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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 nonchemical 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 gtatitude.

REMEMBER: Monthly meetings are on the 4th Tuesday of the month

COGS QUARTERLY

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ORGANIC SUPERMARKET

CLUB VEDGE

9A Sargood St., O'Connor, 2602 Ph. 257 1449

> OPEN 7 DAYS Weekdays 10am - 6pm Saturday 9am - 6pm Sunday 10am - 4pm

5% discount to COGS members, on fresh produce and dried goods.

News Briefs..... by Michelle Johnson

AROUND THE WORLD:

NO TO WEEDICIDES:

In Stuttgart, Germany, public opinion is very strong against the use of agricultural chemicals, and the retail sale of all herbicides and most pesticides is banned. Local councils do not spray kerbs, gutters etc with any herbicides!

(Source: "Snippets from Europe" by Peter Abetz p 10 "Organic Growing" Issue 71, 1993)

GENETIC ENGINEERING: INADVERTENT RELEASES?

Dutch researchers at the National Institute for Public Health and Environmental Protection report that 1. Viable lab. organisms, including those modified with foreign DNA have been found on dried lab coats up to 2 years after contamination. Living GEO's were also isolated from washing water at 40-60°C, suggesting that such organisms can enter the sewerage system.

2. GEO's sent by mail between laboratories are often inadequately packed. Samples requested by the researchers from labs in Holland, the US, Australia and Singapore did not carry the obligatory biohazard label and not one conformed to UN or Dutch specifications.

(Source: "The Living Soil", Jan-Feb, 1994 Issue p5 reporting on results from the "New Scientist")

IN AUSTRALIA:

BIODIVERSITY: A Tasmanian Apple Collection

At the Huon Valley Apple and Heritage Museum there are about 500 varieties of apples on display, all from the nearby DPI Research Station at Grove. The DPI believes it should act as curators for some of the old varieties no longer commercially available. They have collected varieties from private collections Australia-wide.

Their main focus is on research and development, to aid Tasmania's apple industry.

(Source: Organic Growing, Issue 71, "Biodiversity - Tasmanian Apple Collection" by Chris Payn)

ORGANIC EXPORTS:

While there are no precise statistics on the value of exported organic products, it is now estimated to be between \$10-12 million a year. Apparently there is a wide range of products exported including fruit and vegetables, dried fruits, juices, oils, cotton, pulses and oilseeds. Penfolds Wines export a certified organic wine not available on the Australian market!

While this is good for the Australian industry from a trade point of view, it is still not clear what effect this will have on domestic retail markets. (Source: "Growth could hurt retailing" Acres Vol 1, No 11)

ORGANIC COTTON

Coulton Farming, near Goondiwindi in Qld, is the world's largest organic cotton farm. They have already sold cotton for use in the production of Tshirts for sale by Greenpeace, and are negotiating to sell 120 tonnes to Germany.

(Source: "Organic Cotton Projects provides valuable lessons", p10, Acres, Vol 1, No 11)

LEVY ON AG. CHEMICALS

The ACF, in a response to the draft of the proposed new Agriculture and Veterinary Chemicals Bill, have proposed a wholesale levy on agricultural chemicals. The levy would pay for comprehensive monitoring of the field effects of such chemicals.

(Source: "Levy sought to fund chemical checks", p4 Acres, Vol 1, No 11.)

PROBLEMS WITH GENETICALLY ENGINEERED PRODUCE?

It is interesting to note that in the report "Australia's Growing Future 1992" from the Division of Plant Industry, CSIRO, grain researchers identify problems in flour quality including "unsatisfactory dough properties of wheat lines in which alien genes have been introduced to bolster disease resistance" (page 6)

MOUSE PLAGUES and CONSERVATION FARMING?

Following the mouse plague in the grain belt of Victoria last year, some have blamed the adoption of conservation farming for the severity of the problem, and a few have even been prepared to call for the abandonment of such practices.

A closer look at what happened last year, however, shows the situation to have been more complex than such generalisations suggest.

Mouse plagues have only occurred since large areas were cleared and used for cropping, particularly in the grain belt areas of eastern Australia. Since then, plagues have occurred regularly, and no way has been found to control them. There are no registered in-field rodenticides for farmers to use.

The build up in mouse numbers in the Victorian grain belt was first monitored in November 1992, and increases were detected in late



autumn and early winter with favourable weather and crop conditions. But many farmers still chose to believe numbers would decline over winter.

When this did not occur, the Department of Agriculture campaigned successfully to ensure mouse control around buildings.

However, contrary to advice from the Victorian Mouse Plague Committee, many farmers went ahead and sowed many crops dry. Moreover chickpea crops were sowed with what was suspected beforehand to be seed with poor quality and suspect germination viability. Subsequently 60% of crops later aerially baited were chickpeas. This baiting was undertaken in July 1992 when strychnine was approved for broadacre baiting. It continued until October.

Certainly areas where conservation farming was used were hard hit. Minimum tillage and stubble retention meant less disturbance of mouse burrows and more grain and crop residues as a food supply. But it was an overreaction to advocate abandoning conservation farming.

According to Dr Grant Singleton, Division of Wildlife, CSIRO (verbal communication) who has studied these plagues, a good part of the answer lies in being able to more successfully predict these plagues. Then, if a plague only occurs every 7 to 9 years, the farmer can continue to practice conservation farming for that period, but it may be necessary to alter those practices for the year a plague is predicted.

Dr Singleton and colleagues at the Division of Wildlife are also studying methods for biological control of mice populations. This involves the use of a worm parasite which inhabits the mouse liver.

References:

1."Some Lessons from the Victorian mouse Plague" by John Griffiths, Australian Grain Dec, 1993-Jan 1994, p6.

2."House mouse plagues, a worsening problem", Robin Taylor, Rural Research Summer 1993/94 p4.

3. "The search for a biological control of mouse plagues", Grant Singleton and Monica van Wenvseen, Australian Grain, Dec 1993 - Jan 1994 p3

Acres Australia:

Readers of News Briefs may notice that "Acres" is frequently sited as a source for information. Let me recommend this magazine for its excellent reporting on the organic movement in Australia and its interesting articles.

Gardening Gloves for Children:

Ansell have introduced Ansell Kid's Gloves in two sizes 4-7years and 8-12 years. The former were recently purchased at K-Mart at the Hyperdome for \$2.15. Very welcome for our junior gardeners!



