management systems. As the actions listed are completed and guidelines etc are produced they relevant material will be sent out for you to include in this manual. To ensure our plan stays relevant it will be reviewed every year and improved where necessary.
HOW TO USE IT?

The association and TAFE will be customising a training session in early October to introduce members to the plan and develop the necessary skills to implement the plan on their property.

The document has been designed to refer to the legal review and provides contact details of relevant government and non-government bodies.

We encourage you to discuss the plan with family members, employees and community members, debate the merits and shortfalls and adopt this plan.

1. Waste Management

A. BACKGROUND

Most obligations regarding waste management that are relevant to Coonawarra grapegrowers are the general requirements under the Environment Protection Act 1993 and Water Quality Policy to not pollute land or water resources. These requirements should be considered both when storing and disposing of waste materials generated by vineyard activities.

Vineyard wastes may include green waste (prunings), fence posts, pallets, packaging materials, chemical containers, plastic irrigation pipe, disused vine guards, tyres, and domestic rubbish. Vineyards also often have liquid wastes consisting of chemical wash down and unused chemicals.

Almost all grapegrowers in the Coonawarra mulch their prunings and dispose of their chemical containers using the Drum Muster. Pallets, packaging materials and domestic rubbish can all be sent to landfill.

However, a number of grapegrowers have expressed concern regarding the correct method of disposing of CCA treated timber fence posts. CCA treatment involves injecting timber with a solution of copper, chromium and arsenic, which increases the timber's ability to withstand weathering. At certain concentrations, arsenic is toxic to humans and animals, and the heavy metals, copper and chromium, have other residual and toxicity risks.

The best method of storing and disposing CCA and creosote treated timber is still being discussed, however Coonawarra Grapegrowers have been advised by SAWIA to stockpile posts (as no landfill will take them, a planning issue) and to keep them as dry as possible. It is a breach of the EPA act to burn treated timber and very undesirable for your own health.

The CGA wish to draft a policy that demonstrates our commitment to preserving the natural resources and minimising potential contaminations. Already some companies have provided their post storage policies, which will require further discussions before adopting.

Principal Obligations

Environment Protection Act 1993

• To comply with general environmental duty not to undertake an activity that pollutes or may pollute the environment unless all reasonable and practicable measures have been taken to prevent or minimise environmental harm.

• To not intentionally or recklessly cause an environmental nuisance. Maximum penalty $30,000.

• To not intentionally or recklessly cause material environmental harm. Maximum penalty $500,000 (body corporate), $250,000 and/or 2 years imprisonment (individual).
• To not intentionally or recklessly cause serious environmental harm.
  Maximum penalty $2,000,000 (body corporate) $500,000 and/or 1 years (individual).
• To notify EPA of an incident of material or serious environmental harm.
  Maximum penalty for failure to do so: $250,000 (body corporate) $150,000 (individual).

B. OBJECTIVES:
• To avoid/minimise the generation of waste.
• To re-use and recycle waste where possible.
• To prevent/reduce impacts on the environment associated with waste disposal and storage.

