



# Lifting production through rejuvenation

Trevor and Barbara Martin  
Eureka, NSW



Trevor and Barbara Martin.

## The situation

The orchard was purchased in 2011 and production was minimal for the 28 hectares. Although the property looked to have good potential, it was in serious decline and required immediate attention. Lace bug was becoming a serious threat and attention to detail on sprays for this pest by the previous owner was lacking. Trevor and Barbara started to turn the property around in the first year by providing appropriate sprays at the correct times, applying lime to correct soil pH and implementing a good nutrition program.

To fix tree root exposure, V-drains were established and the roots were covered.

To improve the canopy, limb regeneration i.e. leaving stumps rather than cutting flush to the collar (limb removal) was done.

This work continues at 20% of farm work per year on 20% of the canopy.

**The best thing** is using mulch to build soil and resilience, rejuvenation through limb regeneration and renewal through tree planting.

**The hardest thing** was knowing where to start, when there was so much that needed doing.




## Assessment

	IOM Stage	
	Before	Now
Canopy (C)	3-4	2
Orchard floor (OF)	3-4	2
Drainage (D)	4	2
Red flags	8 of 8	1 of 8



Limb rejuvenation allowed light back into the tree and encouraged productive regrowth lower in the trees, these areas were formerly 'dead centres'.

## IOM practices

Pillar	Practice	Purpose	How it was done
C	Tree removal	Productivity	<ul style="list-style-type: none"> <li>Poor performing varieties were removed.</li> <li>Trees were mulched using a forestry grinder.</li> <li>Swapped to higher-yielding varieties.</li> </ul>
D	Inter-row drains		<ul style="list-style-type: none"> <li>Drains were put in to stop water sheeting across the orchard.</li> <li>Designated grassed water courses between blocks and V-drains within blocks to direct water run-off.</li> </ul>
OF	Mulch		<ul style="list-style-type: none"> <li>Mulch applied every alternate year using 100 kg/tree organic material, not compost, i.e. half the farm every year.</li> </ul>
C	Limb removal		<ul style="list-style-type: none"> <li>Strategic limb regeneration of competing leaders allowing light to 'dead centres' which encourages new regrowth and productivity in the lower canopy.</li> </ul>



Limb rejuvenation has allowed the trees to 'relax' while still producing excellent yield returns year after year.



Grassed water course.



Limb rejuvenation has also allowed dappled light to reach the orchard floor and ryegrass to establish, which protects the soil in the V-drains.

## Yields

Year	NIS (t/ha)	Observations
2011	0.3	Lace bug
2012	3.8	
2013	3.2	Cyclone Oswald
2014	4.0	
2015	4.5	
2016	3.7	Storm damage
2017	3.9	
2018	5.1	
2019	4.8	

## Next for this grower will be

Continue annual mulching program giving the orchard and soil more resilience. Continue limb regeneration and orchard renewal program.