

Welcome to Shields Orchard

Farm Outline

- **Location.**
 - 90 Kms from Sydney in the Blue Mts, 600 meters ASL.
 - 1350 mm rain average
 - Mild climate about 500 to 600 hrs a year below 7 deg.
 - Has been affected by climate change.
 - Shale soils up to 60 cms deep.
 - Soils have high organic carbon 7.8 to 8.4% and high water holding capacity.
- **Orchard.**
 - Has been orchard for over 100 years.
 - 6 hect.
 - Small by Australian standards.
 - 3300 apples, 11 varieties.
 - Ripen from early Feb to mid May.
 - Usually have about 3 varieties at a time ripening.
 - 350 stone fruit trees.
 - Other minor crops. Blackberries, raspberries, pears.
 - Too small to operate in the current market environment dominated by the supermarkets.
 - All fruit sold directly off farm during season through the shed shop or by PYO.
 - Manage the farm with my wife Julie, some casual labour from time to time in the fruit season.
 - Have a variety that we have Plant Breeders rights and trademark for "Julie".
- **Management practices**
 - All trees replanted in last 25 years.
 - Planting density has gone from 250 trees / hect up to 1800.
 - All new plantings on trellis.
 - Horizontal branches encourage early production.
 - Rows run north south to get equal sun light for colour.
 - Trees dry out quickly after rain less with less likelihood of fungal disease.
 - All trees irrigated by drip 8 litre / hour.
 - Water needs measured in 2 locations by soil sensors that can be viewed on phone along with all farm wether data.
 - Irrigation system is programmed.
 - Dam has about 10 million litres.
- **Pest and diseases**
 - Use integrated pest management with minimum pesticide use. Which encourages lots of predatory insects that predate on woolly aphids and mites
 - Weather station & phonology models.
 - Trialling electronic fruit fly and Codling moth traps.
 - Codling moth light trap and pheromone s on trap to attract males that emerges first.
 - Use baiting of fruit fly.
 - Fungicides used when needed rather than on calendar basis.
 - No broad spectrum insecticides used.
- **Carbon Positive.**
 - Management practises.
 - Minimum use of fertilisers & spray
 - Farm Solar energy exceeds energy use fro irrigation and normal operation
 - Use compost tea to increase soil biome.
 - Focusing on importance of soils.
 - Soil organic carbon levels of 8,2 % in 2024, has increased by .1 % a year over the last 5 years