Hazards of inappropriate treatment and storage of waste products
• The burning of treated timber posts, used tyres, vine covers, plastic pipe off cuts, vegetative and other waste releasing smoke, toxic fumes, and greenhouse gases causing atmospheric pollution (note: the burning of waste can be illegal).
• Soil contamination as a result of:
  - the poor storage of waste sump oil ;
  - the use of sump oil as a dust suppressant
    (note: this is an illegal practice);
  - the poor storage and disposal of waste chemicals and containers; and
  - the leaching of heavy metals from treated timber posts.
• Increases in regional salinity and water contamination as a result of the poor management of drainage water.
• Effects on regional amenity as a result of the storage of waste on site and the generation of odours.
• The use of a natural land resource associated with the disposal of solid wastes to landfill. (Empty chemical containers can be returned for re-use through the drum MUSTER program)
<table>
<thead>
<tr>
<th>CGA Risk Identification</th>
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<th>When</th>
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</tr>
</thead>
</table>
| 1. Waste Management     | 1.1 CCA post disposal & management | 1.1.1 Survey members to find out:  
  - the quantity of CCA posts currently in use in Coonawarra  
  - the ages of CCA posts currently in use in Coonawarra  
  - The quantity of CCA posts currently stockpiled | MC | Dec 04 | - |
|                         |         | 1.1.2 Encourage SAWIA to develop industry guidelines in conjunction with the EPA for CCA posts use, storage and disposal.  
  - Once industry guidelines have been determined, these are to be circulated to CGA members and their adoption encouraged. | MC  
  Write to SAWIA  
  Through SAWIA rep/contacts – John Innes & Fraser Bell | Sept 04 | Ongoing | - |
|                         |         | 1.1.3 Liaise with Phil Lloyd at Auspine with regard to their plans to construct a CCA post disposal furnace. | MC – Invite Phil to address a CGA meeting  
  SS - Circulate available research papers on CCA post disposal | By Dec 04 | Sept 04 | - |
|                         |         | 1.1.4 Encourage members to find alternatives beyond creosote treated posts including; steel, hardwood, plastic (include recycled plastics), and other resilient timbers. | CGA Members | Ongoing | - |
|                         |         | 1.1.5 Investigate environmentally responsible opportunities for disused and damaged CCA (and other) trellis posts. 1.8m lengths suitable for farm fence posts, and shorter lengths are suited to landscape gardening purposes, as recycling opportunities. | CGA Members | Ongoing | - |
|                         |         | 1.1.6 Monitor soil and water quality in areas of CCA post storage/stockpiles and develop best practice guidelines for CCA post storage and management. | MC | Ongoing | - |
|                         | 1.2 Recycling Opportunities | 1.2.1 Develop a list of recognised waste products. (see list in ‘Background’ section above) | CGA Management Committee | Dec 04 | - |
|                         |         | 1.2.2 Develop a register of providers of recycling services, waste management services, and related products and consultants. (Current examples include: Sunburst – for dripper and cling-wrap; Jim Jamieson, Keith – waste oil; Drum Muster coordinator – chemical containers.) Circulate this list to members and update it annually. | WI Officer  
  MC | Oct 04 | $200 |

| 1.2 Recycling Opportunities | 1.2.1 Develop a list of recognised waste products. (see list in ‘Background’ section above) | CGA Management Committee | Dec 04 | - |
| 1.2 Recycling Opportunities | 1.2.2 Develop a register of providers of recycling services, waste management services, and related products and consultants. (Current examples include: Sunburst – for dripper and cling-wrap; Jim Jamieson, Keith – waste oil; Drum Muster coordinator – chemical containers.) Circulate this list to members and update it annually. | WI Officer  
  MC | Oct 04 | $200 |
<table>
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<tr>
<th>1.2.3</th>
<th>Encourage WRC to expand Drum Musters to broaden their acceptability to other containers and packaging materials.</th>
<th>WRC Lobby Group</th>
<th>Ongoing</th>
<th>-</th>
</tr>
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<tbody>
<tr>
<td>1.3</td>
<td>Waste Oil and Chemical Management</td>
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<tr>
<td>1.3.1</td>
<td>Encourage Chemical Companies and CGA members to use returnable containers.</td>
<td>GO – Write to local suppliers urging them to use recyclable containers</td>
<td>Sept 04</td>
<td>-</td>
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<td></td>
<td></td>
<td>GO – Encourage members through CGA newsletter, website</td>
<td>Dec 04</td>
<td>-</td>
</tr>
<tr>
<td>1.3.2</td>
<td>Encourage the use of granular and other dry formulations of chemicals, bulk containers, and the use of dissolvable packaging materials, to minimize waste generation.</td>
<td>GO – encourage through CGA newsletter, website</td>
<td>Dec 04</td>
<td>-</td>
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<tr>
<td></td>
<td></td>
<td>CGA Members</td>
<td>Ongoing</td>
<td>-</td>
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</table>

