QUARTERLY VOL 4 no. 1

ORGANIC GROWING IN THE CANBERRA REGION



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WHAT IS ORGANIC GROWING

ABOUT

The ORGANIC MOVEMENT endeavours to provide an alternative to the mass of toxic chemicals, fertilisers, fungicides and herbicides used in modern agricultural methods by utilising more natural means of improving and preserving our soils and to produce nutritious, less contaminated food.

WHAT ARE THE ORGANIC ALTERNATIVES?

By enriching the soil with compost, manure, green manure and mulches we avoid disease and control pests through non-chemical methods, including encouraging the presence of beneficial insects to feed on pests, growing companion plants to discourage pest attacks, by growing healthy plants to resist pest attacks and disease and by tuning in to nature with love, harmony and gratitude.

REMEMBER: Monthly meetings are on the 4th Tuesday of the month except December and January

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morning plans

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Meeting Notices are on COGS NOTICEBOARD on the inside back page The COGS QUARTERLY is printed on 100% recycled paper

NEWS BRIEFS by Michelle Johnson AROUND THE WORLD

PESTICIDES ON RICE

Many Asian farmers have used very high levels of pesticides to rid their crops of various rice pests, some of which, like the leaf-eating leafrollers, cause considerable visible damage to the leaves.

However, recent research by the International Rice Research Institute in the Philippines has found that leafrollers can eat up to half a plants leaves without reducing the grains' yield! This was shown by some farmers in Vietnam's Mekong Delta who stopped spraying half of their fields and compared the yields from the two areas. No difference!

Now, apparently half the farmers in the surrounding region have stopped spraying for leafrollers.

Source: "Organic Growing" New Ground p18, Jan 1996

1000LB PUMPKIN?

The 1995 winner of the Great Pumpkin contest in the US and Canada, was a <u>963lb</u> giant pumpkin. Organisers are hoping the 1000lb barrier can be broken in the next growing season.

Source: "Organic Growing", p18, Jan 1996

SHAMPOO LABELLING

The Soil Association in Britain has objected to the name of the "Organics" range of shampoos, complaining that the products contain no certified organic products and that the advertising associated with this product is misleading.

An independent chemical analysis of the "Organics New Generation Shampoo" commissioned by the Soil Association shows it is 70% water, 11% anionic detergent, and 1.3% non-ionic surfactant. They suggest that the so-called magic ingredient "Glucasil" is probably monosodium glutamate.

The Soil Association wants an Environmental Claims Bill introduced which would outlaw misleading advertising.

Source: "Shampoo label "misleading"" by Tim Marshall, p2 Acres Vol3, No 3

IN AUSTRALIA:

NASAA ELECTIONS

Jan Denham was elected Chairperson of the National Association of Sustainable Agriculture Australia (NASAA) at the recent AGM. Jan is a Sunraysia citrus grower, certified since 1989.

Two new directors elected to board are Allan Savins from Tasmasnia, and Graham Clarke from NSW.

Source: Acres Vol3, No3 p2

BFA ELECTIONS

At the AGM for the certifying body, The Biological Farmers of Australia at Lismore last September, three new directors were elected: Edwina Baird-Sharpe, Bill McGilvray and Peter Woodward.

The elections came after an eventful year for the BFA with three directors - Gavin Dunn, David Williams and Stewart Ross resigning and the office being relocated from Adelaide to Oueensland.

At the AGM, a new constitution was adopted, and their commitment to amalgamation with NASAA was reaffirmed.

Source: Acres, Vol3, No3, p18

WHERE'S THE ORGANIC FOOD?

Apparently a few delegates at the AGMs of NASAA and BFA and the joint conference, all held in Lismore last September were heard to comment that it was a telling statement on the organic industry that none of the meals, morning teas etc available featured organic produce.

ORGANICS ON "A CURRENT AFFAIR"

A recent Brisbane-based segment on "A Currant Affair" took a look at organic retailers in Brisbane. They collected 12 samples of socalled certified organic produce from 4 retail outlets and had them tested for pesticide residues at a laboratory in Kingaroy.

Ten of the products were shown to be residue-free. However two of the twelve contained residues of endosulphan - a rather nasty insecticide. The two contaminated samples were peaches and tomatoes from the same retailer, Ted Forbes of "Ted's Organics". His response, when questioned by the reporter was to eventually state that he sold both organic and conventional, and that accidentally the two types of peaches and tomatoes must have been mixed.

The reporter stressed that many people buying organics were doing so for health reasons - for allergies or for special diets for cancer patients for instance - and that consumers can pay up to 3 times the price of conventional fruit and vegetables for certified organic produce.

A organic wholesaler and certified organic farmer were concerned of course when told of the test results, but maintained their belief that such "accidents" only occurred in a very small number of cases.

Such mistakes should not happen. The organic industry is very dependent on being seen as a clean pure source of food, and consumer confidence in the produce is essential.

However it does seem to me that all this report has done is raise doubts, but does not give enough information for the viewer to decide what degree of confidence the consumer can have when purchasing organic produce.

A sample of 12 from 4 outlets hardly constitutes an adequate sample from which to draw any firm conclusions. Yet airing such results on a popular show on primetime TV will inevitably cause a set back to the organics industry. It is, I consider, very irresponsible journalism.

To Prune or Not to Prune, That is the Question...

by Jackie French

This is intended as a guide for the home grower, not for commercial producers, who need to maximise the amount and appearance of their fruit. The home grower merely needs a simple, workable system that is little work -- and one that will give a lot of fruit over a longer time. I readily admit the following is not the best way to prune. . . but it's an easy one for the beginner to follow.

Pruning can stimulate new growth, keep plants flowering, increase their life span -- and also generally tidy them up.

It can also be back breaking -- and unnecessary.

Pruning also removes leaves and new growth, which means the plants must use food and moisture reserves to replace what you've pruned off. Severe winter pruning reduces a plant's ability to photosynthesise in spring -- and may reduce its capacity to fruit as well.

The amount you prune -- and whether you need prune at all -- depends on your needs, and your plant's. Our neighbours down the road, for example, one of Australia's largest and best peach growers, prune their trees dramatically each winter. They need to maximise the amount of fruit per tree -- and they need to have all their fruit ripening over a short period to make picking easier.

I hardly prune my peaches at all. Unlike my neighbours, I don't want great big saleable peaches. I want lots of smaller ones, ripening over a long period (we love peaches -- but even for us there's a limit to how many we can eat at one time). I like my trees to be a thick tangle of leaves and branches so the parrots and currawongs don't get them before I do. Also I'm lazy enough not to want to do any work in the garden unless I have to.

As I write I can see two groups of apple trees in my garden. One lot is a wonderful tangle -- five sorts of apples with cherries and mulberries and many others. We hardly lost any fruit at all to the birds from those trees. Just in front, about 2 metres away, are dwarf apple trees, standing alone in the grass. The birds feasted on those for weeks -- and had a good go at the blossoms this spring too.

Why You Shouldn't Prune

Pruning is hard work.

Pruning stimulates new growth -- so you'll have to prune again.

Birds love eating fruit from pruned trees - lovely clear sites to perch and feed. (On the other hand they like nesting in unpruned trees).

Pruning removes wood and leaves that the plant will need to replace -- so you'll have to feed amd water more.

Pruning can reduce a plant's ability to photsyntheise and reduce fruiting capacity.

Heavy pruning can increase pest problems, like scale and wooly aphids.

Trees which have been heavily and regularly pruned often have far shorter lives.

Why You Should prune

Some trees produce fruit on new or year old wood -- so you need to keep cutting back to get new wood.

Old wood may need cutting out for health reasons.

Pruning may stimulate fruiting in old trees that have stopped fruiting. Old shoots may produce less fruit.

Old fruit spurs may be too weak to nourish fruit.

New growth may be much less disease prone.

With some radical pruning methods trees fruit a year or more earlier.

Farmers need to maximise the amount of sunlight fruit gets for early and even ripening -- and an open tree shape makes picking much faster.

In some gardens -- like ours -- you need to hack back the jungle occaisionally or you'll never get out the door.

Which Trees You Need To Prune

Young Trees

When you plant a tree you need to decide what shape it is going to be. I like to have tall trees, with few low down branches -- the wallabies don't pull them down. Other peope like low vase shaped trees, which are easier to harvest. Others like a natural shaped tree -- and most trees have their own graceful shape that isn't improved by too much human intervention.

The following are some common 'tree shapes'.

Vase Shaped Trees

This is the classic -- and now mostly outmoded -- orchard tree. Vase shaped trees break down sooner than most other shapes.

Choose three or four branches low down on your young tree -- these will become the main leaders as the tree grows. Prune them back to an outside bud. Cut out all the rest. If the tree is unbranched cut it back to about a metre above ground, and wait till next year.

