



Wicking Bed Workshop

6 May 2015
Men's Shed
Frankston

Workshop Overview

- Why are we here
- Introductions
- Setting the scene
- Wicking bed theory
- BREAK
- Wicking bed demo



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Food Security

People who have experienced food insecurity (run out of food at least once) in the last 12 months:

- 3.9% Frankston
- 7.3% Mornington Peninsula
- 4.6% Victorian Average



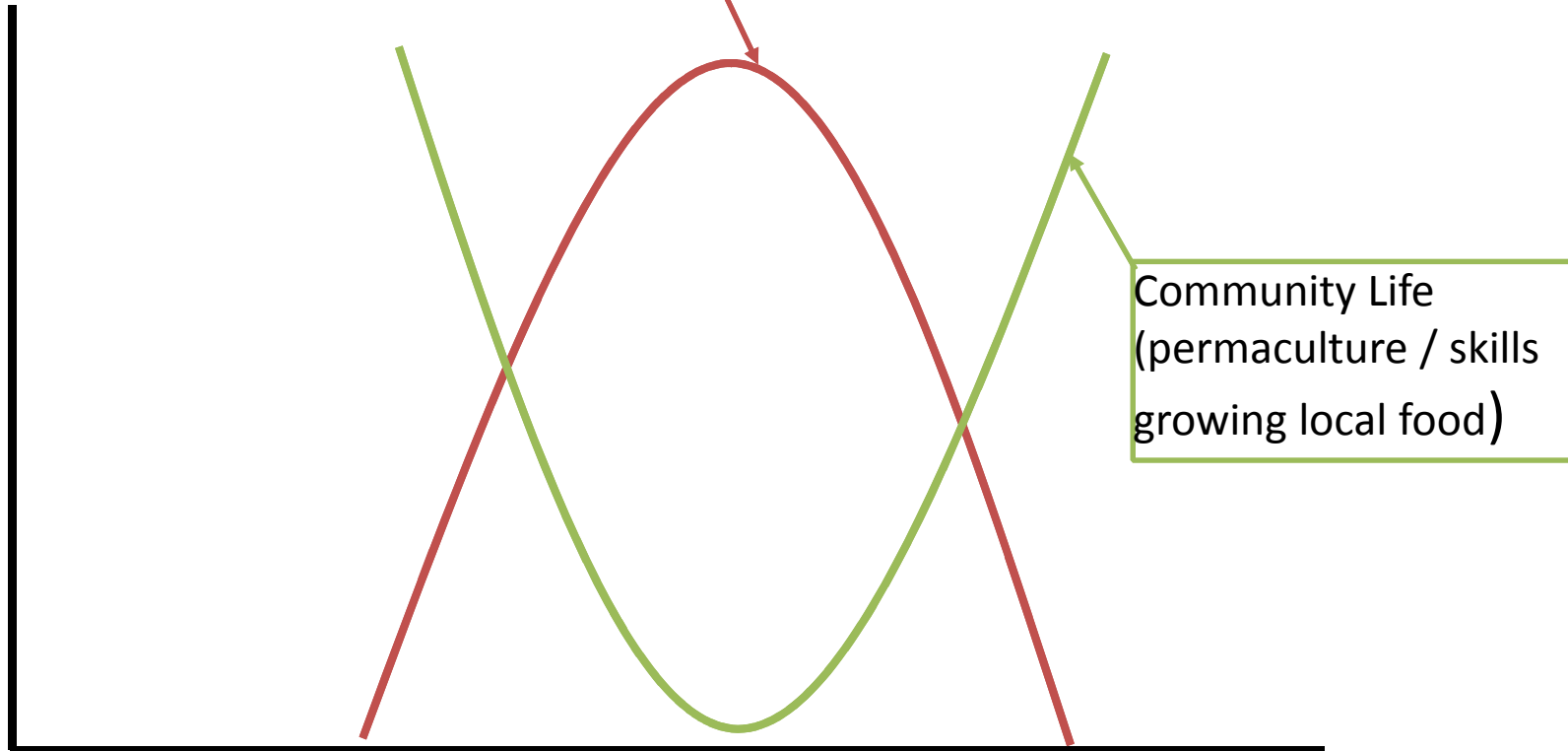
Local Initiatives

- Community Kitchens
- Frankston Food Access Network
- Food Week
- Best Bites
- Community Gardens
- Food Swaps