**C. LEGISLATION**

**South Australia**
- Environment Protection Act 1993
- Environment Protection ( Burning) Policy 1994
- Environment Protection ( Water Quality) Policy 2003

Administered by the Environment Protection Authority

- Soil Conservation and Landcare Act 1989

Administered by the Department of Primary Industries and Resources (PIRSA)

**Commonwealth**
- National Environment Protection ( Assessment of Site Contamination) Measure 1999
- National Environment Protection ( Ambient Air Quality) Measure 1998
- Materials/items purchased on the basis of:
  - the potential for re-use / recycling;
- how waste will be managed and disposed of;
- if a recycled product can be used; and
- ways in which the amounts of packaging can be reduced.

• A waste management plan has been developed and includes:
  - waste types and quantities identified;
  - waste issues prioritised; and
  - waste management solutions developed based on the cleaner production hierarchy (avoid, reduce, re-use, recycle, treat, dispose).

D. CONTACTS

• Environment Protection Authority
  Level 5, 77 Grenfell St (SA Water House)
  Adelaide SA 5000
  GPO Box 2607
  Adelaide SA 5001

  General Enquiries
  Ph: 8204 2000, Fax: 8204 9393
  Freecall: 1800 623 445 (country callers only)
  Web: www.epa.sa.gov.au

• Mount Gambier Regional Office
  11 Helen St (SGIC Building)
  Mount Gambier SA 5291
  Ph: 08 8735 1177

References
6 Finlayson’s (2003) ‘Coonawarra Grapegrowers Legal Manual’. (Finlayson’s, Fraser Bell, South Australia).
A. BACKGROUND

Water is a key resource for the Coonawarra grape growing community, the main uses being irrigation and frost protection. The water supply is limited and at present the quality is adequate. To ensure continued conditions we need to understand the quantity of water required for irrigation and protection as well as defining what threats there are to the quantity and quality of water in the future. The actions listed address the key issues of quantifying water use and understanding the any potential threats to potential supply.

B. OBJECTIVES

To ensure that the quality and quantity of irrigation water is maintained for the Coonawarra winegrape industry by
- Quantifying the current use and quality of the resource,
- Promoting research to allow a better understanding of the aquifer,
- Promoting efficient use of the water resource

