### Sylvatica Farm

Employing regenerative and natural soil practices to rehabilitate compact and grazed paddocks for productive vegetable growing, reinvigorate existing orchards, establish silviculture and create a layered, canopied house garden using permaculture principles.

# History of the House and Garden

#### 1. Jill and Steve

- Initial property encompassed Guildford vineyard (6+ hectares)
- Lived in a bus for two years whilst they built the house themselves.
- The property is mudbrick and was powered solely by windmill for 20years.
- We believe they were keen gardeners, and have since found out Jill was on the committee of Bright garden club.
- We believe there may have been some early permaculture principles and they were here for 35 + years.
- 2. Genevieve and family
  - Weekenders, had the property for 7-8 years that included most of the Covid years
  - Ran a small business in Melbourne and had sheep in paddocks.
  - Did not water the garden during this time, so the irrigation has stopped being used, and one tank had stopped being used.
- 3. Us Sarah, Ellie and Dave
  - Purchased property late Oct 2021

#### Introduction to the garden

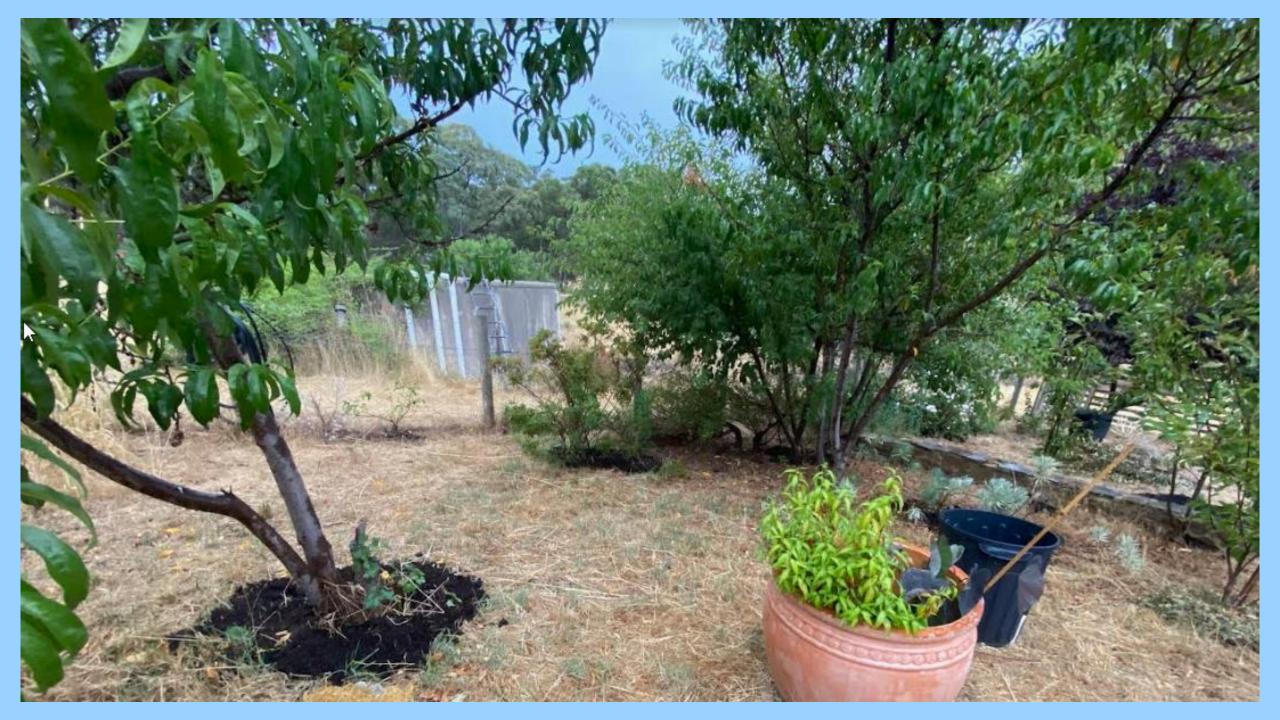
- Only some small established trees (copper beech, weeping elm, crabapples, lilacs, peach trees, weeping cherry, maples).
- Some large established trees- ornamental pear, field maple, eucalypts, Hakea, fastigiate pear.
- Many shrub roses originally planted, that we believe existed due to friendly relationship with Hilltop nursery that used to exist in Guildford.
- Two orchards:
  - Established orchard in south paddock:
    - Almonds, Pear, Hazel, Plums including Damson plum, Cox's Orange Pippin apple
  - House garden:
    - espaliered apple and pear, that have been long overgrown, apples and nectarine
- 4 unused veggie beds