Our Future

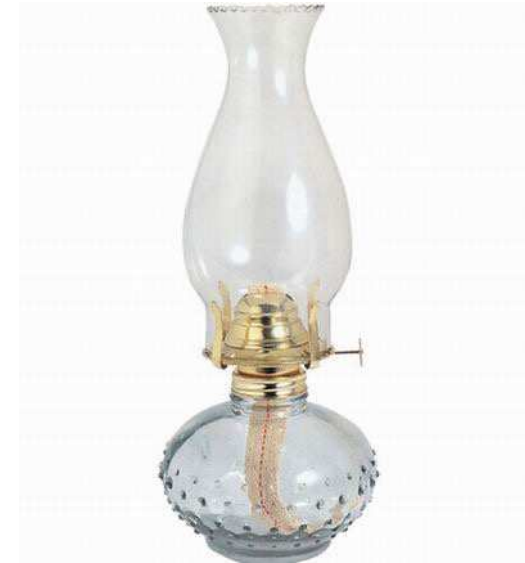
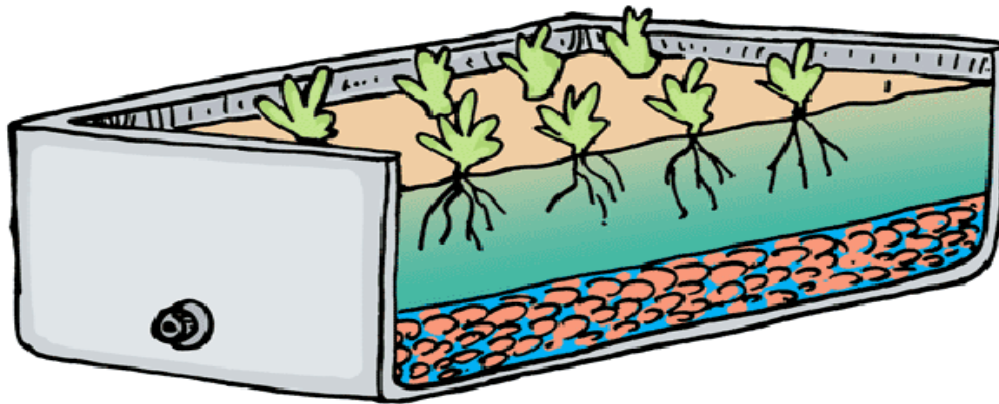
Energy Descent (less access to fossil fuels / climate change)



Community Life
(permaculture / skills
growing local food)

What is a Wicking Bed

- Water travels up to plant roots from below the soil despite gravity
- Uses a capillary action (wicking)
- Wicks up to 300mm



Benefits of Wicking Beds

- **Uses up to 50% less water** than conventional veg gardens
- **Less water lost** through evaporation
- **Low maintenance**
- **Less risk** of under or over watering
- **Plants get the exact amount of water** they need and their roots stay cool
- **Soil remains moist** most of the time
- **Allows for thick mulching** which also decreases evaporation
- **Improves soil quality** through moisture, cycling nutrients (nothing washes away)
- **Can be made cheaply**
- **Easy** to operate

Benefits for Community Kitchens

- Attend bed weekly to monthly
- Temporary
- Cheap
- Portable
- Materials can be re-used / replenished
- Shares skills to increase food security