C. LEGISLATION

- Water resources act 1997

D. CONTACTS

- South East Catchment Water Management Board
  9 Wehl Street
  Mount Gambier

  PO Box 30
  Mount Gambier SA 5290

  Ph : 8724 6000
  Fax : 8723 2965

  Email : kheaver@secwmb.org.au
  Web: www.secatchment.com.au

- Department of Water, Land and Biodiversity Conservation
  Meters; Joy Cuneen
  Volumetric conversion; Ross Carruthers
<table>
<thead>
<tr>
<th>CGA Risk Identification</th>
<th>Actions</th>
<th>Who and How</th>
<th>When</th>
<th>Budget</th>
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</thead>
<tbody>
<tr>
<td>2. Water Extraction 2.1 Accurate recording of use</td>
<td>2.1.1 Identify what data the CGA requires from the Department of Water, Land, Biodiversity and Conservation. CB &amp; PB have contacted Ross Carruthers from the volumetric project along with other CGA reps. Another meeting is forthcoming to review the Dept information and what impact it may have on the conversion to volumetric licences.</td>
<td>CB</td>
<td>Aug 04</td>
<td>-</td>
</tr>
<tr>
<td>2.1.1 Obtain this information from the Dept.</td>
<td>CB</td>
<td>Sept 04</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2.2 Review of PAV – impact on Coonawarra 2.2.1 Stay actively involved in these discussions to lobby for frost protection to be included</td>
<td>CB PB PAV Review Committee CGA Members</td>
<td>Ongoing</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2.2.1.1 Identify what data the CGA requires from the Department of Water, Land, Biodiversity and Conservation. CB &amp; PB are involved in the process and have made submissions including asking the Board to use the current water committee as the wine industry reference group</td>
<td>CB PB PAV Review Committee CGA Members</td>
<td>Ongoing</td>
<td>-</td>
<td></td>
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<tr>
<td>2.2.3 Promote awareness of and participation in local seminars and meetings</td>
<td>KR CGA Members</td>
<td>Ongoing</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2.3 Impact of use during frost periods 2.3.1 Access information from volumetric trials</td>
<td>?</td>
<td>?</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2.3.2 Lobby for research into a vines threshold levels for frosts</td>
<td>PB – write to Irrigation Efficiency Steering Committee</td>
<td>Ongoing</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2.3.3 Monitor other related research studies and disseminate their findings</td>
<td>CGA Members to monitor available information</td>
<td>Ongoing</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>
| 2.4 Drain C Impact | 2.4.1 Identify current knowledge gaps in drainage and surface water re-charge  
Ongoing contact with the Catchment board to set up meetings with the Dept and others | SEWCMB? | Ongoing | - |
| | | | | |
| | 2.4.2 Pursue and prioritise relevant research to fill these information gaps | CGA Research committee | Ongoing | - |
| | See 2.4 | | | |
| 2.4.3 Lobby | CGA Management Committee | Ongoing | - |
| Ongoing | | | | |
| 2.4.4 Ask the Drainage Board to identify opportunities to increase surface water flows to the aquifer | CGA Management Committee | Oct 04 | - |
| Meeting held, drainage board will quote on reinstating weir and recording instruments,  
Mentioned opportunities for investigating recharge | | | | |
| 2.5 Water Efficiency | 2.4.5 Encourage more efficient irrigation use by conducting a RTP irrigation workshop | CGA Technical Committee | Dec 04 | User pay |
| | | | | |
3. Biodiversity and Conservation

Technical Sub Committee:- Daniel Lamb(SWC) Tim Fletcher (BBWE), Martin Wirper (Orlando), Peter Balnaves (Balnaves) Stuart Sharman

A. BACKGROUND
As grape growers we are obliged by law and by the wider community to manage our vineyards and local environment in a sustainable way that ensures biodiversity and conservation is preserved.
It is important to understand the influence vineyard management practices have on biodiversity and conservation in the Coonawarra region. Practices that negatively impact biodiversity and conservation should be identified and managed to minimise these impacts. At the same time other management practices should be explored to find alternatives to ensure sustainable management systems are employed.

B. OBJECTIVE

To ensure all members are aware of their obligations, with regard to the Environment Protection & Biodiversity Conservation Act 1999.
Identify & explore potential management practices that will contribute to sustainable Management Systems.
Encourage widespread adoption of sustainable vineyard practices.

C. LEGISLATION
Environment Protection & Biodiversity Act 1999

D. CONTACTS

- Department of Water, Land and Biodiversity Conservation
  11 Helen St
  Mt Gambier
  PO Box 1246
  Mt Gambier
  SA 5290
  P; 8735 1134
  F; 8735 1155
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>3. Biodiversity and Conservation</td>
<td>3.1 Assessment of management practices on vineyard ecosystems</td>
<td>3.1.1 Continue with our PhD sponsorship of the Research into Beneficial Arthropods by Cate Paull.</td>
<td>Cate Paull Adelaide University</td>
<td>May 2002 To May 2005</td>
</tr>
<tr>
<td></td>
<td>3.1.2 Cate to present her research findings to CGA members at a general meeting and to distribute a summary of her research findings (via CD?) – is this included in the funds already contributed?</td>
<td>Cate Paull CGA Technical Committee</td>
<td>May 2005</td>
<td></td>
</tr>
<tr>
<td>3.2 Research priority register</td>
<td>3.2.1 Update CGA register of research priorities</td>
<td>CGA Technical Committee</td>
<td>Oct 04 To be presented at AGM</td>
<td></td>
</tr>
<tr>
<td>3.3 Use of native species in vineyard floor management</td>
<td>3.3.1 Undertake additional research in conjunction with Chris Penfold from the CRCV</td>
<td>CRCV CGA Technical Committee</td>
<td>Project finalised Sept 04 Project completed Sept 06?</td>
<td>$500</td>
</tr>
</tbody>
</table>
4. Chemical Storage and Use

A. BACKGROUND
The use of agricultural chemicals in viticulture is a very emotive and much publicised area of a grape growers business. As such the Storage and Application of agricultural chemicals is covered by numerous State Acts, with the main ones being: Environment Protection Act 1993, Agricultural Chemicals Act 1955, Dangerous Substances Act 1979 and Public and Environmental Health Act 1987.

