

Thorough preparation reduces cyclone damage on farm

Summary

Cyclones regularly cause severe damage to agricultural businesses across Northern Australia. Thorough preparation can help farmers minimise the damage and shorten recovery time. Management strategies can help prepare the farm and secure on-farm infrastructure. These include regular pruning of established trees, selection of trees that can best withstand wind in wind-breaks, cross bracing and anchoring of farm buildings and sheds, and standby generation capacity. Post cyclone it is important to thoroughly assess damage and work out a strategy for recovery and improvements needed to build farm resilience for the future.

Keywords

Cyclones, farm resilience, clean-up management

When Cyclone Marcia tore through Byfield and Yeppoon in February 2016, the tropical fruit orchard owned by Ian and Sandi Groves at Bungundarra was right in the path. Much of the damage to the property was caused by mature windbreak trees falling across farm roads and into the orchard; the other significant damage was through the destruction of permanent netting (see Figures 1 and 2).

Sandi Groves explained how difficult it was to know where to begin the recovery. *"You couldn't fathom the mess. The clean-up task seemed overwhelming,"* Sandi said. *"The morning after the cyclone, we all ran around trying to make a start but we were so distracted - doing something then going off and starting something else. When we got together for lunch we realised we had to stop and work out a plan."*

The family realised that to be effective, they needed to focus on priorities. The first task was to get all key access roads cleared of debris. The next urgent priority was to get into the orchard and protect the bark of fallen fruit trees and exposed limbs from sunburn by painting them with water-based paint and copper. The next job was to clear fruit tree rows to enable spraying to limit further damage from anthracnose and the inevitable influx of leaf-eating insects that could strip the remaining foliage.



Figure 1: Cyclone Marcia caused severe damage on farm. Source: © Ian Groves.

With the help of friends and volunteers, hundreds of tonnes of fallen timber were cleared in the first few days. *"It would have been good to woodchip it, but there was so much that the only way to manage the volume was to burn it,"* Sandi said.

The Groves were grateful for a number of management strategies in place prior to the cyclone, highlighting in particular:

- a regular program to prune established trees meant the trunks and root systems were robust and weathered the storm well
- all farm buildings and sheds had been cross-braced with strapping and chains which held the structures secure
- pre-fabricated buildings were anchored with chains
- a stand-by generator was on hand.

Preparation in the days before the cyclone also paid off. This included heavily pruning all young trees and removing and securely storing tunnel netting. Sandi was also relieved to be ahead of the bookwork prior to the cyclone – she laughed that this is unusual for her!

The Groves believe that these preparations helped to reduce the cyclone's impact and minimise damage within the orchard — a bonus was that almost a pallet of mangoes were salvaged and marketed in the weeks after the cyclone.



Figure 2: Extensive damage to orchard netting caused by Cyclone Marcia. Source: © Ian Groves.

The Groves say that they have learned from the experience.

"We have completely revised our selection of trees as we replant the wind breaks," Ian said. "We had mostly Tallowood and Torelliana that were recommended in the past. But we've taken note of the species that hold up best in high winds, and we are now putting in casuarinas, golden pendas, Queensland maple and hoop pine."

Sandi said that, while Ian is a keen photographer, in hindsight they did not take enough pictures of the damage as they were so focussed on the clean up.

Another insight the Groves shared was the need to recognise when it is time to get off the post-cyclone 'war footing'. *"At some point, you need to shift your focus back to normal farm routines and fit the on-going clean up works around your schedules of important farm management tasks,"* Ian said.

Sandi and Ian were enormously grateful for the support and help they had from family, friends and volunteers. They have also enjoyed the camaraderie amongst neighbours working together on recovery projects. *"All of us got together at the rural fire shed the evening after Marcia for a pot luck dinner. Some of the neighbours had really harrowing experiences — they lost their houses — so it was good to get together to share stories and just talk. It turned out to be quite a party really,"* Sandi said.

Further reading

GROWCOM's website: <http://www.growcom.com.au> (accessed 15 June 2017).

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