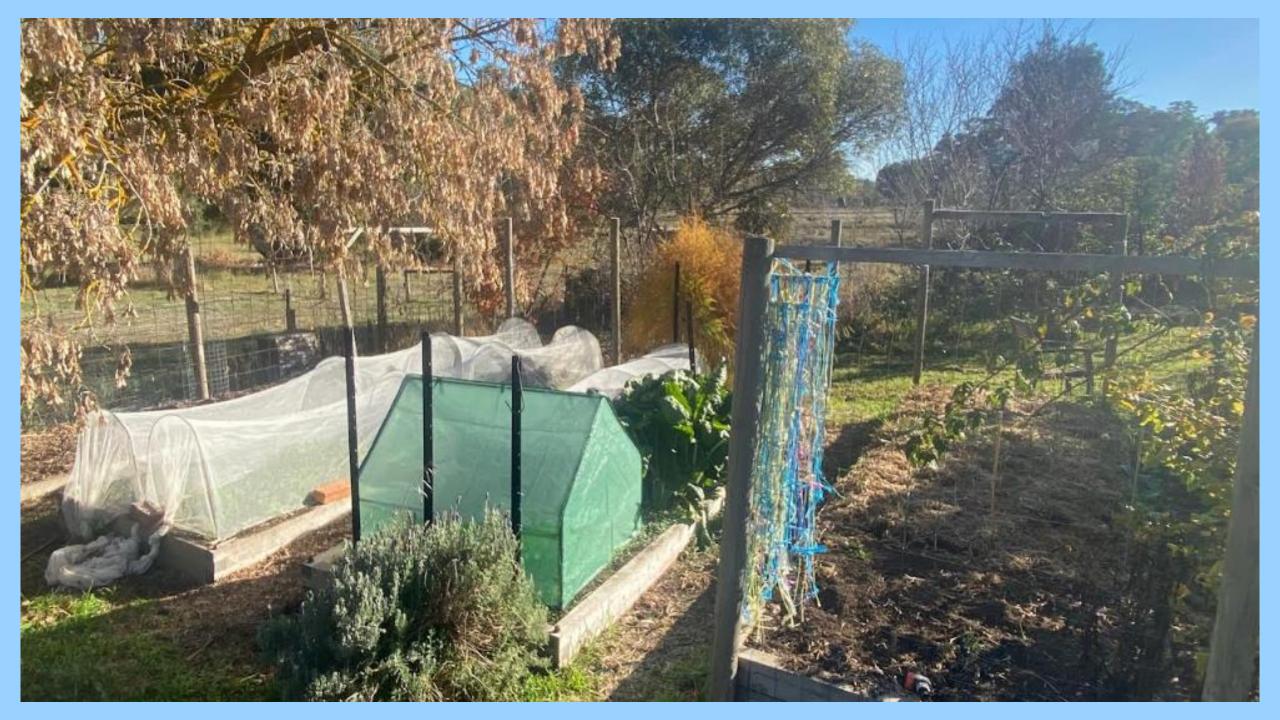




































### Climate of the Garden

- Valley bottom
- Very little wind
- Significant lows during winter
  - Harsh frosts down to -5C
- In Summers we have highs and lows
  - E.g. In February we had a high of 38C, down to 20C that night, however a week before we had 26C high and low of 4C
- >50mm annual rainfall than Castlemaine





#### First steps in the garden

- Clearing the weeping elm grove and reducing the weeds
- Discovering the irrigation
- Finding and revitalizing existing garden beds
- Identifying survivors

# Priorities for now and the future

- Water retention
- Soil health
- Shade Sun exposure
- Frost mitigation
- Fire Protection
- Revegetating and regenerating pasture
- Orchard Rehabilitation

#### Water Strategies

- Water is our no. 1 limiting factor!
- Major focus = improving our water cycle
- Soil health and planting
- Re-use and cycle water as many times as possible
  - greywater
- Redirect water from waste: septic to compost toilet
- Clever watering
  - pipes rand heavy mulching reduce evaporation
  - water drums
  - ollas
- Expanding rainwater collection
- Species selection
- Providing water for wildlife









#### Soil health

- What we started with- low organic matter, compacted, deficient soil
- Focused on 5 tenets of soil health:
  - Keep it covered, maximise photosynthesis, minimise/strategic disturbance, maximise diversity, integrate livestock (future)
- Mulch vs cover crops and "the quest for organic matter"
  - Autumn leaves, pea straw, summer grass, wood chips/sawdust, garden prunings
- Compost- microbial, static, vermicompost, leaf mould
- Biomass through guild planting
  - growing plants for mulch, nutrients (dynamic accumulators), compost activators
- Witchy brews
  - nutrient, mineral and biological extractions and preparations
- Biostimulants
  - Kelp hydrolysate, fish hydrolysate, molasses, raw milk