Courses and Lectures:

1. The Rural Training Centre at the Canberra Institute of Technology is conducting a 2 day workshop on organic vegetable growing on two consecutive Sundays, the 6th and 13th March, from 9am to 4pm.The course will be conducted by Joyce Wilkie and Michael Plane, and the cost is \$160. Phone 207 4180 or fax 207 4029 if interested.

 There will be a "Heavy Horse Workshop" at Pialligo on Saturday 5th March, starting at 9am, Cost \$200, Teachers will be John Gorman and Keith Bruest. If interested contact ACTAID ph 207 4444

3. David Cavagnaro, from the Seed Savers in the USA, is coming to Australia to give a lecture tour and to participate in trials of heirloom vegetables at Heronswood, the home of Digger Seeds. He will lecture in Sydney on February 22nd, 8pm, Macquarie University, Price Theatre and also Melbourne February 24th, 6pm Melbourne University, Lyle Theatre He will also visit Brisbane and Adelaide, but not Canberra unfortunately,

ORGANIC PROMOTION

The Henry Doubleday Research Association has been given the use of an old piggery, and some surrounding land, at the University of Western Sydney. They intend to set up a research centre, library and organic demonstration garden to promote the organic movement. The piggery building has heritage listing and money is available from the Heritage Council for restoration work.

GARDEN FOR THE ELDERLY

At the Mountain District Women's Co-operative in Ferntree Gully, Victoria, a suburban backyard has been converted to a garden for the elderly and disabled, with raised, tiered and no-dig gardens. The garden provides companionship and therapy for the many who have tended it over the last 4 years, as well as fresh produce.

(Source: OGA, Spring Issue, 1993)

IN MY OPINION...

"Australia needs Chiquita Bananas like it needs a breast implant"

by Leigh Davison

Reprinted with permission from the July-September Issue of "Going Organic" the magazine of the Tweed Richmond Organic Producers Organisation

The difficulty of Professor Hill's goal of "the transformation of all food systems on the planet" is highlighted by a report on Chiquita's move on the Australian banana industry, presented recently on ABC TV's Four Corners program.

In an increasingly internationalised trade environment dominated by a decreasing number of larger and larger multinational companies, values like nourishment, sustainability and equitability are not a high priority.

The Four Corners report showed that:

*Chiquita is the largest of three multinational corporations which together control 70%, of the world's banana trade.

* In the three years since it began its move on the Australian industry Chiquita has, unimpeded by any form of federal government restriction, gained control of 20% of the Australian trade in bananas to become the largest banana seller in the country.

*Chiquita emphasises consistency of "quality", a factor which appeals to the large supermarket chains that are taking an increasing share of the fruit and vegetable distribution in Australia, bypassing the traditional central marketing system.

* Quality is defined by size and cosmetic appearance. Taste, nutritional value, and sustainability and environmental friendliness of growing methods are not included in this definition of quality.

* Chiquita Australia currently has to purchase its fruit from Australian growers because quarantine restrictions prevent the importation of bananas.

The fear of the introduction of two virulent diseases (Black Sigatoka and Moko Disease) on imported fruit is the only thing protecting the local industry from a flood of imported fruit produced in Central American "Banana Republics".

In these countries the multinational Chiquita, in conjunction with oppressive political regimes operates enormous, highly chemicalised plantations (the largest employing 47,000 people). The combination of economies of scale, low wages and minimal government regulations for the protection of employee health or the environment would give Chiquita a massive competitive edge on Australian growers if imports were allowed.

Organic concerns

Of particular concern to organic growers, - consumers and environmentalists are the following:

Large clean fruit tend to be produced by methods which depend on high inputs of synthetic fertilisers, insecticides, and fungicides.

The Ideal *My goal is the transformation of all food systems on the planet to ones that have as their goals: nourishment

human development justice humaneness sustainability* Prof. Stuart Hill

Senator Nick Sherry, Chairman of the Parliamentary Taskforce on the Future of Horticulture expressed the view on Four Corners that these diseases will pose less of a threat as improved pesticides become available.

The implication here is that even if the disease does get into Australia on imported fruit, growers will be able to manage it. This is not the case for organic growers whose only protection is quarantine.

Bi-partisan political support for the general principle of free trade has devastated Australian citrus, threatens bananas and will do likewise to those remaining sectors of horticulture which still support family sized farming enterprises.

Of concern to all tax payers is the social cost of keeping, outof-work farmers on the dole.

Even if imports are kept out of the country it is likely that Chiquita's grip on the marketing end of the Australian industry will tighten, thus giving it the ability to dictate cultural practices to growers.

What can we do?

The question then arises: "What can I - as a person who wants to see a food production system which emphasises nourishment, human development, justice, humaneness and sustainability - do about this situation ?"

Here are my suggestions:

* Never buy a Chiquita banana - buy certified organic or BD produce, where possible.

*Express your concerns to your local MPs. particularly the federal ones. Both Harry Woods and Neville Newell have expressed support for family farming. Both are in highly marginal seats. Tell them to push for the maintenance of guarantine restrictions on imported bananas.

(Editorial note: According to Leigh, in an update of this situation, the Federal Government has assured growers in the banana industry that it will not be relaxing the regulations on importing bananas. However the questions over the marketing techiques employed by Chiquita still remain.)

" if it isn't at least 8 inches long and blemish free then it isn't a real banana

by Leigh Davison

When I was 15 I knew that there were a number of things wrong with my body.

I knew, for example, that I should trowel brown goop onto my teenage pimples. I also knew I should make my armpits smell like a pine forest, my breath smell like peppermint, and that I needed to plaster my hair with Brillcream.

The source of my information was. of course, the family television set. My willingness to comply was prompted by a combination of insecurity and vanity.

A generation later the basic scenario has changed little. However the technologies for making our bodies "more acceptable" have become significantly more powerful.

"Ladies would you like breasts like Elle McPherson? Instead of padding your bra the way mum used to, we'll just insert these harmless silicone implants right into the very interior of your inadequately small boobs."

"Fellas are you sick of being a 90 pound weakling? Well why mess about building up useful-muscle by doing honest work when you can develop a useless but impressive looking body with the aid of our bootleg steroids?"

The tragic extent of the side effects of our need to look acceptable is increasing at a rate proportional to our ability to manipulate nature. Just ask the breast implanted women who suffer from chronic fatigue syndrome. Ask the children who ingested leaked silicone while breastfeeding, and succumbed to a variety of ailments including autoimmune problems.

At its best, advertising can provide consumers with useful information on which to base their choices. At its worst it is a tool by which the rich and powerful manipulate the consumption patterns of the masses.