Hedge Systems

A hedge system allows greater light penetration, more trees per hectare, and maximises fruit production in a small area. It is also very labour intensive, and looks contrived if you like your garden to look 'natural.'

With all hedge systems it is important to angle the tree when you plant it, so the main branches that you want to keep point the right way and the tree gets maximum morning sunlight. In spring choose the branches you wish to keep and tie them to wires and remove all other shoots. Even winter or spring cut back the central stems and choose more shoots to wire up'.

Natural Trees

Just let these grow as they want to. If a branch is pointing over the neighbours fence, remove it before it gets too big. If one branch seems to be rubbing on another, cut one of them off - but let the tree form its own shape and balance.

Pruning Older Trees

Which Trees Need Pruning

Peaches fruit on year old (last year's) wood. Theoretically, you need to prune them every year to get more wood for next year. In practice, most trees keep growing, so there is always a little new wood, and always some fruit. I know wild and 'neglected' peach trees around

here that have fruited every year for twenty years -- and probably have never been pruned.

If you want to maximise your fruit production, prune out any laterals that fruited last year, and any spindly ones. If you have an old peach tree, remember that heavy pruning this year will stimulate new wood which will bear fruit the next year -- and then cut that wood back in turn.

I never prune our apples -- I just pull the tall leaders downwards, and either tie rocks on the ends or stake them to a star picket. This stimulates new fruit bearing 'upward' growth. Usually a heavy crop of apples does this for me, by weighing the branches down naturally. See 'bending' below.

Avoid pruning pears much, or they'll form strong upright shoots and be an even worse nuisance to prune in a few years. Bend tall branches over instead, if necessary -- but pears can fruit for hundreds of years with no attention at all.

Loquats only need to be pruned to keep them a manageable shape.

Quinces only need to be pruned to shape the tree, or to thin out thin shoots.

Don't prune apricots and cherries if you can avoid it. They don't need it to fruit and you may get fungal infections. If you must cut out diseased wood, or if the tree is too large, prune in spring or early summer and paint with fungicide afterwards.

Citrus don't need pruning, unless the branches are rubbing or diseased or in the way. You can ignore mulberries, avocadoes, olives, persimmons, pomegranates and tamariloes, too.

European plums just need a litte trimming every two years -- or may not need any pruning at all if they are vigorous and you don't want to prune them back.

Figs will bear indefinitely without pruning. The early summer crop is formed at the tip of last year's branches. The second crop is born at the base of the current season's wood.

Japanese plums mostly bear fruit on the lower half of their shoots. Cut back the top of banches, if you really must. Japanese plums may fruit indefinitely without pruning.

Hazelnuts flourish as wild trees with no pruning -- but a little thinning will increase nut production by increasing the amount of light to the flower buds. Chestnuts, macadamias and pecans can be ignored, unless they grow too big.

Old fashioned walnut varieties don't need pruning. Some new ones do -- cut back new growth each year, and thin out new shoots.

Grapes bear their fruit on new seasons' growth from last year's canes. Shoots from the trunk usually don't bear fruit. Grapevines are traditionally pruned back by about 90%, leaving a few long canes trained on wire that will bear the new season's wood -- and this year's crop. If you don't mind a messy grape vine, however, you don't need to prune at all, as long as the grapevine is still growing. Grapes will fruit for decades with no pruning.

Passionfruit bears its crop on new shoots -- and the longer a vine bears the less fruit is produced near the stems, and the more tangled the vine becomes. Strongly growing vines are also more virus resistant. I recommend pruning passionfruit in summer, and regularly cutting back old growth that isn't fruiting.

Kiwifruit is produced on buds of new shoots on young laterals. Trim kiwi fruit back every few years (they are so vigorous you will have to trim them into shape every few years anyway or your garden will become a kiwi fruit jungle) to keep up a supply of young laterals. This is best done in early winter (later winter prunings can bleed) or summer.

Prune back berries after they have fruited -- strawberries will bear more fruit later in the year if they have been trimmed as soon as the first flush is over. Cut raspberry canes that have fruited right back in winter -- and slightly trim back canes that have fruited in spring or summer.

Bending Instead of Pruning

I would rather bend than prune. Bending doesn't inhibit the vigour of the tree; it's less work; it helps hide fruit from birds -- and you'll get more fruit. It also stimulates more fruit spurs.

The higher a bud is on the tree, the stronger the resulting shoot will be. If you cut the top out of a tree, you'll lose this vigour. In all trees a growth inhibitor is produced by young leaves near the growing tip. This travels down the plant and inhibits the growth of shoots further down.

If you bend a branch, this inhibitor stops growth under the branch -- and the shoots on top of the branch grow upwards. The more vertical the shoot, the stronger it will grow -- and conversely the less fruit it will bear. Shoots angled at about 40 degrees from the horizontal are the best for fruit production -- and I find that the new shoots on a recently bent branch are just about optimum.

How To bend

I pull down long leaders, and either stake them to the ground or tie them to a long stake, or hang large rocks from them. After a year or so they will stay in that position. You can then reach up for the next lot of leaders, and pull them down.

Bending is best one in summer -- the bent branch will keep growing, and stay in position by itself more quickly -- and there is still time for more fruit and leaf buds to form on the upper side. If necessary you can bend in winter as well -- and it is certainly far easier to bend leafless trees than struggle through thick foliage.

Pruning Principles

1. Prune as little as possible. It's less work for you -- and all surgery should be minimised, whether it's for humans or trees.

Remember that the more you prune, the more you have to feed the tree or shrub later to replace what you have taken

- 2. Cut out a few shoots rather than snip bits off a lot.
- 3. Bend rather than cut. See above.
- 4. Always keep in mind the shape you want, and prune accordingly

Pruning tools

All tools should be sharp. Blunt tools tear, rather than cut. Use good quality metal. This won't be cheap — but cheap metal breaks easily, loses its sharpness after a few cuts, and often won't take as keen an edge as good material might.

Don't try to use small secateurs for a large branch -- use a saw. Tall branches can be cut with long handled tools.

When to Prune

Until recently most pruning was done in winter, on the theory that as the trees were dormant less harm was done to them -- a bit like operating on a patient under anaesthetic. However winter pruning wounds take much longer to heal -- and are open to infection longer. Open 'tree wounds' can also attract sap sucking pests like scale and wooly aphids.

Winter pruning can also stimulate early spring growth, which can be cut by frost -- and again lead to disease. Winter pruning also limits the amount of leaf cover a plant has in spring when it puts on most of its growth.

The best time to prune is probably in summer, after fruiting if possible. Wounds close up quickly, and there are plenty of predators to reduce pests -- or there should be if you are following organic principles. Summer pruning may be a little more difficult for the novice -- you don't have a nice bare skeleton to work with -- but the results are much better.

You can also prune in spring, just after bud burst. This is probably best for cherries and peaches and almonds. Wounds close quickly and there may be fewer fungal spores around in early spring than late spring or mid summer.

Renovating Old Trees

Old trees may need to be cut back to remove dead or diseased wood -- or to cut back weakened fruit spurs so new stronger ones can form.

Cut out all dead and diseased wood first. Cut back top branches more than lower ones -- a 'renovated tree' should look like a pyamid. Cut old branches back as near as you can to 'secondary' branches that can be encouraged to grow and replace the old ones. Thin out crowded shoots; cut out all spindly shoots.

The next year you can choose good thick shoots to replace old branches if needed.

How to Treat Large Cuts

Most pruning should be so small that you don't need to cover the cut at all -- just let it heal quickly and naturally. Large cuts on old trees should be painted with latex paint in which you've stirred some bordeaux or other fungicide.

I have tried the old folklore remedy of comfrey ointment on large pruning wound. It was far less effective than the above.

Pruning Ornamentals

As a general rule, prune after flowering, and prune to keep the plant in shape. Shrubs that are growing vigorously produce more flowers. Flowers like dahlias, chrysanthemums, wallflowers, petunias, daisies, heliotrope and carnations will bloom longer, and be sturdier, if they are regularly trimmed. Of course if you pick the flowers often for cut flowers you'll be giving the plant all the trimming it needs.

Herbs like lavender and wormwood should also be pruned, or you will end up with long stalks with a tuft of lanky foliage on the end. Again, pruning after flowering is best. I prune in the hot 'slow growing' mid summer season.

Many native shrubs also respond well to regular trimming, especially if they have been given more fertiliser and moisture than they would have got naturally, and are growing tall and soft and leggy. Tall soft plants are more vulnerable to wind damage, and to damage from extremes of heat or cold.

The smaller native shrubs like boronias, baekeas, thryptomene etc do best with a yearly 'tip' pruning after flowering. This encourages dense, compact growth. Larger grevilleas, melaleucas and callistemons may need a more vigorous pruning, either after flowering, or after rain when you can expect a growth spurt.

