



The Food Forest, established by Graham Brookman (pictured) and his wife Annemarie, is the subject of a film entitled *Design for Life*, which premiered at Gawler Cinema and Adelaide's Mercury Theatre. The film demonstrates how an ordinary family can produce food sustainably and explains permacultural design of homes, farms and cities. It is also available in DVD format, which shows many of the vegetable gardening techniques used at The Food Forest.

Earn from home vegie

Growing vegetables can be a great way to earn extra income from a piece of land.

By SARAH SLEE

FRESH, local produce – especially organic vegetables – are in high demand. Only a small area is required to grow them, and profits can be realised within a relatively short space of time.

The Food Forest at Gawler started as a family garden for Graham and Annemarie Brookman, and is now a multi-award-winning business that grows and sells 160 varieties of organic food, and offers educational and consultancy services.

Growing vegetables for your family gave a good indication of the physical and financial demands of production, before launching into commercial operation.

Mr Brookman, who was instrumental in establishing the Adelaide Showground Farmers Market, said close proximity to market was important, as transport costs would significantly reduce profits. Growers could develop a relationship with a retailer, secure a stall at a farmers' market or join an entity like Food Connect that distributes produce to subscribers. Access to cold storage would also be required.

Water was the most critical consideration for commercial vegetable production.

Vegetable plots required about 1100 millimetres of water per square metre annually. By subtracting annual rainfall from the total required,

Smart facts

- ▶ Vegie production profitable
- ▶ Close proximity to market
- ▶ Reliable water supply

growers could calculate how much water they would need to store, buy or access.

A good gardener could produce a family's annual vegetable requirements on less than 50 square metres. A plot of 1000m² (30m x 30m) could produce about \$10,000 worth of vegetables in a year, and was a manageable size to begin with. A flat piece of land absent of large trees – particularly pines and eucalypts that rob water and nutrients – was most suitable.

A small tractor with front-end-loader and basic tillage equipment was required to prepare and maintain a plot. A rotary hoe, spading machine or offset discs were needed for seedbed preparation, and a robust slasher or mulching mower to trash in crops following harvest. Small-scale, second-hand machinery could be acquired relatively cheaply, or shared between growers.

Well-drained, sandy loam soils were ideal for vegetable production. Because heavy clays were common in the Adelaide region, soil improvement or replacement was usually necessary prior to planting, and was generally financially viable. Deep tillage was necessary to break up

hardpans, which could have a significant impact on soil performance.

Gypsum application was commonly required initially to ameliorate soil compaction, particularly on heavy clays. Ash or lime might also be required to balance pH levels.

Commercial compost made from urban green waste contained large amounts of carbon and a broad spectrum of nutrients, and helped improve soil friability. If a plot was established correctly, this type of compost would satisfy most plant needs.

Organic production does not permit the use of uncomposted animal manure and Mr Brookman warned against its use, as there was potential for manure to come into direct contact with food. Composted animal manure could be utilised effectively beneath mulch.

Use of mulch, like cereal straw, was recommended to reduce weeds, minimise evaporation and replace carbon burned during tillage. Mr Brookman said a combination of mulch and drip irrigation could reduce watering requirements to 20 per cent of spray irrigation water use levels.

Growing a diverse range of vegetables improved continuity of income and helped growers decide what they were able to produce most successfully. Farmers' markets also pre-

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garden

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ferred growers to supply a variety of products, which assisted in retaining a loyal customer base.

Growing from seedlings led to faster returns, a lighter workload, less time between harvests, and greater chance of success. When sourcing inputs like seedlings and fertiliser, Mr Brookman encouraged growers to shop around, or collaborate with others to buy in bulk.

"Because the industry is geared for large growers, small operators might have to hunt around to find someone who will supply them at a reasonable price – so be persistent," he said.

Maintaining a biologically active soil and rotating vegetable families would help reduce the incidence of soil-borne diseases. Growing vegetables that were in-season would also assist in fighting pests and diseases.

Organic certification enabled growers to command a price premium of 30 to 100pc, but involved significant administration commitments and regular inspections.

For potential growers who did not own land, Mr Brookman said there were many landowners – including other growers – who would be willing to lease or share farm land. A legal agreement was recommended to secure a minimum period of use before making an investment in the soil.

• Need to know more?
foodforest.com.au



From little things, bigger things grow

A CHILDHOOD passion for backyard gardening became a commercial venture for Hayden Rogers (pictured), who grew up on a small farm in Angaston and is head chef and owner of Doof Doof Cafe in Malvern.

Hayden learned the principles of organic, biodynamic and permacultural production through The Food Forest at Gawler, putting them into practice in his urban backyard. He now grows 5.5 hectares of vegetables on three parcels of leased land in the Adelaide Hills and Riverland.

Hayden is working towards buying a property and running a full-time enterprise. He also wants to establish a farm in northern Australia to produce tropical foods and supply SA markets out-of-season. His goal is to market a wide variety of primary produce under a Doof Doof brand.

Hayden's vegetables are grown without the use of fertilisers, herbicides or pesticides. He says fertiliser weakens plants, because it promotes faster growth. Cell walls become thinner, making them more susceptible to insects, heat and frost. He also believes that nitrogen application can upset the natural balance of nutrients, making some of them unavailable to plants. Instead, he

makes his own compost using straw and cow manure.

Vegetables are rotated to help control disease and a green manure crop is sown every year between seasons. Growing a variety of vegetables has helped to build a balanced ecosystem of predatory spiders, wasps and ladybirds, which keep pests under control.

Hayden uses a plough rather than a rotary hoe, to preserve soil structure. He says persistence is the key to successful organic farming.

"It takes a while to get the system balanced but if you cut corners, you are back at square one," he said.

"Start off small and be prepared for failure. Just have another go if it doesn't work the first time. When you're starting a new line, grow a few and slowly increase production.

"Build up the soil, read some books, do a course if you can, and have a go. The main thing is that you stick with it.

"A market gardener once said to me 'if you see something that needs doing, do it right there and then'. That philosophy has helped me a lot."

• Need to know more?
doofdoofbackwards.com.au

Sustainability course offered

NUTRI-Tech Solutions, in conjunction with their exclusive SA distributor Bio-Tech Organics, is conducting a comprehensive farm training course over four days in April.

The Certificate in Sustainable Agriculture international course is about educating farmers and consultants on strategies for sustainable farming.

It is a Farm Ready Approved Course, which enables government reimbursement on course fees and related costs.

Balance – both mineral and biological – is the keystone of this approach, but there are numerous management tips, tricks and synergies that complete the equation.

The Certificate in Sustainable Agriculture features the NTS Management Approach where biological agronomists cover every aspect of microbe, soil and plant nutrition and protection. The four days feature mineral, microbe, plant, pest and human health management.

Participants will have the opportunity to take home a multiple-choice exam to complete and return within one month of the course. Growers with a pass in each subject will be issued with the NTS Certificate in Sustainable Agriculture to commemorate their success.

The course includes comprehensive presentations and hands-on workshops. Venue: Roseworthy Agriculture College Information Centre

Cost: \$699 includes seminar manual, lunch, morning and afternoon tea

Dates: Tuesday, April 12 to Friday, April 15. Seats are limited.

• Need to know more?
(07) 54 729900