There was a time when you could say, in the words of the philosophers: "a banana is a banana is a banana". Now we have at our disposal the chemical technologies to create uniformly large blemish-free bananas. And we have an experienced well-heeled opinion manipulator like Chiquita moving in from stage right.

The scene is set for us to learn the important lesson that if it isn't at least eight inches long and blemish-free then it isn't a real banana.

We know that the technologies necessary to create uniformly large blemish-free fruit are bad for soils, bad for the environment in general, and bad for grower health. We know that virtually all of the blemishes on banana skins have no negative effect on fruit quality.

I believe Australia needs Chiquita Bananas like it needs a breast implant.

Consumer Information..... Going Bananas by Michelle Johnson

While many members of COGS grow a considerable amount of their own fruit and vegetables, it is nevertheless true that very few, if any, actually reach self-sufficiency. Even if we did so, we would probably want to vary our diet from time to time with produce that cannot be grown in this area, particularly the tropical fruits. This means that all of us are consumers, and as consumers we have the power to support different types of agriculture.

COGS as an organisation has as one of its aims "to promote the production and consumption of certified organically grown foods", and I encourage our members to support the organic industry whenever they can.

I do recognise however that the public have concerns about the authenticity of organic produce, and this can be a disincentive to buy certified produce. But as a general comment I can reassure consumers that the certifying bodies in Australia are reputable with high standards for certification which are recognised overseas as such.

If you do however have any concerns about the purchase of certified produce, let the COGS Committee know of your problem. For example, recently a member contacted me with a query over bananas, certified by NASAA, which she had purchased. The bananas were covered in a white powdery residue. By contacting Tim Marshall, Certifying Officer for NASAA, I was able to determine that almost certainly the bananas came from a grower in North Queensland well known to Tim who uses diatomaceous earth - this can leave a white residue.

While we are confident that this is the residue noted by our member (given the name of the retailer), we cannot be 100% sure. BUT we could have traced back the source of the bananas with surety if we had known the grower's number. <u>Retailers can tell the purchaser the grower's number on all produce sold if requested.</u>

So, if you have genuine concerns about certified produce, talk to the retailer first and ask the retailer for the grower's number, and even the batch number, and then, if you are still dissatisfied contact us. However if the problem is simply the quality of the food - complain to your retailer about that!

When initially considering the source of the white powder on the bananas, I did look at the possibility of them having been sprayed for fruit fly, or some other pest, when they left Queensland. But apparently, if a batch of organically grown produce needs to be sprayed under any regulations then that batch cannot be marketed as organic ie it loses its certification. If they were treated for fruit fly, the treatment would most likely have been a) to dip the fruit in Rogor , which would not leave a white powder, or b) fumigation , which again would not leave a white residue (verbal communication, Colin Simson, Dept. of Ag. NSW, Inspector)

The Eliot Coleman Workshop:

Joyce Wilkie and Michael Plane invited Barbara Damrosch and Eliot Coleman to their Gundaroo property on October 30/31, 1993.

Eliot, the self-confessed "weed nazi" and farmer from Vermont, presented one of few practical, weekend workshops for practising and prospective Australian organic growers; people interested in efficiently and profitably growing clean food on small acreage.

Although probably best known in Australia for his more recent books <u>Four Season Harvest</u> and <u>New Organic</u> <u>Gardener</u> (Chelsea Green, Chelsea, Vermont, 1989), Eliot's presentation confirmed that he has collated these books only after "two decades of intensive work in field and garden, work which has produced spectacular results not only in yield and bounty but in thought and insight".¹

The workshop format involved purposeful roaming around Joyce and Michael's market garden, hands on involvement with ergonomic garden tools (available from Joyce and Michael) and specific growing techniques, further exemplified with a rich array of colour slides revealing organic growing models from around our world. A weekend on this subject didn't leave much time to elaborate on the relevance of whole-farm planning or the integration of permaculture in the market garden.

The catering was a 'food festival' in its own right enhancing the social aspect of a weekend where a bunch of like-minded enthusiasts came together to steal each other's ideas.

Readers particularly interested in year round food production in the ACT, cool climate techniques and technology, "soil blocking" of seeds, season extension and marketing tips can follow up in Eliot's useful books.

Participants at the workshop came from WA, SA, NSW, Vic., and the ACT, confirming again the demand for good teachers in the field (particularly for first generation growers) and a need for people to experience working models, to enliven written works on organics.

On behalf of all participants, I extend my thanks again to Eliot and Barbara and especially Joyce and Michael and their team of caters for their welcoming hospitality. ¹Introduction. New Organic Gardener (89)

by Philip Moore ACT Participant

Photos courtesy of Betty Cornhill

Demonstrating the use of Appropriate Tools:



Eliot demonstrating the use of the Gundaroo Tiller, made and sold by Mike and his partner, and very easy on the back. The lady's version is smaller, but equally easy.



The wheel hoe: excellent cultivation implement. It can take several different tools.

A very light seeder -drops individual seeds in a furrow, and covers them. Can be set at the right depth, and has plates for different sized seeds.

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"Allsun Farm", Gundaroo



Attentive listeners from as far away as Victoria, South Australia, and Western Australia stand near a bed of lettuce and a polytunnel



Eliot demonstrates the use of a frame for transplanting. It marks the rows clearly and keeps them straight. This is important for later use of the wheel hoe.

Soil blocks for raising seedlings



Different sized soil blockers

I wouldn't have missed the Eliot Coleman workshop at Joyce and Mike's for anything.

Eliot is a fast and enthusiastic talker - virtually impossible to take notes from. On the other hand, he told us right at the beginning,

"If you want to ask a question, don't be afraid to interrupt me."

And when a question came, it started a discussion, as more and more people joined in, and Eliot said,

"This is what I like - a real good discussion!" And so it was, all through the two-day workshop.

We alternated between looking at slides of mostly BD farms in Germany, Holland and France, and his home farm in Vermont, where farmers are using innovative equipment, such as brush or flame weeders, or transplanters, with fast explanations, and walking down to the garden, where we had demonstrations of fast pulling of old broccoli plants (knocking the soil off on his clog), and many other practical things.

We were vastly entertained, while learning how to use Mike's, and his own, many innovative and unusual tools. These tools have been invented to make practical work on the farm and in the garden much easier and more efficient. They are mostly quite simple, and some may be used in different ways for different jobs.