As a general rule flowering shrubs like bouganvillea, philadelphus, geranium, pelargonium, jasmine and lilac should be pruned after flowering. The more vigorously they grow -- and the more straggly they tend to get -- the more you will need to prune them. You only need to twist off the dead flower heads from rhodendrons, daphne, camelias and magnolias to encourage flowering next season, unless the plant is straggly and needs a trim. Azaleas need a light pruning after flowering to keep them compact -- though if they are too leggy cut them back harder. Hibiscus need to be lightly pruned in spring as soon as they are growing strongly to encourage bushy growth. Though this pruning does silghtly delay flowering you'll get more blooms in the long run. Cut back old hydrangea canes in winter, and trim new ones back by a third to keep the bush in shape and encourage new growth.

Conclusion

Pruning can seem complicated to the beginner. When you get down to it, though, most pruning is simply common sense. If you want to stimulate new growth, tidy up a straggly plant, or cut out dead or spindly growth prune. If you don't, forget about pruning, and leave your plant alone.

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Marketing Fruit & Vegetables

by Harold McCormick

Bywong Berries, Shepherd Rd, Geary's Gap

Having just finished this year's harvest, I thought I would write a short discussion on my experiences over the years on how to sell your fruit. Some of the methods will be appropriate to those who have an excess from their garden, others to those who have small commercial crops. Although my experiences are limited to blueberries, the lessons are probably appropriate to a wide variety of produce.

Stalls at Markets and/or Roadsides

We used this method approximately ten years ago when our harvest was small and there was a very limited market for blueberries. We got a vendors permit and sold some on the side of the road. This was a wonderful opportunity to talk to new customers about how to use the fruit, but it was not very productive in terms of sales for the time spent. We sold only 20-30 punnets per day, but reading while we waited for traffic to stop was relaxing.

Selling at one of the weekend markets allowed us to sell greater quantities in a shorter period of time. One of the disadvantages of this method is the amount of packaging required, and the time needed to pack the products. The Health Department in the ACT has stringent packaging requirements. You should be able to price your product at or just below market value.

For small amounts, I would try market stalls first on the basis that the return per time period is greater and the costs involved are less. Probably neither of these methods are suitable for large quantities of fresh produce.

At Work or at Friends' Work

This method can be great if you have a reasonably large workplace where people meet regularly for morning tea -- schools and large public service departments are ideal. Quite often these workmates look on you as providing a service. The packaging may be more flexible than at a stall. We supply most of our fruit to these venues in 1 kg paper bags. We are on a "don't use plastic bags for fresh fruit" campaign.

This is our main method of selling other than PYO. Price the fruit just below retail but try and set a price and stick to it for the entire season.

RESTAURANTS, BAKERIES

Local restaurants and bakeries prefer to use local produce if it is available, as it is generally fresher and of better quality. Normally you would need to deliver regularly, usually once a week. Set a delivery time when the owner will be there and insist on payment on delivery. Most owners are excellent but a few feel their time is more critical than yours. (Editor's note: when Harold brought me this article, he also brought me some blueberries — he forgot to ask for payment).

Usually packaging arrangements can be more flexible than for fruit sold direct to the public. We have served a limited number of these establishments over the years, and still do. A small number of good regular customers is better than a large number of small variable ones. Set your prices midway between wholesale and retail. Delivery costs and delivery time can become quite an imposition.

Wholesale to Local Retailers

This is a good method to sell reasonably large quantities of fresh produce. Most retailers prefer a regular supply over a number of weeks; they expect you to be able to supply reasonable quantities and to give them sufficient notice (at least a week) if your quantities are going to be less. In our industry a week of rain makes it very difficult to supply in the quantities required as wet fruit stores poorly.

They will insist on your fruit being picked on the firm side, and will reject any soft fruit. It must be packed and labelled to the industry standard -- for us 12 punnets of 200 g in a packing box. There are a number of organic retailers in Canberra (at Fyshwick Markets, Griffith and Yarrowlumla shops, and the ANU). Conventional retailers will take your fruit if it is of high quality but will not pay the organic premium. All retailers will only pay a few cents above the Sydney Wholesale Market price for that item. Once again they pay in cash on delivery.

A good option well worth exploring when you have a steady supply over a fairly long season.

Sydney Wholesale Market

I have not sent any fruit to Sydney but most who do say it has been a disappointment. You need to make arrangements with an agent in Sydney to sell your fruit. The fruit needs to be sent in a refrigerated truck to arrive in Sydney in the wee hours of the morning. It works like a huge retail market with retailers moving about the wholesaler stall getting their week's supplies. You get what your agent manages to sell them for (less agents fees). Sometimes the prices are good but mostly you are lucky to cover freight and packaging. Only if you are desperate.

Pick Your Own

This is our main marketing method. We believe it gives our clients the best quality fruit and the opportunity to renew their bonds with the source of all their food. It saves on packaging and the time picking and packing.

Plants must be hardy as they do suffer some damage no matter how careful people are. Although children may cause more damage because they are less well coordinated, we welcome children as we see this as a particularly valuable experience for them. Blueberries are quite hardy and we look on the damage as summer pruning. You will also lose a quantity of fruit as people pick but most people go to great lengths to do the right thing. We encourage tasting as they pick as this teaches them which fruit is ripe and builds future customers.

You must have a good location near a large market and preferably on a main road or just off it. You must be prepared to spend large amounts of time, particularly in the summer sun, showing people how to pick the fruit and how they can best use it.

Persons in remote areas or small country towns will find this method difficult. We price the PYO at the price of bulk picked fruit (less the cost of picking). We believe that the savings on packaging more than offsets any damage or loss of fruit.

Subscription

This method involves providing a box of fruit each week to a regular group of clients. In some cases, an annual subscription is charged; in other cases, produce is paid for as delivered. In its original form, subscribers spent a certain amount of time labouring for the producer.

This method has the advantage of a consistent income over most of the year or if you use a subscription a guaranteed income in advance. However, with this goes the responsibility of providing a wide range of produce over the majority if not the whole of the year. This will severely limit the times when you can have vacations or get away. I have personally no experience in subscription farming but I believe Allsun Farm (Joyce Wilkie & Michael Plane) operates at least partially by this means.

Jams, Chutneys Etc.

This value adding method is the flavour of the month for a variety of producers. This allows you to make additional income on a limited amount of produce. Jams and the like can be sold at a variety of markets. Because the produce is preserved you have more flexibility when you wish to sell it -- for example, to produce an income at a time when there is no fresh produce.

The biggest drawback is that the jams must be made at a time when you are busy with a harvest. For any large quantity you will need to buy glass bottles; they will be clean and all the same size which will make labelling easier. Once again ACT Health regulations are quite strict on what must appear on the label.

These are some ways to make a profit from your produce. Which you choose will depend on your location, the size of your crop, the type of produce and your own preferences regarding such things as packaging. However, whatever you finally decide on, it is imperative that you consider the possibilities preferably before you plant your crop and certainly well before the harvest.

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Your Rural Correspondent David Odell



Summer Heat, Summer Rain, Makes a Summer Superseason

The Summer of '96, a Summer to remember for its lushness and its bounty. The very word sounds somnolent and sluggish but by its very nature it means planting, tending, caring and preparing for the harvest; a veritable round of tasks extending as long as there are daylight hours. What a contrast to this time last year when drought was the order of the day — the conditions then imprinting the fear that this present bounty could be snatched away and then things will be 'normal' again.

What a difference moisture makes -- adequate, well spaced, natural precipitation -- to even the most unpromising landscape.

However, for the present, we may enjoy this unique season but should not be beguiled by its transient beauty because now is the time to prepare for the next drought. Instead of being lured into thinking that more stock should be bought to utilise the extra feed I have actually reduced numbers to prevent over-grazing and have encouraged the incorporation of humus by slashing and discing where the conditions makes this feasible.

Now is a good time to make or buy hay and grains and to make sure that water storage is installed - my philosophy in regard to the latter being that if you put in twice as much water as you really want you will finish up with half as much as you really need!

So far approximately 1500 metres of trellis, 1.8 metres high, has been erected with the bottom wire, 300 mm from ground level, carrying the irrigation line with drip feeders installed every metre. By a system of gate valves water pressure can be applied directly by means of the petrol pump or indirectly by gravity pressure from the high-set water tank.

A simple ring cut from a piece of 25 mm poly pipe is used to slip over the ends of the lines, which are doubled over to seal them off, and which also provides a quick release method for flushing should the lines become clogged with sediment. The beauty of the system is that it is simple and that it works!

