



# Integrated Avocado Canopy Management

Jan Toerien

Rosehill Estate, Childers

[avodata@ozemail.com.au](mailto:avodata@ozemail.com.au)

# Integrated Avocado Canopy Management

Three different stages can be identified in the development of canopy management:

1. Individual Limb management
2. Individual tree management
3. Hedge row of Avocados

# 1. Individual Limb management

- ➔ Individual limbs are ringbarked or cinctured to increase yield
- ➔ Removal of the highest or widest growing limbs
- ➔ Concepts like cutting windows and rejuvenation forms part of this culture
- ➔ Water shoots are cut back or removed to prevent excess growth
- ➔ Some growers that use the limb manipulation systems are very successful and produce good yields
- ➔ Cultivars like Ettinger, Shepard, Edranol and Reed are treated very successfully

## 2. Individual tree management

Cut the trees down and start again

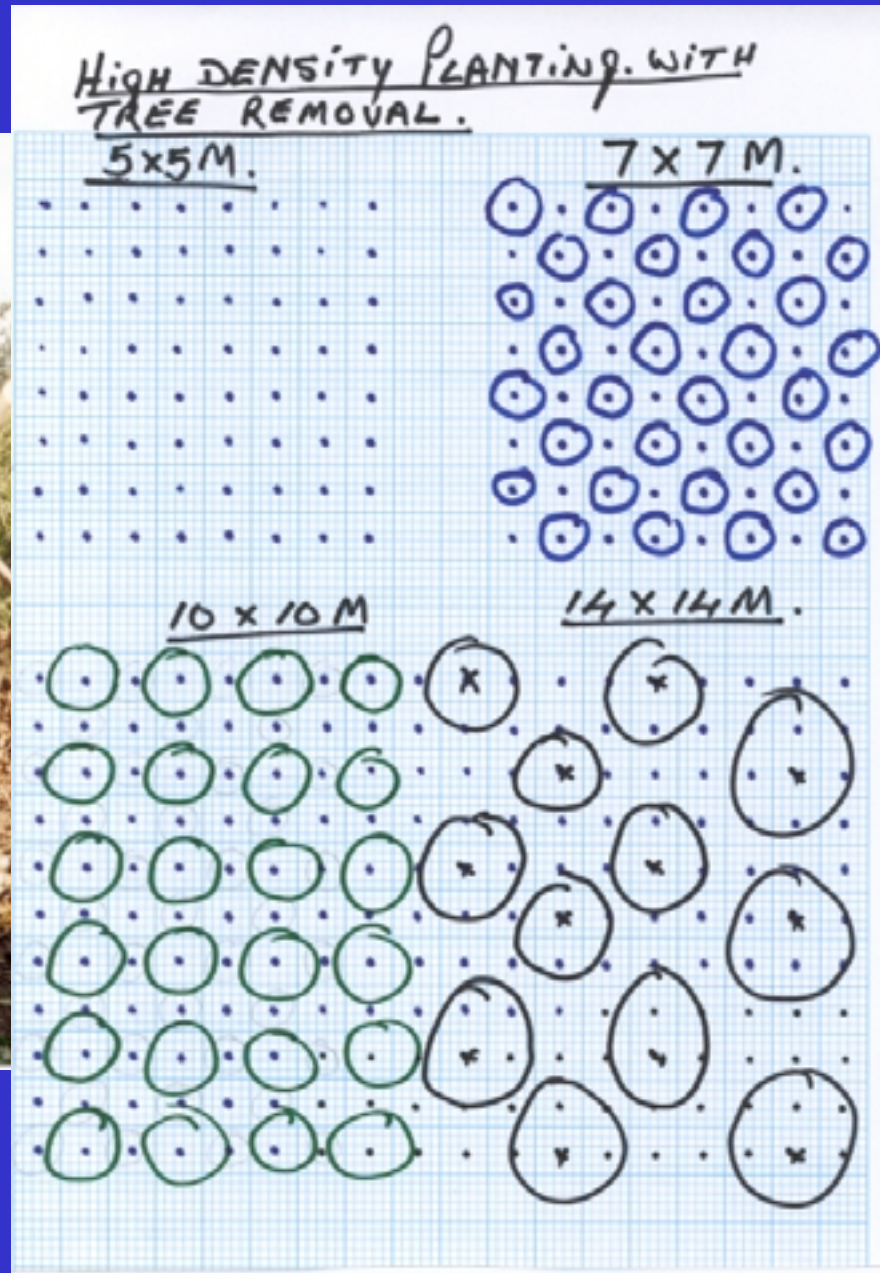


Staghorn the trees



# Tree removal

## Limb pruning



## Three different stages can be identified in the development of canopy management:

1. Individual Limb management
2. Individual tree management
3. Hedge row of Avocados
  - Young trees
  - Mature trees

## The principles to hedge row of young trees:

- ↪ Cut side branches out that are more than a third of the diameter of the central leader
- ↪ Remove all growth with an acute angle
- ↪ Tip all shoots after 20-cm growth
- ↪ Space horizontal shoots evenly in a spiral on the central leader to avoid overshadowing by growing directly above one another

# Hedging of mature orchards

The important factors are:

Phytophthora Control

Irrigation Management

Nutrition Management

Reserve Management

Fruit-set Management

Hedging Management



## Hedgerow Management:

- Shaping of the hedge row
- Control of reaction growth
- Maintenance by Summer Pruning



## Principles of Summer Pruning:

- ↖ Manage tree size & shape without damaging production potential
- ↖ Understand that the role of spring flush is purely vegetative extension growth
- ↖ Summer growth is critical growth to develop flowers on mature tree growth for next crop
- ↖ Timing is very important, must remove mature spring flush just outside fruiting line
- ↖ At each cut, regrowth will become more complex
- ↖ Timing is also critical to enable normal flower induction for spring flowering for next crop

# Maintenance by Summer Pruning



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  - Young trees
  - Mature trees:
    - ⇒ Important Factors
    - ⇒ Hedge row management:
      - Shaping
      - Control of reaction growth
      - Summer Pruning
    - ⇒ Steps to implement integrated hedging

## Steps to implement integrated hedging:

- Manage your Phytophthora control, irrigation, nutrition and reserves
- Shape the trees into a hedge after harvesting in winter
- Increase fruit-set with a PGR during springtime
- Remove wild growing water shoots in November
- Cut the spring flush back to just outside the fruiting line
- Mature the summer flush reaction growth with a PGR in time for autumn flower induction

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    - ⇒ Steps to implement integrated hedging
    - ⇒ **Advantages of integrated hedging**

## Advantages of integrated hedging:



- Increased yield
- Increased fruit size
- Increased fruit quality
- The trees produce fruit more regularly
- Spraying is much more efficient
- Cultivation is much easier and cheaper
- Production process can be fully mechanised
- Total bearing surface exposed to sunlight, free of GST



# Advantages of integrated hedging



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