Everything moved so fast that it was impossible for me to take videos until my batteries ran out, then photos, till my films ran out, and take notes as well, so all I can say is, you should have been there!

by Betty Cornhill



Plants grown in soil blocks and pots. Note the difference in size. (seed planted at the same time)

Geowool: a new growing system

by Stewart Ross Organic Farmer Anarres 8 Kallaroo Road, Pialligo, 2609

The increasing concerns of agriculture with the problems of land pollution, and its subsequent environmental costs, have encouraged horticulturists to search for better methods with which to work. A close study of the history of agricultural practices will soon point out to the keen observer that innovation is, and has always been, a prime role in farming communities of the world. I would argue that one would have great difficulty in finding some process or piece of equipment still in use today that does not owe its original conception and subsequent development to some group, or individual member, of a farming community. Need being the mother of invention, has been the driving force of agriculture for all of history.

The requirement of all populations in all lands to eat is a hard task master. This and the, until recent times, mystical vagaries of the weather have combined to place before the farmer a continuum of probabilities that, should they fail to be addressed, can have catastrophic outcomes. But farming communities of the globe have always managed and have more than borne their share of the responsibilities for human survival. These sedentary land managers, unlike the warmongering groups of history with their nomadic tendencies, have helped humanity to thrive.

The very numbers of the world population and the need to feed them with limited resources has now become the problem that farming communities must face. This gives a new set of problems and new imperatives. We must in fact, and you must forgive the glaring metaphor, invent a new wheel.

Urban pressure on arable lands has become chronic. Most cities were established on arable farm lands but outward pressure by city populations has forced, in many cases, the development of farms on marginal lands. These lands, originally of low fertility, have been further flogged to increase productivity to feed an ever expanding city population. As the cities are not apparently willing to address this problem of rational land use-or abuse, as some of the conscious might see it-farmers are now applying some enlightened and divergent thought to the problems they are faced with.

At Anarres we had, for some time, applied ourselves to the problem of reinvigorating a farm that had been farmed continuously for a century or so (the land being part of the original farm lands of Duntroon). Reports to Federal Authorities by the 1960's were pointing out that the fertility of the land was suffering dramatically and that everincreasing amounts of fertiliser were proving of little or no remedial use.

What in fact was happening on these lands, as well as on those on all larger metropolitan farm peripheries, was what can only be described as hydroponics - and an extremely expensive one at that. In these instances, the land merely acts a support for the root system, while the water soluble nutrients are percolated past them and on into the active water table. Even the most wasteful of growing systems - ie chemical hydroponics, when considered in terms of energy units - repump all their nutrient solutions until all of the economically extractable nutrients are utilised.

We needed to revitalise our own land in a sustainable organic manner. The prime need was to be able to use some of the lands for production while others were being allowed to lie fallow and so as to rest and reinvigorate. And we needed to do this a cost-effective manner. Wool, it seemed to us, would provide some of the answers to some of our most imperative needs. "Wool", to quote a colleague, in correspondence, from the Ikley Wool Research Station in the U.K. "is environmentally impeccable".

Using wool for land revitalisation would also provide an answer to some of the wool growers imperative needs. In Australia we are faced with an ever increasing wool stock pile and with the failure to obtain adequate returns for woolgrowers. When this is coupled with the lowest prices obtained in a generation for vegetable and fruit growers, it means that we must look for new and innovative growing systems if we are at all to reverse these potentially disastrous trends.

Systems are what concern us at Anarres; interactivity being prime. We had observed over a number of years the possibility of an important soil/wool interaction - old fleece and crutchings and so forth have, for generations, been used by farmers as mulch for the establishment of cottage gardens and as a moisture conservation material in the establishment of tree groves and farm avenues. What was needed now was to try to understand what in fact was really going on at the soil/wool interface, for what was going on between soil and wool was not apparently going on between cotton/soil, paper/soil or, in particular, between plastic mulch and soil.

With wool, the crop yields and soil condition seemed to be substantially improved. Soil improvement was indicated by an ability of the soil to carry moisture and hold it where the plants could utilise it.

Our preliminary observations led us to set up a full field trial during last winter, using a needled non-woven wool textile we have called *Geowool*. This field trial was supported, in part, by the Wool Research and Promotion Organisation. We compared bare earth and Geowool conditions and observed the wool's ability to alleviate the problems of soil hydrophobia in dry to arid conditions. We also demonstrated very impressive weed suppression under Geowool. In some instances this suppression was nothing short of spectacular considering the fact that some trial beds were mulched at coverage rate of only 100gms/m²; although suppression was most effective at 300gms/m².

Trials are still underway to try to understand some of the observations we made in the preliminary winter trial. Soil/wool bonding is of great interest and trace element leaching at the soil interface may be important. The ability to be able to incorporate wool directly into the soil as a soil conditioner after cropping is also being investigated. The massive surface area of the wool fibres are a suitable site for the natural propagation of most of the beneficial soil floras and bacteria and we could expect further soil improvement after incorporating the wool directly into the soil.

Thousands of square kilometres of plastic mulches are being applied to agricultural lands world wide seasonally. Much of this material is no longer being reclaimed. It is an expensive process and the recyclers do not want to touch this material as it is too problematic for them. The presence of clays and chemicals etc and the necessary restrictions on atmospheric pollution, means that local authority tips are restricting burning and burial of these plastic based mulches. Wool answers many of the needs of agriculture today. With more time and resources we feel sure that wool will sooner rather than later enter many of the areas of horticulture that are now being grossly polluted by the presence oil based plastics.

We are at the moment running some summer trials on late planted tomatoes and capsicum species. These trials and the previous winter trials are being supported by the Australian Wool Research and Promotion Organisation. We are also planning to observe some of wool's longer term possibilities in other horticultural activitie, as part of Anarres is in the process of being converted to wine grape growing.

Murrumbateman Scouts

Fund raising to send country scouts to the 17th Jamboree in January 1995

SHEEP MANURE Large bags \$5-00 each (feed bags)

ALL MANURE WELL ROTTED

FREE DELIVERY NORTH SIDE OF CANBERRA

Telephone: Garry 227 5768 Bob 227 5861 Rodney 227 5948 Kim 227 1360

OPAC STANDARDS by Michelle Johnson

In the following months we should all be considering what inputs we need to apply to our soil to improve its fertility and structure. If the condition of the soil is poor, it may be necessary to look at a number of measures over a period of years to build up the soil to a satisfactory level. To help those unfamiliar with organic practices, I have listed below the materials permitted for use in soil fertilising and conditioning in organic growing, as given directly in Annex II, "National Standard for Organic and Biodynamic Produce", produced by the Organic Produce Advisory Committee in 1992 (the list is rearranged in alphabetical order).