The joy of seeing the gentle drip of water precisely located to the roots of the tomato transplants can only be equated to the time the electricity was connected and the childish flicking of switches just to see the lights working! So many enterprises fail because water supply is inadequate - first make sure of your source of supply and then pipe it to where it is needed -- because without regular water the crop is subject to the vagaries of the weather and a piped system not only makes good sense but provides good insurance as well.

After much trial and error the trellis design for my limited area is based on the rows being 2m apart and for the grapevines to be set at 2m in each row. Each trellis will have two high wires set 300mm apart at 1.8m and 1.5m and two low wires at the 1.2m and 900mm marks and, of course, the dripline set at 300mm above ground level. When the grapevines are planted at their 2m intervals and the main stems have made the desired height each alternate vine will have its laterals trained to either the higher or lower wires thus ensuring room for growth, adequate sunshine for ripening and access for cultivation while at the same time making best use of the available space.

Until such time as the vines take over, possibly in two or three year's time, the alternate spacings can be utilised for vegetables in rotation, their weeding and cultivation not only benefitting the vines but also improving the soil and making best use of the drip irrigation.

At present, as well as the 400 tomatoes, I have planted dwarf beans (as a companion crop), a variety of curcubits and snow peas and a few other experimental plantings to test out the system. I'm finding that if I plant, say silverbeet, in clumps of 4-6 at 1m intervals around the drip area I'm getting the same production as I would in a continuous row with a great deal more ease in cultivation and weed control.

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Geoff Foster RMB 649 Gundaroo Road via Bungendore Phone (06) 238 1109 After applying for membership and requesting certification with the Biological Farmers' Association (BFA) and completing the Statutory Declaration I was visited by David Williams, their certifying officer, for a farm inspection and discussion. It's really delightful to be able to talk with a person such as David who is dedicated and committed to common principles but who also, somehow, manages to find the time to be involved with the wider scheme of certification and in helping individuals to feel that they can make a difference nationally to sustainable agriculture. I now have my certificate to state that I have been given Grade A status for all vegetables, dairy cows, grapes, poultry and eggs. David was so pleased with the look of my Isabrown chickens that he took six of them back to Breeza with him.

I managed to solve the problem of depredations by predators (mentioned in my last article) in a variety of ways. The crows which came in low like Stealth bombers to raid the nest boxes just to feed egg yolk to their young were frustrated when the hens were temporarily confined to their shed with their entrance blocked off and it wasn't long before the crows changed their habits (come to think of it perhaps the Stealth bomber was modelled on the crow).

The cockatoos took longer to discourage even after I stopped broadcasting the grain as they (or some) thought it their right to use the feed troughs inside the chook house after my back was turned but eventually they got the message.

I hadn't noticed the mice had gone until I saw the snake. I had surprised the metre long brown sunning himself (herself?) outside the cowshed as I came up to milk the cows -- in fact we were both startled -- but he looked the more venomous as he reared cobra-like and flattened his hood but quickly slid away under some discarded bags where he had the advantage. Was he just passing through or had he made his home there? I didn't feel comfortable as I milked the cows but nothing much could be done at that time as I was keen to get the cows back to their paddock before any snake-finding investigations could take place.

Was it prudence or apprehension that convinced me to allow the snake to get away under cover of darkness? In the event as I gingerly raked the bags away the next morning there was no snake to be found and, more importantly, I haven't seen him since -- but I've made sure since then that there is no rubbish left lying around which could provide a refuge which may encourage them to stay.

The fence-climbing fox posed a potentially time consuming problem if further losses were to be avoided and as I wanted to do the job properly but didn't have the time to devote to it then a simple solution had to be found immediately otherwise there would be no chooks left to worry about. The answer was Thompson.

Thompson had grown up with chickens and other stock and had appeared to be a rather nondescript, meaningless sort of dog; good natured but seemingly possessed of no outstanding characteristics. He had seen both his brother and his mother suffer from lead poisoning because of their liking for poultry so apparently he was able to learn fairly quickly but it wasn't until Jack disappeared that Thompson's true character was revealed.

He is a one man dog (and I guess that makes me a one dog man) and all the love that he had bound up within him was able to be lavished on me. I knew he always wanted to be a lap dog but this was impractical due to his size and his hard muscular frame and of course he had always been discouraged, even ridiculed, in his attempts to gain affection. But now that he had me all to himself he is able to come up behind me and unexpectedly lick my hand just to say, 'I'm here'. He's proved to be a good listener and will often give his own opinion when asked but also, surprisingly, has become very protective of me when visitors or strangers arrive putting on a very threatening attitude until reassured that everything is OK.

So Thompson (and his kennel) moved into the chook yard for night patrol and faced with such a devoted and protective adversary the fox must have decided to go elsewhere because the chooks have been safe since then.

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Summer too has encouraged me to change my routine in order to avoid the heat of early afternoon. Previously by the time the milking was done and the usual morning chores completed the best part of the morning had gone leaving only a couple of hours for the garden before knocking off for lunch. Then usually it was too hot to make a start again until early evening and that didn't leave much time before dark so it was easy to procrastinate and not be really productive.

As I milk only once a day there was no practical reason why it had to be done in the morning -- there was no milk tanker waiting to pick up my production quota -- so I decided that afternoon milking was just as feasible (this also had its advantages during the festive season). The cows didn't mind this change of routine but it did take me a little while to get used to it so now its a matter of having a full morning in the garden, a break until about 4 o'clock when the cows are milked (in the shady shed) and routine chores are finished still leaving possibly another couple of hours in the garden before dark.

Breaking the work day into two parts certainly has its advantages for personal comfort but more importantly it's being 'sun smart' in avoiding too much sun during the hottest part of the day.

It was interesting to hear recently that Jerseys as a breed are enjoying something of a resurgence. I've always advocated them as the ideal house cow, but dairy farmers are now finding that in their previous haste to produce bulk milk there has been a serious loss in quality and are now looking to Jerseys to rectify that loss either through the inclusion of them in the herd or by cross breeding.

So I was rather fortunate recently in being able to get a pedigeed heifer from my old friend Basil Alcock at his Crystalbrook stud in Bemboka where he told me that seven people were on a waiting list for his heifers with one farmer wanting 50 of them for his herd. As I only wanted one my request was a little easier to fill and I was very pleased with the one I got as she is a calf with a lot of potential and is now doing well after an initial tummy upset which I put down to the heat and the journey home. Her stud name is Mistletoe which sounds a bit parasitic but its too late to change it now so Mistletoe she is!

Affer has left his mark on my little herd (remember Affer Bull?) now gone to the great hambuger in the sky, but not forgotten. Buttercup produced one of his sons which looked likely as a vealer but has blossomed into a potential herd sire. Not only did I think he had potential but Abigail adopted him as well on the supposition that as she was the herd matriach she had the right to rear the Crown Prince. So 'Rockyglen Wham Bam' (so named because his brother was called Bam Bam) had the best of both worlds and grew sleek and handsome. Now that he has been weaned it is Abigail who bellows in reply to his protests.

In spite of Buttercup's initial reluctance she allows Mistletoe to suckle and this saves me time on two counts feeding and milking - and which also ensures a healthy, naturally reared calf.

One cow I didn't expect to be milking was Abigail's heifer from Affer's first drop as she proved to be in calf to her own father. Jerseys have always enjoyed early maturity as one of their attributes but I was unaware in this case she had commenced to cycle as on counting back she could only have been seven months of age and had always been a tiny thing. However when she had difficulty in calving it was necessary to call the veterinarian to compete the birth -- the calf was dead -- and for a while there were fears that Little Mary wouldn't make it either but a week later when she was well enough to put her foot in the bucket at milking time I knew she was on the mend.

Affer had been with me for two seasons so this time I thought that perhaps an infusion of Canadian genetics would be an advantage through A.I. After talking to the local vet. I was to give each cow two hormone injections ten days apart and after the last one he was to come within 72 hours to do the actual inseminations.

The secret of intra-muscular injections, is do not hesitate because even the quietest and most gentle of cows will object very strongly so make sure that they are well restrained. I made the trip to Bundanoon to the Bovine Semen Centre to pick up the straws in a special container that kept them frozen in liquid Nitrogen, three top Jersey sires (two of each in case of mishaps), two Watusi (just for fun) and one Dexter (for Little Mary). Of the six cows inseminated I think only Buttercup has missed out as she will need to be done again.

The Canberra Show will provide COGS with the opportunity of reaching a wider community in showing and demonstrating the advantages of sustainable lifestyles and I look forward to meeting with some of you there, especially on Friday 23 February in the morning when I am to give a talk on Backyard Poultry.

Now I come to think there hasn't been any rain for the last three weeks - does this mean that the drought has begun?

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PESTS AND ORGANIC GROWING

by Elizabeth Palmer

A wise man once called insects and diseases the best professors of agriculture. Pests tell you when you are being right by their absence and when you are doing wrong by their presence

Eliot Coleman "The New Organic Grower"

The problem of how to deal with pests is one of the first questions asked by those planning to "go organic".