#### Vegie beds

- Untouched and unwatered for many yearshydrophobic, dead soil
- Trialled adding organic matter (compost, manure) but would not wet
- 'Strategic disturbance' and supersaturation
- Applied biological preps and stimulants
- Experimenting with bentonite clay
- Cover crops challenging- direct seeding
- Introduce beneficial biology
  - Biopriming seed, home-made seed raising mix











### Orchard Rehabilitation

- Intensively pruned in past (pollarding) and then abandoned
- Restorative pruning- multi-year approach
- Increase soil organic matter and carbon
  - cardboard and hessian over weeds
  - fungal dominated compost (humanure), "fungal duff"
- Foliar sprays- compost tea/extract, biological and mineral preps
- Guild planting
  - companions, biomass, dynamic accumulators, weed barriersgrazing pressure!
- Netting for bird protection and frost







# Garden History

- Permanent resident since Feb 2023
- Lifelong gardener- 35 years Northcote/Fitzroy, Olinda
- Regular garden visitor to Botanic Gardens, residential and overseas gardens, public gardens, shows, festivals + exhibitions
- However my own gardening history had been of shade + woodland gardens- a stark contrast to open, sunny Sylvatica
- Longtime desire to create and garden in a large space

## Garden Influences

- I have always read my gardening as well as done my gardening.
  - extensive gardening/natural history book collection
  - Edna Walling: for her woodland gardens and personal frugality in her own garden
  - the latest drop dead gorgeous English or American gardening book

Once we had experience of a summer at Sylvatica my influences grew and widened

- Heidi Gildemeister: Mediterranean gardener + author
- Filipe Oliveri: author, Mediterranean specialist, particularly for frosty, frozen winters
- Barbara Maund: Castlemaine resident, author, experienced

### • Patrice Newell: "Who's Minding the Farm?"

- Charles Massey: "Call of the Reed Warbler"
- David Montgomery: "Dirt: The Erosion of Civilisation"
- Peter Wolheben: "The Hidden Life of Trees", etc.
- Susan Irvine: rosarian
- Castlemaine Garden Club
- Castlemaine and District Festival of Gardens

### Ornamental garden

### Autumn/Winter 2022

- South gardens planted with Northcote refugees (roses, abutilons, hawthorn)
- Underneath existing ornamental pear my large hostas found shelter, but they were just hanging on, but made fat nesting buds over winter
- Planted trees from Northcote

### Spring 2022

- Planned for trees for moving shade, shrubs to ground heritage roses, perennials for colour + longer flowering, food for pollinators + design elements
- Developed "souvenir" bed

### Autumn/Winter 2023

- Planting commenced in west bed
- Carpark design + planting
  - Pears, eleagnus, pomegranatres, relocated planter boxes
- Tree planting in west paddock
- Planted summer-dry species by entrance
- Spot planting
- Added watering tubes to plantings during establishment

#### Autumn 2024

- Formal layout of south garden
- Extension of west bed planting
- Completion of greywater beds, limited planting



### Further Afield

- Rehabilitate compacted, nutrient deficient pasture
  - Introduce air, water and biology
  - Deep ripping on contour
  - Address key deficiencies: Ca, P, B, Mb
  - Multi-species cover crop
- Establish silvipasture system
  - Plant diverse tree rows (habitat, pollinators, fodder, biomass, firewood, timber, fire mitigation)
  - Rotationally graze sheep (future goats?)
  - Revegetate waterways, dams and create habitat corridors
  - link to box-ironbark forest, revegetation in vineyard

# Challenges

- Time
  - Even with the three of us, we found that with all the projects involved, there was always too much to do and too little time to do it. Had to reduce expectations on much larger landscape and celebrate the small wins.
- Watering
  - Started off with watering cans
  - Extended using taps
  - Adding pipes to planting.
  - Adding length of hose to taps to make it easier to fill up watering cans
  - Introducing irrigation
  - Future setting up automatic drip irrigation
  - Adding a large tank
- Grazing pressure
  - We've had two main culprits on grazing pressure within the garden
    - Swamp wallaby
    - Deer
    - Birds
  - What we've done to reduce it.
    - Extended the inner perimeter of the fence garden with star pickets and chicken wire.
    - Adding cages to new plantings