However, it must be stressed that organic growing involves far more than simply substituting organic fertilisers for chemical ones, and other sound organic practices including composting, use of green manures, and crop rotation should also be adopted.

Permitted Materials for use in soil fertilising and soil conditioning.

*approved microbiological and biological preparations¹
*basic slag

*blood and bone, fish meal, hoof and horn meal, or other waste products from fish or animal processing¹

*bio-dynamic preparations 500-507

*calcined or rock phosphate and other crushed mineral bearing rocks (excluding those minerals which are more than 20% soluble)

*clay

*composts from organic household refuse

*composts from plant residues, spent mushroom and vermiculture substrates

*dolomite and lime

*fish products

*gypsum (calcium sulphate) from a natural source

*heat-composted animal manures1

*homeopathic preparations

*naturally occurring biological organisms (eg worms) but excluding products derived from recombinant-DNA technology

*organic by-products of the food and textile industries

*peat

*rock potash and sulphate potash

*sawdust, bark and wood waste from untreated sources

*seaweed or seaweed meal¹

*slurry or urine

*straw

*stone meal

*sulphur

*trace elements (including materials such as borax, Epsom salts, but not synthetically chelated elements). Natural chelates are acceptable, eg ligno sulphates and those using the natural chelating agents such as citric, malic, tartaric and other di- and tri- acids

*wood ash from untreated sources

¹Some of the available commercial products identified above by ¹ have added nitrogen or other chemical fertilisers which are unacceptable in organic farming and therefore such products must be selected with care.

by Sylvia Maseyk, Mary Flowers and Traudi Kalivoda

The autumn weather in Canberra is usually fairly stable providing an opportunity for planting some late crops.

It is possible to put in late plantings of brassicas (cauliflower, cabbage, Brussels sprouts, broccoli and kale). Seedlings can be planted up to March, but it is too late now to sow seeds.

Kohlrabi is a cool weather crop which can be planted now. Preparing the soil is the key. A rich sandy soil with lots of organic matter encourages rapid growth. Plants should be well spaced. When the plants are 10-15cm tall mulch the bed with grass clippings, sawdust or compost. Fertilise heavily as rapid growth is essential for texture and flavour. More information on kohlrabi is in Traudi's article in the Spring 1993 COGS Quarterly.

Sugar snap peas can be planted in March for a May to June harvest if there are no severe frosts, although the seed packets will say differently, (See Traudi's article in the Summer 1993 Quarterly for tips on growing good peas).

Leek seedlings for winter soups may be planted now as well, although again gardening handbooks usually say it is too late. A good friable soil, rich in organic matter and well-limed is essential for growing leeks successfully.

Winter lettuces (cos, Imperial, salad bowl and oak leaf) as well as corn salad, raddichio and flat and curly-leafed endive can all be planted during autumn provided they are in a sheltered position.

Spring Flowers

by Sylvia Maseyk and Traudi Kalivoda

Many spring flowering plants are best planted or sown during autumn. This enables them to establish themselves before the cold weather sets in so that they may develop robustly as conditions become more favourable. Others require the cold temperatures to germinate. Spring flowers which are best planted during autumn include all varieties of bulbs, ranunculus, anemones, stock, poppies, sweet peas, candytuft and larkspur.

Bulbs, Corms etc

Bulbs, corms and tubers flourish in colder climates like Canberra's. Bulb catalogues and nursery stands provide the best ranges of the many varieties now available. They make beautiful spring garden displays and excellent cut flowers. Bulbs require a good deep soil with plenty of organic matter such as compost, straw or well-rotted manure. They will benefit from a light dressing of Blood and Bone or Dynamic Lifter during the growing period.

Seedlings

Stock and poppies should be planted now from seedlings. Stock (Matthiola incana) grows well in a warm sheltered position, with plenty of sun. Best planted in early autumn to Silver beet can be planted at virtually any time as it is temperature hardy, but requires good soil, well composted and limed.

White turnip can be planted in February or March, although autumn is too late for swede turnips.

Garlic, both the jumbo and ordinary varieties, can be planted in autumn. With the later only plant the outer cloves as the inside ones don't multiply readily. It is worth noting that the price of seed garlic varies dramatically in price; it has recently been seen at 4-5 corms for \$1 up to \$1 per corm, so shop around! Garlic does not seem to attract weeds as much as onions and is good for companion planting near roses to assist in keeping aphids away. Some say that it also improves the scent of the roses!

Autumn is also the time to divide clumps of chives and garlic chives and redistribute around the garden.

Other herbs which can be planted in autumn include parsley, celery and celeriac and Florence fennel. Fennel and celery are heavy feeders and also require plenty of water.

Autumn is also the time to prepare garden beds for spring by growing green manure crops or covering the beds in March to keep the weeds down over winter. Alternatively, let the weeds grow and use them for green manure! Now is a good time to clean up your garden and throw all the left overs onto your compost heap ready for spring.



ensure it is well established before the cold weather sets in. Stock makes an excellent highly perfumed cut flower.

Iceland poppies (Papaver nudicule) should be sown in January or purchased as seedlings for planting out in March to April. Poppies like a friable, well-composted soil and also require a sunny sheltered position. <u>Shirley poppies</u> (P. rhoeas) should be grown under shelter during winter.

Direct Sowing

Virginian stock, sweet peas, candytuft and larkspur can be

planted in autumn direct from seed. Virginian stock (Malcomia incana) makes a good border plant or can be sown between bulbs for a colourful display. Annual Candytuft (Iberis umbellata, I. coronaria) are hardy and fairly easy to grow. <u>Larkspur</u> (Delphinium ajacis) seeds should be sown direct and thinned. These varieties all require a sunny sheltered position and friable, well-prepared and drained soil.

Sweet peas require full sun and protection from strong winds. They are best planted during March in a rich well-drained soil containing plenty of rotted manure. Trellises should be in place before sowing as sweet peas need support from the time they reach about 6" in height. Blood and bone or liquid manure can be applied during the growing period.

Asparagus

by Mary Flowers & Traudi Kalivoda



Asparagus is a unique vegetable in that in good conditions it will keep bearing for many, many years. It will do well in deep well-drained, well-composted loam in an open sunny position. It is advisable to purchase one- or two-year-old crowns, which are available from nurseries during the winter months. Thorough soil preparation is vital as the bed will be long lasting.