Most of us have grown up with the idea that the best way to produce pest-free vegetables is to find an appropriate poison to kill off the intruders. This attitude of course has been fostered by successive Departments of Agriculture and by a variety of chemical companies, which over the last 40-50 years have recommended a number of lethal cocktails to be applied to plants and soil.

Organic growers however argue that the health of the plant is the critical factor in sound pest management, and that weak, unhealthy plants succumb very readily to pest infestation, while those plants which are strong and healthy are less likely to be attacked. They believe therefore that the best way to deal with pests or disease is to stand back and evaluate the situation to decide where the problem really lies.

If we are having a pest problem with our tomatoes for instance, instead of immediately looking for an appropriate spray (highly toxic or even at the lower end of the toxicity scale), let us examine the reason for the pest attack.

How healthy are the plants? How vigorously are they growing? Does the soil have sufficient compost and organic matter to produce healthy plants? Is the location we chose the best one for good results -- does it get the necessary amount of sun, and is there sufficient protection from wind? Were the tomatoes planted at the correct time of the year for our district? Has the watering been too much/too little and is there sufficient drainage for this type of plant?

All these are factors which affect the health of our plants, and pests/diseases are not slow to take advantage of any decline in that health. It is not too dissimilar in the case of humans: people who are 'run down', not eating properly or severely stressed will more easily succumb to viral and bacterial attacks than those who are strong and healthy.

HOW CAN WE GROW HEALTHY PLANTS?

1. SOIL This is the *most important* factor in producing pest-free vegetables. <u>DO NOT</u> go to the nursery to buy an armful of chemical additives to apply to the soil. Build up your soil in the ways outlined in the companion brochure: 'What is Organic Growing?'. (*Note: this brochure also by Elizabeth Palmer is available from COGS - ask at our General Meetings*) You will then ensure that your soil will be the best possible medium for producing healthy plants.

2. CROP ROTATION This is just what the name suggests: varying from one season to the next the type of crop planted in each garden bed. In other words, don't plant the same type of vegetables in the same place in successive years. It is a system which farmers used for hundreds of years prior to the agricultural chemical revolution of 1940/50s, but it has now been largely discarded, to be replaced by chemical additives.

Rotating your crops has a number of advantages:

- a. It interrupts the disease/pest cycle by discouraging a number of fungi and diseases which may be endemic to specific crops. If successive crops of the same family are planted, similar diseases will flourish. It's important to realise however that a number of different plants belong to the same family. For instance, cabbage, cauliflower, broccoli, brussel sprouts are all brassicas; tomatoes, eggplants and capsicums are all solanum fruits; cucurbits cover cucumbers, melons, pumpkins and zucchinis; while peas and beans of all varieties are legumes.
- b. Different crops extract different nutrients from the soil. Planting successive crops of the same family therefore will not give the soil enough time to build up depleted nutrients. Rotating crops overcomes this problem.
- c. Since crops have different growing needs, crop rotation enables you to tailor those needs to obtain the best from the soil. For instance, legumes fix nitrogen in the soil from their roots. It makes sense therefore to follow a crop of legumes by brassicas which are gross feeders of nitrogen. It also makes sense to follow the brassicas with a root crop such as carrots which do not require such highly nutritious soil.

There's no hard and fast rule about rotation of crops. Decide on your needs and then tailor your rotation to those needs and to your available garden beds.

- 3. PLANTING TIME Make sure that you have an efficient planting calendar for this region. Late and early frosts can play havoc with the health of your frost-sensitive plants, and even though they may survive, they are generally less healthy and therefore more prone to disease and pests.
- **4. WATERING** It's wise to install an efficient watering system, one which waters deeply to encourage deep root growth. For this reason, a dripper system is very effective for a number of vegetable plants. For instance, overhead spraying on pumpkin and other cucurbits may cause fungi on leaves; and the fruit of capsicums will often rot on the vine if water from overhead spraying continually lies on the fruit near the stem.

OTHER FACTORS IN PEST MANAGEMENT

1. PREDATORS Encouraging natural predators is a very effective way of dealing with pests. Blackbirds for instance will forage under mulch for baby snails and snail eggs; ladybirds will feast on aphids; spiders will deal with a wide variety of insects; predator and parasitic wasps are particularly valuable for their ability to paralyse or parasitise a variety of larvae, including those of the white butterfly into which they inject their eggs; centipedes will compete with blackbirds in eating snail eggs found under mulch; and the young of the praying mantis will happily feast on small cabbage riddler moths. The list is almost endless.

Once you introduce poisons into your garden however you'll lose all these friendly predators along with the unwanted pests and so you'll have to rely more and more heavily on pesticides.

One way to encourage natural predators is to plant a variety of colourful flowers amongst your vegetables. These will attract a whole variety of predators, which in turn will feast upon your pests -- a simple and colourful method of pest control.

- 2. HERBS AND FLOWERS AS PEST DETERRENTS Growing some herbs and flowers in between your vegetables is another technique you can use in your pest management regime. For instance, French marigolds will deter a number of unwanted bugs, including nematodes and white fly, and at the same time their bright flowers will attract bees to your garden. Sage will help to protect against the cabbage white butterfly, and rosemary will do the same against the carrot fly. Plant garlic in between your brassicas to deter not only the cabbage white butterfly, but other flying insects. There are many varieties of mints -- peppermint, spearmint, eau-de-cologne -- and they are all useful in deterring bugs, aphids and the larvae of the white butterfly in particular. Since mint roots are very invasive however, it's better to grow them in pots which can be moved around between your plants as needed.
- 3. SNAILS/SLUGS One of the most persistent pests in the vegetable garden is the snail/slug which attacks young seedlings before they've had a chance to grow into healthy plants. To counteract this you can:
- a. Trap them in small containers filled with a 50/50 mixture of stale beer and water. Sink these into the soil in strategic spots near your seedlings. Snails find the mixture irresistible, and dead snails can then be disposed of next morning.
- **b.** Dispose of them yourself after rainy weather when they are very visible; alternatively, inspect dark corners in your vegetable garden from time to time. You'll soon get to know their favourite daytime hiding places, and once again you can then deal with them.

LAST-RESORT PEST MANAGEMENT

If all else fails, there are some measures which you can take to cope with problem pests.

- 1. GARLIC SPRAY This can be useful for aphids and caterpillars. You can buy it commercially, or make it yourself. Crush some garlic, soak for several days in a small amount of liquid paraffin, mix with water (about 600mls) and a small quantity of soft soap (to enable it to stick to the leaves). Dilute with more water before spraying. Experiment to find out the best strength for your needs.
- 2. PYRETHRUM This is a contact spray made from the pyrethrum daisy (Chrysanthemum cinerariafolium). It will kill a variety of bugs, caterpillars, aphids and other insects with which it comes in contact. Be careful however because it will also kill friendly predators such as ladybirds. Make sure therefore that none of these is present when you spray. Pyrethrum will generally break down completely within two days, but as it does not kill the eggs of insects, a repeat application may be necessary. It's better to spray in the evening when bees are not active; in addition, if sprayed during the day in strong sunlight you may find that it causes some burn damage to some of the leaves.
- 3. DERRIS DUST (Rotenone) This insecticide is more powerful than pyrethrum and will be effective for a longer period. It should be used with great care however, because it will also kill earthworms if they come in contact with the powder. It can either be used as a dust on the leaves, or mixed with water and soft soap and sprayed on the plants in the normal way.
- **4. DIPEL** (*Bacillus thuringiensis*) This is a useful bacterium because it attacks only the larvae of the white butterfly. Spray on the brassicas if the larvae are in plague proportions, but remember once again it is a *last*, not a *first* resort.
- 5. DEFENDER (Metaldehyde) Snails/slugs prefer to eat these pellets rather than your seedlings, so they will give effective control if necessary. It is lethal to pets however, could make small children very ill if it's ingested, and may kill worms and other friendly predators if it comes into contact with the soil. To minimise these problems, you can use old margarine containers, complete with lids. Cut out a number of doorways on the sides of the containers,

insert some pellets and place in strategic places in the garden. This will avoid the poison contaminating the soil, but pets and small children could still be at some risk.

CONCLUSION

One of the exciting aspects of organic growing is that it is very easy for us all to do our own experiments. This applies particularly to pest control management. Try different combinations of herbs and flowers in your vegetable garden and make a note of what works so that not only can you use that technique next time, you can also share your new knowledge with other organic growers. Much of the information on pest control techniques has come from just that type of experimentation by 'ordinary' people. The observations of individual growers, as to what works and what doesn't, can add to the sum total of all our knowledge.