The issues listed address key aspects identified in sustainable and responsible use of agricultural chemicals in the Coonawarra Region.

B. OBJECTIVES
For Coonawarra grape growers to become recognised as being leaders in the safe and sustainable use of chemical by developing and adopting best practice guidelines for all aspects of chemical storage and application.

C. LEGISLATION
Environmental Protection Act 1993
Agricultural Chemicals Act 1995
Dangerous Substances Act 1979
Public and Environmental Health Act 1987

D. CONTACTS

• Environment Protection Authority
  Level 5, 77 Grenfell St (SA Water House)
  Adelaide SA 5000
  GPO Box 2607
  Adelaide SA 5001

  General Enquiries
  Ph: 8204 2000, Fax: 8204 9393
  Freecall: 1800 623 445 (country callers only)
  Web: www.epa.sa.gov.au

• Mount Gambier Regional Office
  11 Helen St (SGIC Building)
  Mount Gambier SA 5291
  Ph: 08 8735 1177
**Agsafe Limited**  
A subsidiary of Avcare Limited  
Level2, AMP Tower, 1 Hobart Place  
Canberra ACT  
Ph 02 6230 4799

**Limestone Coast Chemcare Committee**  
Chair: David Brown  
Ph 0427 656 030  
PIRSA: 08 8226 0549

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<tr>
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<th>Budget</th>
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</thead>
<tbody>
<tr>
<td>4. Chemical Storage and use</td>
<td>4.1 Chemical shed waste water management</td>
<td>4.1.1 Develop best practice guidelines, which will include different parameters for different sized operations.</td>
<td>SM</td>
<td>Dec 04</td>
</tr>
<tr>
<td></td>
<td>4.2 Spray drift – tourists, neighbours, off-target damage</td>
<td>4.2.1 Develop guidelines for members for consideration when spraying and circulate to members</td>
<td>Grant Oschar</td>
<td>Dec 04</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.2.2 Contribute on an annual basis to the spray drift public awareness campaign, as requested</td>
<td>Grant Oschar – Chemcare Committee</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>4.3 Chemical Use</td>
<td>4.3.1 Encourage CGA members to participate in RTP Workshops on both Integrated Pest Management and Spray Application.</td>
<td>Shane Mills CGA Management Committee</td>
<td>Workshop1 05 Workshop2 06</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.3.2 Continue to promote and support relative research</td>
<td>Shane Mills CGA Management Committee</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>
5. Phylloxera Control

A. BACKGROUND

South Australia has been well positioned for protection against the importation of Phylloxera with the establishment in 1899 of the Phylloxera and Grape Industry Board of South Australia. The Board is governed by the Phylloxera and Grape Industry Act of 1995, and its profile supports other protocols which look at other pests and diseases as quarantine, and protection or sustainability issues, on behalf of industry and the environment.

Description and Geographical status of Phylloxera

Phylloxera is a yellow aphid (type of insect) that feeds on vine roots and leaves, gradually destroying the root system until the vine dies. There is no way to kill phylloxera, and the only way to remove it is to remove and destroy the infested vines.

In Australia, phylloxera has only been found in small areas of central and north-east Victoria, and south-east New South Wales. South Australia is currently phylloxera-free.