Once the asparagus is growing, it is not advisable to dig around it in order to remove weeds; but if you allow them to take hold in such a permanent bed, it is very difficult to get rid of them. So make sure it is free of perennial weeds such as couch, oxalis, nutgrass and onion weed.

Some weeks before planting dig the bed over deeply, incorporating plenty of organic manure and compost and add lime or dolomite to reduce acidity if your soil requires it.

Planting

Dig a trench 20cm (8") deep and 25-30cm (10-12") wide in the prepared bed. Now form a small ridge along the bottom of the trench. The crowns, after trimming

any damaged or long roots are then planted with their roots straddling the ridge. Now fill in around and over the crowns with composted soil so that the dormant shoots are 3-4cm (1-2") below the surface. Firm soil gently.

As the spears appear, more composted soil is added until the bed is level. You need to gradually fill in the bed as the plants are very tender in the first year after planting.

Maintenance

Asparagus is a heavy feeder and needs good drainage and plenty of water. It may be dressed with Blood and Bone between July and August.

At the end of the season when the fern is turning brown, cut it down at ground level and remove. Cover bed with some wellrotted cow manure and compost. Seaweed is also a perfect mulch for asparagus.

Harvesting

Don't harvest any spears until the third year after planting; ie when crowns are four or five years old. The spears should not be cut at all in the first year after planting but may be lightly trimmed over a period of no more than four weeks, during their second in the bed. Some experts recommend no cutting at all for the first two years.

In the third year, harvesting should start when the spears appear in September and continue until mid-December when the spears are allowed to develop into fern to build up food reserves for the following year.

Cooking

Asparagus is delicious steamed or raw in salads. If steaming it, stand the bunch up in a deep saucepan one-third filled with water. This cooks the tougher bases of the spears while lightly steaming the tips.

Asparagus is wonderful steamed and served with Hollandaise sauce or cut it diagonally into 3cm pieces and lightly stir-fry in a small amount of water and butter and serve with a squeeze of lemon juice.



Propagation of Plants

by Lydia Waldron

CUTTINGS

In the warmer months, softwood or "tip" cuttings are taken. In the cooler months cuttings are of the hardwood variety. Correct timing contributes to the success with propagation. The best time to take cuttings of evergreen plants (eg. gold dust plant, sage, rosemary, rhododendron, basil, azalea, teatree, daphne etc.) is late spring - late autumn. Deciduous plant cuttings (eg. apple, rose, etc.) are taken in late winter during the plants bare-leaf state. For cuttings, clean, sharp (coarse) river sand is best; but if unavailable, seed-raising mix will suffice (beach and builders sand is entirely unsuitable). At this time of year (April, May) plants are more safely propagated by woody cuttings. Sticks of well hardened wood are placed in the river sand, which, being poorly supplied with nutrients, encourages the formation of roots. When the roots begin to form, the plants can be watered with a "tea" made by decomposing willow twigs in water. The plant growth hormones in the tea encourage more rapid root formation whereupon the cuttings should then be transferred to a medium containing plenty of nutrient (ideally compost) before the nutrients stored in the plant tissues are expended.

Many plants strike easily from tip cuttings placed in a glass of water on the window-sill (coleus, African violets, balsam, basil, daisies). I have experienced some difficulty in transferring these "hydroponic" cuttings to any dry potting soil medium. But all will take if struck in the river sand immediately.

Should cuttings not strike well in river sand, try adding peat moss or light vermiculite or perlite in the ratio of 3:1; i.e. 3 handfuls of sand to 1 handful of peat moss. Perhaps the tiny root hair will be able to penetrate more easily.



Method of taking cuttings

- Select healthy length of plant (about the size and diameter of a pencil). Make a clean slanting cut a millimetre or two below the basal node (i.e. at junction with the stem).
- Remove all but the top leaves by cutting them off cleanly close to the stem. Dip the cutting in a hormone preparation.
- Make a hole in the sand with a dibble stick (ensures that the hormone preparation isn't removed). Place many cuttings in the one pot.
- Plant cutting, water gently (preferably with the willow tea) and cover with a plastic bag or plastic bottle as a cloche. Keep out of direct sunlight. No need to remove cover as it acts as a terrarium.

When to take cuttings

Azaleas, Camellias (Dec - Feb) Conifers (July) Crepe Myrtles (July, hardwood), (Oct - Nov, soft tip) Daisies (Sept - May) Evergreen shrubs (Aug - Sept; March - May) Fuchsias (Sept - Feb) Gardenias (Aug - Sept: March - April) Geraniums (Sept _ May) Hydrangeas (June - July, hardwood; Oct - Jan, soft tip Lavender (Nov) Murraya (Aug - Sept; March - April) Photinia (Aug - Sept; March - April) Wisteria (July, hardwood or root cuttings after flower. Brambles, currants (spring, summer, autumn)

LAYERING

Useful for all brambles, currants, tomatoes, deciduous magnolias, azaleas, rhododendrons, hypericum, jasmine - anything really that will bend!

A flexible growth is bent in the middle, cut halfway through for about 6-8 cm in length with the cut kept open by wedging a match at the plant end of the wedge. You don't always need to make this cut in the more vigorous species. The end of the growth is staked and the cut is anchored with a hoop or peg and covered with soil. The "new" plant may be staked or not, depending upon its pliancy.

Once rooted the new plant is severed from the old one just behind the cut on the old plant. It is dug up and potted (unless the cut area was already pegged into a pot of soil, in which case it becomes "hey presto"). Layering seems to be most successful when undertaken during the phase of most rapid growth (late Spring and early Autumn).

Aerial layering

Useful for well grown specimens such as maples, fruit trees etc. Also houseplants such as dracaenas and figs that have become too large. The stem is cut through and the match inserted as before. Then wet sphagnum moss is wrapped around the cut and tied in place at either end with tape. When new growth appears the new plant is ready to be unwrapped and severed from the parent at a point below the roots.

- cut into the cambrian layer of the branch, cutting towards the tip
- wedge the cut to keep it slightly open
- pack the wound with wet sphagnum moss
- wrap the whole with gladwrap or foil and secure at each end
- after 8-12 weeks, check to see whether roots have formed at the cut. If so, the new plant is severed from the old just below the cut. The moss can be left on or soaked off when it is repotted.

SEEDS

For seeds, always use a bought seed raising mix. These are formulated to drain readily and yet retain adequate moisture. Have usually been sterilised, also.

Growing roses from seed?