Read books by those who have conducted their own experiments on pest control and who are now sharing their knowledge with other organic growers. One such book is by Jackie French, *Natural Control of Garden Pests*, AIRD Books, Victoria, 1990, but there are also others to be found in libraries and bookshops which are well worth reading.

"What I am proposing is a totally revised way of thinking for the proper understanding of agriculture. We need to develop a biologically-oriented thinking that sees our agricultural efforts as participatory rather than antagonistic vis-a-vis the natural world. It isn't a question of whether pesticides are undesirable or not. The fact is that they are totally superfluous. They were devised to prop up an agro-industrial framework that was misconceived from the start. When you abandon that framework, you can abandon its superficial thinking pattern. Don't start with industrial theory and try to "naturalise" it. Start on another plane entirely. Study the established balances of the natural world in order to learn how to nurture and enhance those balances for agricultural production. Pay attention to the existing framework of pest-plant relationships and learn how food production can be achieved through biological diplomacy rather than chemical warfare. The potential of such a new understanding is as yet undreamed of."

Eliot Coleman "The New Organic Grower"

NATIONAL STANDARDS FOR ORGANIC AND BIODYNAMIC PRODUCE

For the readers interest, and to follow on from the previous article, the following reprint lists the materials approved in an organic system to help control pests and diseases as determined by the Organic Produce Advisory Council, the government which sets standards for export of organic produce. Please note that, as in the previous article, growers are urged to be cautious in their use of these substances:

"C. Approved Materials for Plant Pest and Disease Control

The reliance on substances rather than management practices for the control of pests and diseases is not in accordance with organic farming principles. Caution needs to be exercised even when using products derived from natural sources as they are not necessarily non-toxic.

Some of the approved materials are selected for their short life in the environment and may not always be of low toxicity.

The following substances are permitted for use in an organic system:

Pyrethrum* extracted from Chrysanthemum cinerariaefolium, without piperonyl butoxide

rotenone extracted from Derris elliptica

Quassia extracted from Quassia armara

neem oil and extracts

ryania extracted from Ryania speciosa*

propolis

diatomaceous earth in non-heat treated form

Stone meal

Metaldehyde baits in traps or enclosed from the environment

baits for fruit fly as required by statutory regulation. Baits must be fully enclosed within traps.

Bordeaux mixture, Burgundy mixture and other forms of copper* (hydroxide is the preferred form except for Bordeaux on dormant tissue)

sulphur in a wettable or dry form

sodium silicate (waterglass)

sodium bicarbonate

potassium soap (soft soap)

biological controls (naturally occurring organisms and approved cultured organisms such as Bacillus thuringiegis)

pheromones

granulose virus preparations

essential oils

light mineral oils

seaweed, seaweed meal, seaweed extracts, sea salts and salty water

homeopathic preparations

natural plant extracts, excluding tobacco, obtained by infusion and made by the farmer without additional concentration such as garlic extract, etc, and used as a repellent, antifeedant or pest/disease control

potassium permanganate*

carbon dioxide and nitrogen gas

vinegar

Caution needs to be exercised with respect to wetting agents which may be contained in some commercial formulations of the above products. Acceptable weeting agents include seaweed products, and vegetable oils such as coconut oil.

^{*} The products identified above by an asterisk (*) are toxic and should be used with care and with adequate safety precautions. Use of any of these products must be recorded in the farm diary or a logbook and repeated use must be only under the surveillance of an approved certifying organisation."

The Internet Column

By John Allen

Email: jallen@pcug.org.au

COGS WWW Home Page URL: http://www.pcug.org.au/~jallen/cogs.htm

If you are on the Internet, and you haven't yet let me know, send me a message and say hello!

We currently have 10 COGS members on the Internet. The COGS Home Page has been accessed 1160 times since 24 October 1995

New Information on the COGS page:

- WWW link to Agricultural News and Publications 1995 Home Gardening Packet
- Reference to local www directory (ACT On-line) to the About Canberra page
- WWW link to Donald Firsching's Chicken Page
- WWW link to Bay Area Permaculture Group Web Site
- WWW link to North Central Institute for Sustainable Systems
- WWW link to Permanent Publications
 PERMACULTURE
- WWW link to Robinvale Wines (Victoria)
- Tasmanian Organic-Dynamic Producers Co-Operative
 Inc. added to list of other organic growers' organisations
- New article Organic Fruit Fly Control
- WWW link to Companion Planting Clues
- WWW link to Compost Resource Page
- WWW link to CAN-O-WORMS
- WWW link to Worms On The Loose
- New article Papaya Fruit Fly Invasion

My interesting site this month is from Montreal. The article is reprinted by the kind permission of Sean Cosgrove.

http://unixg.ubc.ca:780/~cityfarm/Montreal13.html

Urban Agriculture Notes - City Farmer: Canada's Office of Urban Agriculture Montreal's Community Gardening Program

By Sean Cosgrove

From his presentation to Habitat 94, Edmonton, September 20, 1994, as reported in Cities Feeding People: Urban Agriculture and City Planning in North & South.

Introduction

The Island of Montreal, with a population of 2 million, has one of the best community gardening programs in North America. Community Gardening Profile Montreal began its community gardening program in the post-OPEC 1973 period, like most new wave community greening programs. Montreal has a very extensive, well-organized and supported community gardening program.

Metro Montreal includes 15 municipalities which support over 100 community gardens. The City of Montreal maintains the most by far, and has some 75 garden sites, in many sizes, containing 6654 allotment plots. The largest garden site has 255 plots.

I am going to speak mostly about the City of Montreal program. Their program is run by the Department of Recreation, Parks and Community Development. Soil, manure, fencing, water, tools, toilets, clubhouse/toolsheds and ongoing maintenance are provided by the City. In addition, there are five paid horticultural animators who are responsible for a group of sites. These resource people answer any horticulture inquiries, work with the executive of each garden group, and report on any maintenance problems. Maintenance is then provided by the Public Works Department.

History

In the early 1970's, Italian and Portuguese immigrants in North Montreal were guerrilla gardening. Noticing this, the City tried to regulate the activity, and these regulations began to formalize a process to permit and organize community gardens. The City soon found itself stuck in a competition as neighbourhoods and groups fought to get land for gardens. The community gardens then found a political champion at the Montreal Botanical Garden in Pierre Borque, who sheltered the fledgling program under his wing. There was a great expansion until the program grew so large that administration bogged down. A complete review of the program by the City of Montreal took place in 1985, the year of the departure of Montreal's long serving boss-mayor Jean Drapeau.

The review was very significant and resulted in the establishment of clear policies for the establishment and operation of the gardens. The review mandated that all gardens use organic methods. It created the role of horticultural animator to help ensure a transition to organic gardening.

The Department of Recreation and Community Development was given over-all responsibility for the program. They co-ordinate several other Departments who work on different facets of the program. These include: Habitation & Urban Development; Provisioning and Buildings: Public Works; and Planning and Policy.

Current Situation

The community gardening program is especially popular with senior gardeners, age 55 and over. They are the majority in 39 gardens (and in 2/3 of the largest gardens). There is a multi-cultural presence in many gardens, and eight gardens have a majority of neither "anglo" nor "franco" citizens.

The gardens are very productive and have a long waiting list. Inscriptions cost \$5.00 per year and solicitations are sent out in the monthly hydro bill. The City could site 12 new gardens on the basis of their waiting list of 25%.

Every gardener must agree to the rules of the garden program, such as the insurance stipulation. Insurance is provided in the City program. Gardeners are grouped in lots of 10 or 15 for insurance purposes. There is some flexibility in respect to how each garden is organized. Gardeners must grow, however, at least five different types of vegetables. They are now being allowed to grow flowers in the common areas along the fenced borders.

Many of the sites are on institutional land. Montreal relocated 12 gardens (1986-89), at a capital cost of \$400,000. They estimate costs of \$20,000 for the establishment of a new garden site of 90 plots. There is official community gardening zoning for 13 garden sites. 22 gardens are situated in City parks.

This is by far the largest, best organized program in Canada, owing, no doubt, to their community development goals and objectives. They are planning strategically to improve the program.

Key Challenges in the 90's

In the 90's the program has conducted composting experiments in one-third of the gardens, is donating food to community kitchens, and is ensuring better access for disabled gardeners. It has also suffered funding cuts and has lost half of its important horticultural animators.

Other challenges that the program faces are the permanence of garden sites, finding land for new gardens, expanding existing ones and replacing gardens that have been lost to development. Also needing to be resolved is inter-departmental confusion about the availability of resources and each department's working role.

Future

Pierre Borque, community garden champion and a 30 year veteran of Montreal's civil service, was recently elected Mayor of Montreal. "Bourque has earned a reputation as a builder, be it the Biodome, Botanical Gardens, or dozens of parks he's helped create or improve during his tenure as the City's chief horticulturist and associate director of parks." His victory could mean more resources for community gardens. He has already called for more horticultural therapy projects in the City.