For the purposes of phylloxera control, Australia has been divided into 3 zones:

- **Phylloxera Exclusion Zone**: Areas declared free of phylloxera comprises Phylloxera Free States (SA, WA, Tas, NT) and Hunter-Mudgee (Local Govt. Areas of Blayney, Cabonne, Cowra, Dungog, Greater Cessnock, Maitland, Merriwa, Mudgee, Muswellbrook, Orange, Rylstone, Scone, Singleton), MIA-Sunraysia (Balranald, Berrigan, Carrathool, Griffith, Hay, Leeton, Murrumbidgee, Murray, Narrandera, Wakool, Wentworth), Victoria (Wine regions of Henty And West Wimmera, Shires of Mildura, Swan Hill and Kerang, Cities of Mildura and Swan Hill, Borough of Kerang).

- **Phylloxera Infested Zone**: Areas declared to contain vines infested with phylloxera comprises small areas in Central Victoria (Nagambie, Upton, Mooroopna), North-east Victoria (Rutherglen, King Valley), South-east NSW (Corowa), Sydney Basin (Camden and Cumberland).

- **Phylloxera Risk Zone**: All areas not classified as PEZ or PIZ
Coonawarra, like all South Australian vine regions, lies inside the Phyloxera Exclusion Zone.

**Coonawarra and the risk of Phyloxera**

Phyloxera has never been found in Coonawarra or elsewhere in South Australia. It occurs in Victoria and New South Wales. The most recent outbreak was discovered at Porepunkah in December 2003. In 2002 the Phyloxera and Grape Industry Board of South Australia (PGIBSA) undertook a study to identify the risk of Phyloxera entering the State and to estimate the likely impact. The report found that, if Phyloxera entered Coonawarra, it would have a higher economic impact than in any other region of South Australia.

1 Contact PGIBSA for a map showing phyloxera infested zones (PEZ's)

**The risk of Phyloxera entering Coonawarra**

The report found that there was a relatively low risk of Phyloxera entering Coonawarra. However, the Coonawarra Grapegrowers Association (CGA) recognises that the increasing geographical distribution and spread of vineyards in South Australia and other States, and increased vehicular and people traffic over greater distances, may increase the risk. Coupled with the seriousness of impact on the wine industry should it enter Coonawarra, the risk has been flagged as significant and worthy of placing sound strategies to limit the risk.

The major risk factors identified in the report were:
- Planting material purchased from interstate
- Machinery movements
- Vineyard workers, tourists, and winery personnel movements

Other risk factors identified include:
- Industrial espionage

**The risk of spread of Phyloxera to other vineyards in Coonawarra**

The report found that, if Phyloxera did get into a Coonawarra vineyard, it would spread more quickly than in any other viticultural region of South Australia. This is because Coonawarra has:
- Heavy clay soils (preferred by the aphid);
- A high concentration of vineyards (there are no barriers to the spread of Phyloxera between vineyards);
- A high level of machinery movement between vineyards; and
- The lowest level of any region of vines grafted to Phyloxera-tolerant rootstocks.
B. OBJECTIVE