- 1. Collect rosehips
- 2. Store in fridge for ~ 1 month
- Break open hips and remove apple-pip sized seeds (any number from 0-20)
- Keep seeds on a window-sill in a damp cloth to germinate. This can take months.
- When shoots (eventually) appear, transfer them to seed raising mix and plant about 1 cm down
- When deemed sufficiently robust, you can plant the seedlings out in full sun, but keep them moist. Will generally flower in their first year.
- Results are variable. The father is unknown as the hip comes from the mother. Also the first flowers may not be indicative of those to follow. The true flowers appear in year 3.

DIVISION

Certain (obliging) species can be propagated simply by division. Plants such as iris. clivia, cast iron plant, agapanthus, gazanias, red hot pokers, dahlias, chrysanthemum, chives, marjoram, chamomile, thyme, lemon grass can be lifted out of the ground/their pots and gently tweezed apart or severed with a clean sharp knife after the excess soil has been gently shaken off. New segments, each with roots and a few leaves, are replanted or potted. Autumn, i.e. now, is the conventional time for most of these (late Winter for chrysanthemums), but 'you can attempt division at any other time. As long as the divisions are kept well-watered, they will probably strike well.



Autumn approaches at Loriendale

by Owen Pidgeon

How has the season been? A regular question to all farmers. And in Australia there will always be a tale or two to tell. The summer of 94 has been a long, dry one. For our orchard in the hills, the essential nature of water supplies has been again proven; but now the yabbies and the fish are fighting for space.

We have been running the Deutz diesel unit every day for the past two months. Just after Christmas, the first incident made me wonder whether it was going to be 'one of those years', as the water was not pulling through the pump. Checked everything! Undid bolts that had never been taken apart before - and hoped like mad that we put them back in the right order. Then we found that the suction valve was sitting up out of the water a little, every time the pump started to draw water. The weights were not in the right spot. An adjustment and away we went again.

This week we had another scare. My youngest daughter Lauren, had come down with me to clean out the Israeli designed plate-filters at the pump. They work very well in keeping the water clean for the micro-sprays. However, after back-washing, that morning we forgot the normal routine (to open again the two flow valves). Back at the house, there was no water. I'm sure that I completed the 200 metre dash in Olympic time, hoping to get back to the pump before the pressure 'blew everything up'. I made it.

The only other time that problem has occurred for us, was the first Christmas, after I had taken delivery of the pump. The neighbour was moving some young bulls along the road. Well, one young animal decided that our orchard had better grazing, so through the boundary fence he came. As we chased him up and down our precious rows of young apple trees, with just finished trellis wires, my son Stephen must have got distracted. He started the pump, without opening the flow valves. [This Gaan/Deutz unit has enough pressure to water 200 trees on full spray, up a steep incline.] Fortunately the shaft packing had blown out a little, letting some of the water pressure to escape, while we tore around and around after this young bull.

A Success Story

We trialed the full removal of infected leaves last Autumn, to prevent the recurrence of apple scab. Applications of urea after leaf fall are used by many orchardists to break down the leaves before the Spring-time. The leaves are the major carriers of the fungus (once the prunings are removed).

A labour of love, really (or a scientific experiment). My three lovely girls and I gathering up the leaves from under three rows of the Royal Gala trees. There are some Granny Smith pollinators there too. Anyway, those trees are 95% clear of the problem this season. Now, before the experts say "but the Summer has been dry" let me remind you that the Spring was fairly inclement. By way of comparison, the other rows of trees with the very susceptible varieties (Granny Smith, Red Delicious) registered about 20% marked fruit. We did apply one dosage of Bordeaux spray at bud swell, as an early season preventative.

The Faithful Labourer

Now, if you are thinking that I'm writing about my helper, you are mistaken. The 1963 David Brown tractor has given me faithful service over the past seven years of setting up. It's a family heirloom. Well, this year saw the replacement of the second original back tyre. Heavy beasts to re-position at the best of times. We were to attend a concert just before Christmas so I allowed 90 minutes to get the fitted tyre off the trailer and back on to the wheel-base. It ran away from us. It just wouldn't move into the right position. Let's call in Grandma - she may have helped with the originals. Made it to the concert with 4 minutes to spare, thankfully as the young lassies were the stars.

The tractor now won't lift anything. The hydraulics have failed. Fortunately there are some good tractor mechanics in the district, so I'm hoping to have it going for the apple harvest. Unless there is another major disaster, some of the varieties will yield well this year.

Trellising

We are working hard to tie up branches to the trellis wires at present. The Golden Delicious and Mutzu are laden. The Mutzu is already as big as the normal apple and it won't be ripe until April. I seem to only get installing new trellis rows when the sun is at it's hottest and the ground at it's driest. I probably should not have worried about trellising the Fuji and the Cox's Orange Pippin this year. There isn't an apple on them (frosts,— dry spells, etc). Ah well, the Snowies are coming on, the Spartans are looking good and the Grannies great.

The Harvest

Its been great to see friends at harvest time. The nectarines will only last through February, but the apples will run on till late May. If we can keep the water up, the hazelnuts may also produce a good crop for April.

e PLEM IN THE READ SHOW THE

Owen Pidgeon

"Loriendale" Springrange Road, past HALL

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Temporary trials of setting up our five acres

by Shirley Carden



Because we are still building our extension the garden nearby is anything but permanent and this gives me a lot of extra work.

So far most of my growing areas are temporary because the drainage and landscaping have not been finalised. I have so many plants in pots waiting to be planted out. On a hot windy day these can require watering up to three times a day. We are not on town water so this exercise is not easy. Several times at a moment's notice I have had to move ALL my pots to a new location, hurriedly decided on and not always suitable. My green house has similarly been moved three times. Needless to say the "builder" has other priorities besides gardening but his help in the garden is invaluable when he has the time.

But there is a bright side to all this. I spend many hours gazing out of the window observing nature and how my plants are behaving in their temporary positions.

I feel very frustrated not being able to plant in too many permanent beds. However the trees are permanent so I tend to concentrate on them, especially in the orchard. I weed

under them and then cover heavily with slashings and other mulch from the chicken and goat yards. The weeds go on top of this, apart from the onion grass and couch grass (these are thrown on an area which is regularly slashed). After weeding I scatter seeds under the trees, e.g. parsley, calendulas, dill, nasturtiums and heartsease and I plant things such as strawberries and vegetables.

But when all these plants mature mulching amongst them is very difficult. Now at last I have found a solution......