Sean Cosgrove of the Toronto Food Policy Council is a Board Member of the American Community Gardening He wrote Metropolitan Agriculture in Association. Victoria B.C. in 1990 as a Master's Degree Project for the Faculty of Environmental Design at The University of Calgary.

From the Editor (of the conference papers)

In 1977 a classic gardening film titled The Vacant Lot featured a Montreal community garden. This 16 minute National Film Board of Canada production is still available as part of a compilation video named The Plot Thickens, along with two other Canadian gardening shorts.

The Vacant Lot

The charming story of how a group of 176 senior citizens transform a useless vacant lot in Montreal managed to into a garden of delights - vegetables, flowers, and parties. It has completely changed their attitude about inactivity and retirement.

My Urban Garden

In a backyard plot the size of a living room, Halifax gardener Carol Bowlby grows enough vegetables to last a family of five for seven months. Her wealth of practical information will delight and inspire.

Tara's Mulch Garden

Explains the techniques and processes whereby a bumper crop of vegetables can be produced without machinery, soil preparation or weeding.

All available from:

The National Film Board PO Box 6100 St. Centre-Ville Montreal, Quebec, H3C 3H5

E-mail us at: cityfarm@unixg.ubc.carevised March 22,1995

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BOOK REVIEW

By Joyce Wilkie & Michael Plane

THE NEW ORGANIC GROWER: A Master's Manual of Tools & Techniques for the Home and Market Gardener.

Revised & Expanded Edition Chelsea Green, Vermont, 1995. pp 340 RRP \$39.90

In the six years since Eliot Coleman submitted the original manuscript for the first edition of the 'New Organic Grower', he has travelled to Europe again, spent a month running workshops with Australian organic farmers, and continued to develop and refine his thinking. He has benefited from suggestions of those who read the first edition of the book and wanted more information on certain subjects or who wanted data on areas he did not cover. He has reviewed new equipment options and in some cases he has finally made up his mind, by acquiring more information, on points where he was previously ambivalent.

Eliot Coleman summarises his reasons for writing this book in the preface to the first edition and as reviewers we can do no better than to quote him;

"I strongly believe in the values and rewards of the small farm. I wish to encourage them. And so this book is written for those with a small farm dream. But it is also has a wealth of ideas to offer the serious home gardener. The efficient, professional techniques described here are basically scale neutral and can be used to make everyone's vegetable growing more productive and enjoyable. And who knows? The best home gardeners often move up to become small farmers."

What he has done is written a clear, precise and also entertaining manual for anyone interested in growing organic vegetables. Don't be deceived by his easy to read style, this is an extremely well researched and thorough book written by a bright, innovative vegetable grower, with a wealth of experience, over a thirty year period, as a commercial market gardener, the director of agricultural research projects and teacher and lecturer on Organic Agriculture.

The book is a clever combination. It is both a first hand account of Eliot Coleman's own experiences and also a step by step practical guide to vegetable growing on any scale from domestic to commercial. The topics covered range from selecting land, through growing practices to marketing. Throughout the book a philosophy of farming is developed and emphasised, Coleman is concerned with

the health of the soil and his plants but he also cares about the farmer and his customers and the quality of the produce. His frankness is refreshing - his rule is that if he doesn't know how to do something he says so and refers the reader to a good source. The book ends with the most comprehensive, innovative and interesting annotated bibliography we have ever seen.

This is not just another North American book on organic vegetable growing. His 30 year apprenticeship shows through and his experiences with North American, European and Australian growers are skilfully incorporated to make this a universal manual for cool and warm temperate farmers and gardeners. Given that you have enough reliable water, most of the suggestions in this book can be applied to growing vegetables in temperate N.S.W. the A.C.T. Victoria, Tasmania and all of New Zealand. Most of the equipment needed is either now available in Australia or can be built with a little work and innovation. Some Australians have used the first edition of the book as a blue print and have found his ideas on crop selection, crop rotation, green manures, undersown legumes, soil fertility maintenance, composting, seeding, potting soils, soil blocking, transplanting, harvesting, marketing, season extension, and incorporating livestock, all work extremely well.

Coleman's desire in creating and revising the book was that it prove useful. When he had finished writing the first edition he said to himself. "I wish I'd had a copy of this when I started 25 years ago" He still feels that way 30 years on. It is rewarding for him to be able to pass on dependable information that he has gleaned from farmers around the world, dug out from obscure sources or devised on his own. He sees coherent patterns in natural biological systems that can be adapted to producing the highest quality vegetables and hopes that the book makes those patterns more accessible. As people who has used the first edition of the book extensively, attended workshops run by Eliot, visited his farm and helped with the revised edition we can recommend it most highly, indeed we believe it is the most important text written on this subject since the 1950's and wish we had had a copy when we started.

Available from; Gundaroo Tiller and Acres Australia

LETTER TO THE EDITOR

39 Lewin St., Lyneham

To the Editor, COGS Newsletter, Dear Sir,

WHITHER COGS?

It is nearly 20 years since the first moves to establish the Society were made. During the past two or three years the direction of COGS has broadened from its original philosophy of education, information and the community gardens, and is now concentrated upon small-holdings, farms, horticulturalists and so on, and Certification as commercial organic producers and properties. It has taken most of the last 20 years to reach this stage of public and Government acceptance and there is still further to go before all primary agricultural produce throughout the country is organically grown. The Federal Government is now involved and the idea has become "mainstream". Overseas it is even more advanced.

I would like to suggest that if COGS is to continue concentrating on the small/medium farmer, many of whom live around Canberra, and encouraging the Certification of properties or produce, raising and maintaining standards of organic growing, then it should relinquish the gardens. The community gardens could then join together as a separate group, as Canberra Community Gardens or some similar identifying title. As a united, single purpose group the policy, stated years ago, of eventually having the ACT Government provide space for gardens in all new suburbs, as well as some older ones, could be pursued. Overseas it is now compulsory in some countries to provide such gardens or allotments in their area so that people can grow much of their own food.

It would also be possible for the existing gardens to present a united front direct to the Government re land tenure, rates or whatever applies, to ACTEW re water, and to any other authority as the need arises. And the garden members could have much more communication and cooperation with each other, to the benefit of them all.

It does not seem possible for COGS to engage successfully in both spheres of interest. Each is very demanding. One is very strictly local in scope, while the other is much broader and covers a far wider spectrum. Each has long-term goals, which should be pursued as keenly as ever. I feel, in this regard, that perhaps COGS has outgrown its gardens. I wonder what other members think?

Yours Faithfully, Gay Baker

COGS LIBRARY

At the end of last year, Committee members undertook an audit of our library holdings. It seems that a substantial number of books are either missing or borrowed and long overdue.

PLEASE could you check, and double check, your book shelves to see if you have forgotten to return a book?

If you can't come to a general meeting, contact

Betty Cornhill 249 8323 (Northside) Michelle Johnson 231 6219 (Southside)

to arrange to return the book.

The library is a valuable resource for COGS members, and we do want to keep on updating our holdings, but we cannot continue to spend money if the books are simply going to "disappear"!

Because of the number of overdue books the library will be closed for borrowings at the February and March Meetings.

NEW MITCHELL COMMUNITY GARDEN!

By Michelle Johnson

Recently a number of very enthusiastic and committed people have formed a steering committee to plan a new Community garden in the North Canberra area. Following representations to the COGS Committee, the COGS Committee has endorsed the establishment of this garden which will operate under the auspices of the Canberra Organic Growers Society.

The proposed site for the new garden is in Mitchell, and the Garden Committee are currently determining the layout of the garden and planning its establishment, hopefully in time for the next growing season. COGS is exploring ways of funding this new garden, and the COGS Committee has decided that the assets of the current Watson Garden will be transferred to Mitchell when the Watson garden closes at the end of June this year.

We are all hopeful that this garden will be a wonderful place for members to grow their own fresh organic produce in a friendly, cooperative environment, where members can share their knowledge of organic gardening and participate in garden activities ie make it a real community garden. With the commitment of the steering committee the garden is off to a good start! Already a number of the plotholders at Watson have indicated that they want to join the new garden.

John Tuxworth, the convenor of the garden, has supplied the form below for those members interested in the new garden:

IF YOU WISH TO BE ACTIVELY INVOLVED IN THE NEW NORTH CANBERRA GARDEN PLEASE COMPLETE THIS NOTE AND RETURN TO

THE CONVENOR: JOHN TUXWORTH 150 MAJURA AVE. AINSLIE 2602.