Types of Wicking Beds

- Boxes
- Baths
- Containers
- In-ground
- Swales



How Wicking Beds Work



Considerations

- **Positioning**

- Too hot in summer, too cold in winter

- **Plant Selection**

- Sow seedlings, sow seeds direct, sow seeds to punnet

- Select for season

- www.diggers.com.au/garden-advice/in-the-garden/

- www.gardenate.com

- Select for recipes/uses

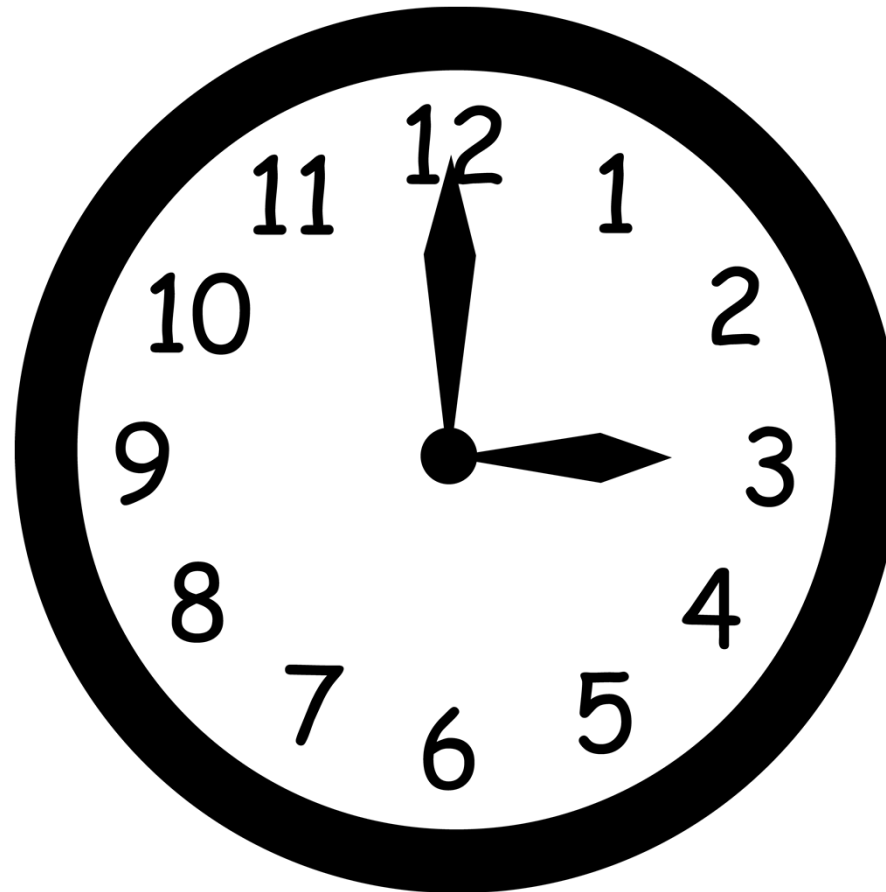
- www.livelihter.com.au/Recipe

- Commonly used and easy to grow: Cherry Tomato, Herbs, Spinach, Silverbeat, Salad Greens, Perennials (e.g. Thyme, Chives)

- **Plant Spacing**

- Overcrowding vs. companion planting

BREAK



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Materials for Wicking Beds

- **Framework:** Container, Veggie Box, Sleepers, rocks, straw bales
- **Waterproof lining** for reservoir
- **Pipe** for water inlet
- **Reservoir:** Washed river sand, Scoria, Straw, Plastic Tray
- **Soil Barrier:** Geotextile, Hessian, Rags, Cloths
- **Quality Soil**
- **Mulch:** Pea straw, Sugar cane, Leaf litter
- **Electric Drill** for holes
- **Lid** for covering pipe to stop mosquitoes (pot holder)

Method for Mini Wicking Beds

1. Clean box and check for holes
2. Bore two holes, 1/3 from bottom (these are the overflow)
3. Cut pipe to size so when standing in box is about 15cm above final soil line
4. Drill a bunch of holes in the bottom quarter of the pipe (so water flows into reservoir)
5. Stand pipe up straight in the box
6. Cut seedling trays to fit bottom of box. Sit them upside down to create the reservoir
7. Wash Scoria and back fill any gaps
8. Lay a piece of hessian cut to size to fit the box. This acts as a permeable barrier between the water and the soil

Method for Mini Wicking Beds

8. Add soil and compost to 10cm below the top of the box.
9. Plant some herbs and seeds.
10. Fill the reservoir. Once it flows out of the overflows the reservoir is full.
11. Give the soil a light watering to settle the new plants.
12. Mulch
13. Stand back and watch them grow!
14. Check water level by looking down the pipe, once it gets low top it up.

Safety

- Mulch products may contain micro-organisms and bacteria. You should avoid breathing the dust or mist by wearing a particulate mask. Wear gloves when applying the mulch and wash your hands immediately after use.
- TIP - Dampen down the sugar cane mulch before using it to prevent spreading dust particles.

Management

- Check soil still moist for first few days while it starts to wick
- Check water level every week to start - learn how long the reservoir needs refilling (1-4wks, different times of year, climates)
- Keep it level
- Give light sprinkle of seaweed solution every 2-4wks
- Replenish soils between seasons with some compost mixed through the top
- Leave a plant to go to seed and collect the seeds for the next season (using fertile seeds)

Variation – Worm Farm



Where to next?

- Community Kitchens
www.communitykitchens.org.au
- Community Gardens Frankston
[www.frankston.vic.gov.au/Our Community/Community Development/Community Gardens](http://www.frankston.vic.gov.au/Our_Community/Community_Development/Community_Gardens)
- Community Gardens Mornington Peninsula
[www.mornpen.vic.gov.au/Environment Waste/Environment/Environment -
Get Involved/Community Gardens](http://www.mornpen.vic.gov.au/Environment_Waste/Environment/Environment_-_Get_Involved/Community_Gardens)
- Permaculture www.permaculturemelbourne.org.au

Thank you

- Workshop feedback form
- 12 week follow up

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