To protect the Coonawarra Wine Region from infestation with Grapevine Phylloxera through awareness, education, and the development of protocols and infrastructure for use by industry and the public.
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<tbody>
<tr>
<td>5.1 Phylloxera entering Coonawarra</td>
<td><strong>5.1.1 Planting Material:</strong></td>
<td>1 Encourage grapegrowers to only purchase rootlings or cuttings from AVIA or VINA accredited nurseries/suppliers, preferably in South Australia.</td>
<td>All grapegrowers MA – Develop a grapevine purchasing protocol and provide grapegrowers with a copy.</td>
<td>Ongoing (When planting or replanting)</td>
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<td>2. If purchasing rootlings or cuttings from interstate nurseries, first obtain a Vine Import Declaration Form from the Phylloxera &amp; Grape Industry Board and follow the requirements of Phylloxera Prevention Protocol “Planting Material”*.</td>
<td>All grapegrowers</td>
<td>Ongoing (When planting or replanting)</td>
</tr>
<tr>
<td></td>
<td><strong>5.1.2 Machinery:</strong></td>
<td>3. Minimize use of machinery that has worked outside Coonawarra.</td>
<td>CGA Members MA – Communicate risks of using machinery outside of Coonawarra via meetings, newsletter and website</td>
<td>Ongoing</td>
</tr>
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<td>4. Give preference to local contractors.</td>
<td>CGA Members</td>
<td>Ongoing</td>
</tr>
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<td></td>
<td>5. To encourage grapegrowers to construct a wash down facility* and ensure that all foreign machinery and vehicles are cleaned before they enter the vineyard.</td>
<td>Each Vineyard to establish facility</td>
<td>As soon as practicable</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. Support the use of the Naracoorte ‘Heat Shed’ for treating machinery and vehicles before they enter the vineyard or region, by wine companies, growers and contractors.</td>
<td>CGA to contribute to heat shed construction costs. CGA to make members aware of the heat shed facility and encourage members to utilise this facility.</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td><strong>5.1.3 People:</strong></td>
<td>7. Minimise the number of people entering vineyards by:</td>
<td>CGA Policy CGA/CVA Members to spread word and educate.</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Erecting ‘no entry’ signs* at appropriate locations</td>
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<td>- Providing information about Phylloxera at cellar doors and accommodation facilities*</td>
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<td>- Stopping all vehicles, except your own or those determined to be uninfested with Phylloxera, from entering the vineyard</td>
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- Providing effective sanitation systems for disinfecting footwear or alternatively providing boots for workers, contractors, visitors and winery personnel to change into before they enter the vineyard
- Training all staff, including cellar door and winery staff, in how to prevent Phylloxera by controlling visitors and vehicular parking and traffic* eg. Car parking in unshaded gravelled or sealed areas
- Encourage tourists/visitors to keep clothing, footwear, and vehicles clean
- Encourage the use of random road blocks on State Borders to monitor and educate travellers in plant protection and quarantine requirements

8. Avoid incitement which might lead to infestation through industrial or environmental espionage

| 5.1.4 Education and protocols | 1 Encourage all grapegrowers in Coonawarra to be registered with the SA Phylloxera and Grape Industry Board and for this grower number to be noted by the CGA Office. Encourage neighbours to do the same. | CGA Members WIO PB – Phylloxera representative | Ongoing July | - |
| 3 Facilitate annual presentations of the SA Phylloxera and Grape Industry Board’s Phylloxera Prevention Protocol. | CGA Committee/Phylloxera Board | Annual Early Spring | $300 |
| 4 Support the use of the Naracoorte Heat Shed | CGA Members | Ongoing |
| 5 Support random road blocks | Canvas SAQUIS and PIRSA | At any opportunity |
| 6 Develop and implement and ongoing public awareness campaign for locals, visitors, employers and employees. | CGA Members | Ongoing |

5.1.5 Risk Identification
Lobby for an improved National approach to Phylloxera Management. | CGA Lobbying/WIO | Ongoing |

5.1.6 Management Plan to handle infestation
1 Establishing an infestation protocol in conjunction with the SA Phylloxera and Grape Industry Board | CGA Members |

5.2 Spread of Phylloxera between vineyards in Coonawarra
5.2.1 Machinery:
1. Minimise movement of machinery and equipment between vineyards and wash or heat treat machinery frequently. | CGA Members | Ongoing |
5.2.2 Aerial photography

1. Support the PGIBSA to conduct aerial photographic surveys on an annual basis

CGA Management Committee - lobbying

Ongoing

- 

2 Contact PGIBSA for A Growers Guide to Choosing Rootstocks in South Australia

* Available from PGIBSA

C. LEGISLATION

Fruit and Plant Protection Act 1992

Phylloxera and Grape Industry Act 1995

SA Phylloxera Prevention Protocol 2000

National Phylloxera Management Protocol

Administered by

Phylloxera and Grape Industry Board of SA
Department of Primary Industries and Resources SA (PIRSA)

Principal Obligations

Fruit and Plant Protection Act 1992

- A person who knows or has reason to suspect that plants owned by them or in their possession or control are affected by disease must -
  
  (a) Report the matter to an inspector by the quickest possible means
  
  (b) Take all reasonable measures to prevent the spread of the disease.
  
  nb. A person who grows, propagates or processes the plants for profit is presumed to know or have reason to suspect the plants are so affected in the absence of proof to the contrary,

- A person must not introduce or import a disease or any fruit, plant, soil, packaging or other thing affected by disease into South Australia.
  
