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“Going organic has helped us financially and compost has been a big part of that”

Humphrey Howie, Fat Goose Fruits

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**Compost for citrus
– a case study from Fat Goose Fruits, Renmark, SA**

Who

Humphrey Howie,
Fat Goose Fruits

Where

Renmark, South Australia

What

Citrus

Aims

- improve soil health
- better balance of soil nutrients
- reduce water use

Outcomes

- higher quality fruit
- better fruit size
- increased soil organic carbon
- improved soil health
- more earthworms
- reduced albedo breakdown
- a condition that causes
creasing in fruit and decreases
saleability



Fat Goose Fruits

At Fat Goose Fruits in South Australia’s Riverland, many of the trees in their citrus orchard are over 60 years old. They were planted soon after World War 2 by Humphrey Howie’s father. Humphrey and his wife Michelle now own and manage Fat Goose Fruits.

When Humphrey and Michelle took over the property in 1988 it had been managed using conventional techniques for over 40 years. Humphrey was seeing the same problems each year and began to think about alternative markets and the environmental impact of their production. After a visit to a friend who had recently converted to organic, and a research trip to Europe, he decided it was time for change. Since then, compost has been integral to Fat Goose Fruits’ production system for both its nutritional and soil conditioning properties.

Most of their citrus orchards (19 ha) are now organic and their certified organic citrus is distributed all over Australia. Although many of the trees are old, they are still producing well and Fat Goose Fruits are doing all they can to keep it that way.

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“We could be organic without compost, but it would mean I’d have to pay far more attention to nutrition.”

Humphrey Howie, Fat Goose Fruits

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Compost product

For the first 4-5 years after converting to organic production, Fat Goose Fruits used composted pig manure. Soil tests began to show increasing levels of phosphorus, and Fat Goose Fruits needed a product that would give them consistency across a range of nutrients. Initially they tried making their own compost from green waste, but they now use certified organic compost that is blended with gypsum and lime from a commercial supplier. Fat Goose Fruits

apply compost at a rate of 10m³/ha, twice a year (autumn and late winter), using their own spreader. The spreader concentrates the compost under the tree canopy, leaving the mid-rows mostly clear. The compost is gradually watered in using a limited-throw sprinkler irrigation system. They also use a seaweed-based product twice a year (at spring flush and in late November) and slash the weeds, turning them back into the soil.

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“Investing in soil health is money in the bank.”

Humphrey Howie, Fat Goose Fruits
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Where to from here

Fat Goose Fruits will continue to convert the rest of their orchards from conventional to organic production, with compost remaining an integral part of their organic production system. Regular soil testing will continue to ensure the trees are provided with the nutrients they need and the soil health continually improves.

The bottom line...

Fat Goose Fruits still have some trees under conventional production and when they compare those to the trees where compost is used, they see many differences. Fruit size and quality is better from the organic trees and there is less albedo breakdown – a condition that causes creasing in fruit and decreases saleability. The organic orchards are also using less water than the conventional orchards – up to two megalitres per hectare less in some cases.

Soil tests over the last 10 years have shown that soil organic carbon has increased from 1% to 3.5% in some areas. The top two to three inches of the soil is now a rich dark colour and the soil has more earthworms and insect activity. Without compost, Fat Goose Fruits would have to use organic ‘off the shelf’ products and the management of the trees’ nutritional needs would be much more complex. Although the focus at Fat Goose Fruits is more on quality than quantity, they are still achieving average yields of 30t/ha.

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“Our soil analysis speaks for itself and the top 2-3 inches of our soils are now dark and rich in organic matter”

Humphrey Howie, Fat Goose Fruits
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For more information on the program contact:



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