

Risk mitigation for the nursery industry

Australia is a land of extremes, characterised by droughts, fires and floods. Cyclones are an unnerving familiarity in the tropics and of course the 19/20 bushfire season one of the worst on record.

It is essential for all production nurseries, whether they operate in traditionally riskier areas or not to have natural disaster risk mitigation and recovery plans.

This Nursery Paper covers the methods available to growers to improve the natural disaster resilience of Australian production nurseries.

SUMMARY

- Whether you operate in a region that is prone to natural disasters or not, every production nursery should have a risk mitigation plan.
- Staff and other personnel who may be on site are always the number one priority.
- Use all the tools available to you to keep up-to-date on the latest information.
- Be proactive in minimising your risk and exposure to fire, floods and other natural disasters don't wait for something to happen.
- Know where to find up-to-date information in times of heightened risk.
- The nursery industry is working to develop a risk map for the industry, an official Natural Disaster Recovery Action Plan and a risk mitigation and management best practice guide for individual nurseries.



Flooded shadehouse.



This communication has been funded by Hort Innova using the nursery research and development levy contributions from the Australian Covernm

BACKGROUND

Due to the very nature of the industry, a large proportion of Australian production nurseries are particularly vulnerable to natural disasters.

For one, nurseries tend to be located on large plots of flat land and in close proximity to a river or other water source. Naturally this greatly increases the risk of flood.

This is also exacerbated by the sheer number of production nurseries situated on the coast where exposure to cyclones, hail and other extreme weather events is most prevalent.

There is of course a whole different set of risk factors for bushfires which also leave production nurseries vulnerable. Volatile fuels such as grass, fallen leaves and bark heighten the risk, with machinery, vehicles and power tools also ignition points for fires.

Today there is an expectation that government, business, community and individuals share the responsibility for natural disasters. Growers may be familiar with this concept of shared responsibility when it comes to biosecurity issues, and the principle is the same with natural disasters.

Together, we need to build an industry that is better prepared, more resilient and can recover faster from cyclones, floods, fires, hailstorms or heatwaves.

A strategic levy-funded project, 'Nursery industry natural disaster risk mitigation and recovery plan' (NY18008), is exploring and examining key vulnerabilities facing the nursery industry. The results will be used to develop a risk mitigation map with the assistance of independent agency, Cohga Pty Ltd.

Hori

nnovation



BUILDING A RISK MITIGATION AND RECOVERY PLAN

A project is underway which is reviewing the potential impact for natural disasters and severe weather events on Australia's nursery industry.

Nursery industry natural disaster risk mitigation and recovery plan (NY18008) is being managed by Kerry Battersby from Nursery & Garden Industry Queensland (NGIQ) and funded by Hort Innovation using nursery industry levies and funds from the Australian Government.

The project is in the process of developing resources including checklists, risk maps and business continuity templates that will assist nurseries in the preparedness, recovery and resilience of natural disasters and extreme weather events.

The resources will be created with input from 16 nurseries which have been identified from a diverse range of geographies, production types and sizes, with the majority based in high-risk areas or participating in industry best management practices.

The templates will be a useful suite of tools for nurseries pre, during and post event and will also be provided to industry peak bodies to assist their teams navigate their members through an extreme weather event, including tried and tested ways that help businesses through tough times.





Fallen tree on a shadehouse.

Developing a risk mitigation strategy is a long-term activity. It takes months of planning and it could be more than a year before your business is fully prepared for the potential impacts of a large-scale fire, flood or cyclone. According to Kerry Battersby, NGIQ, here are some steps you can take *today* to start reducing your vulnerability.

1. Create a 'rainy-day' bank account

- Engagement with growers has told us that nurseries are diligent in ensuring that they pay all bills on time. However, sometimes that courtesy is not repaid by our own debtors which can create cash flow issues. By chasing up expected payments more tenaciously and freeing up more cash flow, it's possible to set aside funds for use in tough times before insurance or government assistance kicks in.

2. Keep a stash of spare shade cloth

- Shade cloths are an important first line of defence for many potential natural hazards including severe heatwaves and hail damage. Just as you wouldn't drive around without a spare tyre, all nurseries should keep spare shade cloth out of harm's way at all times, ready for use if the main cloth is damaged.

 Ensure backup power - Electricity is often the first resource to be lost to an incoming natural disaster. Depending on the location of key power infrastructure, this could affect sites that are many kilometres away from danger. Ensure that backup generator is easily accessible and fuelled up at all times. Similarly, consider having solar power power banks available to keep devices charged.

- 4. Ensure backup water source if possible, maintain access to a reservoir, rainwater tank or dam water and if you expect a flood, pull your pump out of the reservoir, so you can use it again after the event.
- 5. Take stock Do regular stocktakes of your plants and as we head into disaster seasons consider moving particularly valuable stock or plants that are ready for sale. Depending on the situation in your area, consider moving plants off site. Ahead of time, think about which plants you can afford to lose, and which are the most at-risk areas on site. Doing this thinking before disaster strikes means you can focus on executing plans when the time comes.

AT THE FOREFRONT OF DANGER WITH DAVID JAKOBS, CEO, OASIS HORTICULTURE

Oasis Horticulture, one of Australia's largest producers of bedding plants, has been hit by two significant fire events at its Blue Mountains site in the last 20 years. The material impact of the most recent disaster in 2013 was significant, resulting in major disruptions to operations, and a significant insurance claim.

Since that last major event, one of the core priorities for CEO David Jakobs is building a comprehensive strategy around risk mitigation, building resilience in the business and ensuring business continuity. As with any major business activity the first step is often the hardest, but according to David the task becomes much more achievable once an initial audit had taken place.