  Maximum penalty for breach is $20,000.

- Planting material (eg cuttings, rootlings or graftedlings) must only be sourced from a vineyard or nursery in a Phylloxera Exclusion Zone (PEZ), it must have originated from a PEZ vineyard or spent at least 12 months being grown in a nursery in the PEZ.

Phylloxera and Grape Industry Act 1995
• A person who -
  (a) Transfers or acquires ownership of a vineyard comprising 0.5 hectares or more of planted vines
  (b) Establishes a vineyard comprising 0.5 hectares or more of planted vines on land owned by that person
  (c) Extends a vineyard owned by that person so that it comprises 0.5 hectares or more of planted vines
  (d) Removes vines from a vineyard owned by that person so that the vineyard ceases to comprise 0.5 hectares or more of planted vines
    must, within three months of doing so, provide the Phylloxera and Grape Industry Board of SA with a return containing -
    the person's name and address
    the location of the vineyard, including Section number, District and Hundred
    the varieties of vines planted
    the area of each variety planted
    the age of the vines
    the source of the vines
    The penalty for failing to provide the return is a $1000 fine. The penalty for making a statement that is false or misleading is a $2000
    fine.

• A registered person, winemaker or distiller may be required by the Board to pay a contribution toward costs incurred by the Board in carrying out its primary
  functions.

SA Phylloxera Prevention Protocol 2000
While not legally binding, the SA Protocol, incorporating the National Phylloxera Management Protocol, sets out "Industry Standard" and "Best Practice"
procedures for preventing the spread of Phylloxera into South Australia. The sections of the Protocol relevant to vineyard owners / managers are reproduced
in Schedule 6.

The "Industry Standard" procedures are based on the National Protocol, adapted for South Australia. It is strongly recommended that these procedures be
followed when moving plant material from a Phylloxera infested Zone or PRZ into South Australia, due to the high risk of introducing phylloxera into this state.
The "Best Practice" procedures are additional steps that can be taken to provide South Australia with even better protection against phylloxera. Often these
procedures involve applying the "Industry Standard" procedures to plant material moving between vineyards that are both within the PEZ.

Permits / Licenses Fruit and Plant Protection Act 1992
• Movement of small quantities of germplasm establishment material from vineyards in the Phylloxera Infested Zone or Phylloxera Risk Zone via a PRZ
  nursery is allowed in special circumstances under a permit.
• Permits are only granted where the applicant can demonstrate that the material is from a unique or recognisable clone/variety which has desirable
  characteristics that are not available in material that can be sourced from outside a PIZ.
• Under the permit, the cuttings must be:
  (a) Hot water treated in an approved facility
(b) Held in quarantine for 12 months in a PRZ region
(c) Inspected and determined to be free from phylloxera prior to the release of the consignment.

• Applications must be submitted to the Department of Agriculture in the state where the material will be quarantined.
• If a permit is granted, material may be brought out of the PIZ in accordance with the National Phylloxera Management Protocol, set out in the “Industry Standard” section of the SA Phylloxera Prevention Protocol Procedure 2. See Schedule 6.

Other Relevant Legislation

Victoria
• Plant Health and Plant Products Act 1994
• Plant Health and Plant Products Regulation 1996
• Catchment and Land Protection Act 1994

New South Wales
• Plant Diseases Act 1924
• Plant Diseases Regulation 1996
• Proclamations

Commonwealth
• Environment Protection and Biodiversity Conservation Act 1999
• Quarantine Act 1908
• Export Control Act 1982

D. CONTACTS

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Vine Improvement
Australian Vine Improvement Association
PO Box 398

NURIOOTPA SA 5063
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Regulations/quarantine

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Program Leader
State Quarantine Inspection Service
Primary Industries and Resources South Australia
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