YOUR NAME	
ADDRESS	
CONTACT PH	
No. OF PLOTS {25sqm each}	Max 4
CAN YO	OU ASSIST BY:
JOINING WORKING BEES	Y/N
STEERING COMMITTEE	Y/N
PLANNING NEW GARDEN	Y/N
OTHER ACTIVITIES	Y/N.

PROPOSED CONSTITUTIONAL CHANGES TO BE APPROVED AT THE AGM

By Michelle Johnson

In September 1992 a new Constitution was ratified by COGS members. The new Constitution was necessitated by changes made to the Incorporations Act in the ACT, which made alterations to our old constitution obligatory.

Since then the new Constitution has served COGS well and is, I believe, a good one. However there are a couple of areas where I believe changes should be made, and these proposed changes (given below) have been agreed to by the COGS Committee and will be put up for your agreement at the AGM on the 26th March, 1996.

 Under the current Constitution at the AGM members elect 5 office bearers and up to 8 ordinary Committee members. There is no specific mention of the election of the Editor or Librarian. We believe these positions should be specifically voted upon. This would mean that members elect 5 office bearers as before, a Newsletter Editor, Librarian and 6 ordinary Committee members.

We are not suggesting a change in the size of the Committee.

To achieve this change, the following alterations must be made:

Alter

Rule 12(1) of the Constitution to:-

The Committee shall consist of-

- a) the office-bearers of COGS; and
- b) the newsletter editor and the librarian; and
- c) no more than 6 ordinary committee members;
 each of whom shall be elected pursuant to rule 13 or
 appointed in accordance with subrule(4)

Alter

Rule 13(1) to:-

Nominations of candidates for election as office-bearers of COGS, or newsletter editor, or librarian, or as ordinary Committee members shall be made in writing, signed by 2 members of COGS and accompanied by the written consent of the candidate (which may be endorsed on the nomination form).

Alter

Rule 13(6) to:-

The ballot for the election of office-bearers, newsletter editor and librarian and ordinary committee members shall be conducted at the AGM in such a manner as the Committee may direct.

Alter

Rule 15(5) to:-

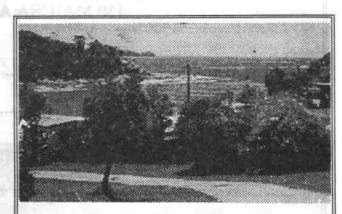
Ordinary Committees shall perform such duties as the committee from time to time may determine and assist in the furtherance of the objectives of COGS in whatever manner the committee determines.

2. As well as the changes listed above the Committee recommends a change to the quorum for Committee meetings. Currently the quorum is simply 7 Committee members. From experience over the past three years we have found that we rarely have 13 people on our Committee as allowed for in the Constitution and when some Committee members cannot attend meetings because of illness or absence or other committments we have struggled to make the quorum. It would be much easier if it was smaller, so we recommend the following:

Alter

Rule 18(5) to

A quorum for the transaction of the business of a meeting of the Committee shall be any 7 members of the committee, or if at any time there is less than 7 members of the committee present, but not less than 5 members of the committee present, a quorum shall be constituted provided 3 members of the committee present are office-bearers of the committee.



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VACANCIES NOV-MAR

* BRASSICAS

Late plantings of Brassicas in March may be successful, but usually Summmer plantings are more reliable. It is too late to grow from seed. Take care too with the varieties chosen eg it is too late to plant savoy cabbages, but the smaller ball-headed varieties should be successful.

* PEAS

Sugar snap peas may be sown in early March for a Winter harvest, but the crop could be lost if there is an early severe frost affecting the blossom. Peas sown later in April-May will be ready for a Spring harvest.

* LETTUCES

Only plant Winter varieties of lettuces (cos, salad bowl, oakleaf, butterhead and mignonette varieties)

* ONTONS

Early varieties can be sown in April to early May, to be harvested late Spring to early Summer. Mid season varieties are often sown late Autumn Winter early longkeeping varieties in Winter. However, timing of mid or late season varieties is well worth experimenting with by making successive plantings to determine the best time in your specific locality.

*LEEKS

Leek seedlings may be planted early March for small leeks in Winter, although plantings are more reliably made in Summer.

AUTUMN VEGETABLE PLANTING GUIDE

	MAR	APR	MAY
Broad Beans		S	S
Broccoli	T		
Brussel Sprouts	T		
Cabbage	T		
Cauliflower	T		
Chicory	ST	T	
Chinese Cabbage	T		
Corn Salad	ST	T	
Endive	ST	T	
Garlic		S	S
Kale	T		
Kohlrabi	ST	T	
Leeks	T		
Lettuce	ST	ST	
Peas	S	S	S
Onions		S	S
Turnips	T		

S = Seed Sowing T = Transplanting

NB This table is a guide only, please observe the seasonal weather patterns before deciding when to plant, as there will often be distinct differences in weather from one year to the next. The microclimate of your garden will also influence the times when you plant.

* SPRING FLOWERS Remember that many Spring flowering plants are best planted in Autumn, so that they can establish before Winter cold, and then start growing in the early warmth of Spring. Stock and poppies can be planted from seedlings in March and perhaps early April, others such as Virginia Candytuft, Larkspur and Sweetpeas can be sown direct throughout Autumn.

* GREEN MANURES Autumn is the time to plant green manure crops, which can be dug in in Spring, at least 4-6 weeks prior to planting your Summer crops.

Benefits of green manure crops are:

a) they provide valuable nutrients for successive crops
b) they provide organic matter for soil microorganisms to break down,
c) they provide soil cover in Winter and d) they help aerate the soil.

Crops suitable for planting in Canberra are:

Legumes:
Broad Beans, Field

Broad Beans, Field Peas, Lupins, Sub Clover, Tic Peas, Vetch

<u>Non-Legumes:</u> Barley, Oats, Rye

NB. Legumes are very useful as they fix nitrogen in the soil.

Flowering crops need to be dug in before flowering, cereal crops before producing a head of grain.

COGS NOTICEBOARD

FEBRUARY GENERAL MEETING:

Tuesday, February 27th at 7.30pm at the Griffin Centre, Room 4.

A HARVEST NIGHT

Instead of our usual speaker at this meeting we are asking COGS members to bring along some produce from their garden, or plants, or whatever you would like to show to other members. A show-and-tell. It can be something new you've grown or just something you've grown very successfully this year. We will have a display table ready and we would like to see it overflowing. We also hope some members will tell us about what they've bought, however if you don't want to stand up and talk we can label your produce on the display table (but it is a friendly gathering so please participate.)

MARCH MEETING: AGM

Tuesday, March 26th at 7.30pm at the Griffin Centre, Room 4.

This is our Annual General Meeting, so come along. All Committee positions will be declared vacant and elections held for the new Committee. Please consider joining the Committee. Nomination forms will be available in the March Flier. The current COGS Committee also recommends some minor changes to the Constitution (see page 24), so please consider these beforehand, as these will be put to a vote on the night.

After the AGM, Jackie French will talk to the meeting.

Members may return library books at both the February and March meetings, but the library will not be open for borrowings. (see page 22)

Next Committee Meeting: 19th March, Tuesday 7.30pm, Environment Centre.

An important agenda item at this meeting will be the subject of grant submissions for this year. If Garden Convenors are interested in COGS applying for a grant on their behalf could they come to this meeting or submit a written proposal to the Committee beforehand. Convenors could ring Michelle to discuss these grants.

<u>Please note</u> that all Committee Meetings this year will be held on the third Tuesday of the month, except December, at 7.30pm at the Environment Centre, unless members are notified otherwise.

MANY THANKS to Elizabeth Palmer for writing the leaflets "What is Organic Growing" and "Pests and Organic Growing". These will be distributed at the COGS display at the Canberra Show and many subsequent events.

WATSON GARDEN: It has come to our attention that a significant amount of equipment, belonging to COGS, is missing from the Watson Garden. This equipment is needed at the Garden now, and will be transferred to the new Mitchell Garden after June. If you know the whereabouts of any of this equipment could you please make sure it is returned!

OPEN DAY: Ron & Fiona TITO are having an open day at their property at Michelago on Sunday 24th March. Details in March Flier.

OPEN DAY: Theodore Community Garden on Sunday 24th March. Details in March Flier.

OPEN DAY: YOUTHHAVEN Saturday, 2nd March, 2.30pm - 4pm

COGS members are invited to an Open day at Youthhaven Community Garden in North Kambah on Saturday, 2nd March. Forget about elections and visit this outstanding community garden!

Members will remember reading about this garden in previous Quarterlies and listening to John Brummell discuss its operation last year at one of our General Meetings.

Youthhaven is on the the right hand side of Kambah Pool Road in Kambah, coming from Namajira Drive (which runs into the Tuggeranong Parkway). It is opposite Gleneagles Estate on the LHS, before the roundabout at the entrance to Gleneagles.