"Our initial audit taught us a lot about our business, about where our vulnerabilities were and what our strengths were as a business and what we could leverage to increase future resilience. It highlighted what areas we needed to focus on in the short, medium and long term."

It's important to realise that you are never alone. Oasis partnered closely with its insurance broker throughout the initial audit process and developed a Business Continuity Plan (BCP) that clearly documented



Oasis Horticulture Fire Wardens, and additional irrigation at Oasis Horticulture.



Fire damage at Oasis Horticulture.

actions and steps prior to and post a significant site interruption linked to a natural catastrophe like fire, flood or wind events. The primary objective of this document was to ensure that the business had adequate plans in place to provide continuity of supply to its customers in the event of a significant interruption to any critical business processes. This process framework that not only put the business in a good position to ensure resilience for future events, but also put downward pressure on future insurance premiums.

The business now repeats fire safety audits at least annually. The site boundary – which backs on to dense bushland – is checked and cleared when and where necessary. Dead or excess material around the site is removed, limbs of trees that are close to important structures are cut, gutters and the underside of buildings are cleared, any potentially flammable materials are removed from all areas close to buildings and importantly, the capability of staff to deal with potentially catastrophic events is checked via regular site drills.

"In the lead-up to the fire season we have at least 1-2 fire drills a month, which may seem like a lot but it's effective and also important. There's no use trying to train someone on what to do when a fire is approaching, or even in the days leading up to a potential catastrophic event. Site safety is a critical part of our weekly toolbox talks and very much a part of our business ethos. We have an OH&S manager who reinforces safety in everything we do.

In November 2019, a catastrophic rating was declared for much of New

South Wales. This gave Oasis the opportunity some of the plans it had devised as part of its audit into action.

"The first thing we did was reduce our headcount for the day. Normally we have 70-90 staff on site, so we reduced that number down to about 25 for the day. All core activities that needed doing were done early in the morning, with only a handful of staff remaining onsite after mid-morning. We also held a drill that morning, to reinforce to staff the potential severity of the conditions +40-degree temperatures and high wind, we located pumps near key dams, filled mobile water tanks checked fire hoses and ensured all safety equipment was ready, we were prepared if a fire occurred."

Oasis is also a designated Neighbourhood Safe Place (NSP) for the Yellow Rock community so site signage directing residents to the location on site was put in place with social media linked to the Yellow Rock community also actioned. The Yellow Rock rural fire station is also now part of the Oasis site.

Ultimately, ensuring your business is resilient in times of danger comes down to a few basic things: Solid processes good preparation and effective communication. By devoting time and resources to our BCP and conducting annual audits developing subsequent policies and checklists, and then ensuring all staff are aware of what to do before or during an event minimise business risk, increases staff safety and assists with lower insurance costs. All this increases the likelihood that your business will continue to prosper despite adverse events, as Oasis Horticulture has done.

STAY INFORMED: Real time information

Below is a table with just some of the reliable places you can find live updates of impending natural disasters. Remember, times of bushfires can be frantic and swiftly changing. As such, try to seek information from multiple sources where possible.

Always err on the side of caution, even official sources can be delayed in their reporting of events and risk-levels. Note: this is a non-exhaustive list.

REGION	RESOURCE	HOW TO ACCESS
NATIONAL	Fires Near Me Australia	Android or iOS app stores
	Bureau of Meteorology	www.bom.gov.au
NEW SOUTH WALES	Fires Near Me NSW	Android or iOS app stores
	NSW SES website	www.ses.nsw.gov.au/your-local-risk/
QUEENSLAND	Queensland Fire and Emergency Services	newsroom.psba.qld.gov.au/
	Queensland Fire & Emergency social media	@QIdFES Facebook.com/QIdFireandEmergencyServices
VICTORIA	Vic Emergency	http://emergency.vic.gov.au/respond/
	Vic Emergency smartphone app	Android or iOS app stores
TASMANIA	Tasmania Fire Service alerts map	http://www.fire.tas.gov.au/Show?pageId=colGMapBushfires
SOUTH AUSTRALIA	Alerts SA smartphone app	Android or iOS app stores
	Country Fire Service	https://www.cfs.sa.gov.au/site/warnings_and_incidents.jsp
WESTERN AUSTRALIA	Emergency WA	https://www.emergency.wa.gov.au/)
	DFES Twitter	@dfes_wa
NORTHERN TERRITORY	Bureau of Meteorology	http://www.bom.gov.au/nt/warnings/
	Secure NT	https://securent.nt.gov.au/alerts
A.C.T.	ESA ACT	https://esa.act.gov.au/
	ACT residents should also pay attention to alerts from New South Wales agencies	

PROJECT UPDATES

Growers wanting to hear more about 'Nursery industry natural disaster risk mitigation and recovery plan' (NY18008) are strongly encouraged to register for the Greenlife Industry Australia National Conference 'Healthy Plants Healthy People' in Perth taking place 3-5 March, 2020. Registrations after February 21 should be made directly to Greenlife Industry Australia via *conference@greenlifeindustry.com.au*.

At this event, Kerry and Peter James from Cohga Pty Ltd will be presenting a range of resources based on the work undertaken as part of this project. They will showcase the Risk Mitigation Map along with various action plans devised through the research, and David Jakobs will share the bushfire risk mitigation practices of Oasis Horticulture.

These resources will be made available to all growers.

LINKS TO RESOURCES

PAST EDITIONS OF NURSERY PAPERS ARE AVAILABLE ONLINE, on the Greenlife Industry Australia website: https://www.greenlifeindustry.com.au/Section?Action=View&Section_id=46