As well as missing all my friends in COGS I also missed being able to hire the Rover shredder. We kept putting off buying a shredder here but have been having the various brands fairly regularly demonstrated to us. Finally we decided we just couldn't live without one and settled on our old friend the Rover. This has opened up a whole new concept of organic living. The shreddings are much easier to use between the various plants I grow under the trees than is slashed hay. Also shreddings are less likely to blow away. Recently a large branch of a lemon scented gum blew down. It was shredded and with the resulting material I mulched my two strawberry beds. The beautiful aroma that resulted every time the sun shone on the mulch greatly improved the quality of my life at least. I also shred such surplus herbs as lavender, sacred and camphor basil and incorporate it into the bedding for the goats and the chickens. Hopefully it will improve the hygiene in this area.

When I visit my neighbours' gardens I get the impression that their soils are not "living" as ours certainly are. Most of my weeds are returned to the soil. When I weed I try to lever the weeds out without disturbing the area too much. This also has the effect of aerating the soil. For this I use a very old gardening fork which has strong enough prongs not to bend, a carefully chosen weeder which will not bend and a very large screwdriver. I also prefer to weed after rain. Michael Plane of Gundaroo Tiller makes a special fork with strong prongs which is ideal.

This area is a dream when it comes to compost making and mulching. We have our own chickens and goats. There are plenty of wild ducks 'dropping' in on a regular basis. Horse manure is available from close by, and cow manure is also plentiful. The beaches are just a few minutes away so seaweed is also available. All one needs is plenty of time to collect it all. Many of our neighbours are actually pleased to have their slashings carted away.

With the extremely hot weather that descends on us, and the blustering winds, the ground can dry out drastically to the point of developing large cracks. Watering from the dam takes a lot of time and effort until we set up a proper watering system. Heavy mulching is absolutely essential if we are to save all the trees we have planted.

I am also fast coming to the conclusion that for healthy plants, mulching must be an ongoing procedure. The mulch has to be replenished at regular intervals. The incredibly hot

> weather we are experiencing occasionally has been so bad that even the tops of the potato plants and the leaves of some trees were burnt off.

> Another area we have to concentrate on is windbreaks. The winds can be atrocious. In the last few months four of our trees have blown down. This has meant less shade for the goats. They are Saanens so according to the experts there is a definite risk of them acquiring skin cancer.

> Obviously there are many challenges still to be overcome on these five acres, but we are keen to come to grips with them in the very near future ... and we feel this is still a wonderful place to practise our chosen way of life.



COMPOSTING - Feeding your garden for next to nothing

by Peter Cornhill

Now that we are well into Summer and approaching Autumn, if you can find time for composting you will be rewarded with a rapid breakdown of raw materials (weeks rather than months, as in winter) to form, hopefully, a rich dark brown friable humus, suitable for spreading throughout the garden. I spread layers of compost from 25 to 50mm deep on the surface of my raised garden beds, thus continually building these up rather than digging and disturbing the structure of the underlying soil. This generally works well provided your beds are raised enough (at least 150mm if possible). In heavy clay soils you may have to loosen the beds with a fork to allow sufficient penetration of air and water, but do not turn over the soil.

You will also find, especially in the more rainy weather that weeds are easier to pull out with a layer of compost or mulch on top of your beds. And of course they provide more raw materials for your compost heap. If you are lucky enough to have some leaves left over from winter time, you could alternate layers of these with the weeds and grass mowings. You may also have the dried out stems of last season's perennials which should be chopped up into 150mm sections if possible before adding to the heap remember, the smaller you can chop such material, the quicker it will break down.

If you are even luckier you will have your own chooks or ducks in the backyard. Not only do they provide you with delicious eggs virtually all year round, but they recycle excess weeds and all kitchen waste (barring onion peelings and orange and lemon peels which I put directly into



the compost heap). They also provide manure and semibroken down compost in the chook house where I scatter dry leaves each week from autumn to early spring. Once or twice a year I remove this semi-composted material (several barrow loads) and add this to the compost heap as well. I prefer this rather than putting it directly onto the garden, as poultry manure is a "hot" manure and can easily burn plants. No manure should go directly on the garden. It should always be composted.

During autumn and winter I collect leaves of all types and store them in feed bags. Then, as green, nitrogen-rich material (weeds, grass mowings, animal manure) becomes available, I start to build the next heap. I find that, provided the compost heap is made correctly, even the large oak leaves, renowned for slow breakdown, will decompose. Another good source of raw materials is lucerne hay, which contains a good balance of nitrogen and carbon, and can often be available cheaply for the garden as seconds with a bit of mould in it - see References/Sources at end of this article.

Okay, so you have your materials ready, as much material as possible. Though you can add layers over time, remember that as long as you are adding to the heap, it will prolong the time till the compost is "cooked". According to Biodynamic sources a maximum of 1 cubic metre is ideal if enough heat is to be generated. Whatever type of heap you make (open or closed), a few simple rules apply for successful compost in my experience:

- Start with the course material; eg prunings from perennials. This can form a loose layer on the bottom, helping to aerate the heap.
- 2. Always build up the heap in thin layers of each material, alternating between layers of carbon-rich (straw, leaves, sawdust) and nitrogen-rich substances (grass mowings, green weeds, manures). When you have put enough to just make the previous layer invisible, that's thick enough, especially with leaves! Every now and then add a thin layer of previously made compost or soil if possible.
- 3. Keep building layer upon layer as high as you can go before the heap falls over. Water dry layers, and give the heap a good soaking when you've finished building for the day. Remember if your heap is not enclosed in a bin, you will need to cover the finished heap with something to retain the moisture; eg biscuits of lucerne hay or old carpet. In summer or if your heap is in a sunny spot, you may need to water it from time to time during breakdown.
- I regard a reasonable amount of fresh animal manure essential to generate enough heat to make the heap "cook". Any sort will do, though cow is probably the best, if available.
 Kitchen waste should be covered up with another
- 5. Kitchen waste should be covered up with another layer to avoid attracting rodents, cats and dogs. I add wood ashes sparingly, as they are very alkaline; ie not good for Azaleas, Camellias, Rhododendrons, Ericas, Daphne, Gardenia and most natives. I also add small quantities of lime to "sweeten" the acidic leaves.
- 6. Do not add couch grass, kikuyu (yes there is some growing in Canberra), honeysuckle, ivy, jasmines or others that are invasive and may take root in the compost. Also, no rose or fruit tree prunings as these can cause fungus spores to be retained and spread.
- spread.
 7. You can finish the heap with a good layer of soil or compost on top. Then add a commercial or a Biodynamic Compost Starter to facilitate breakdown of the heap. These should be watered in

as per instructions, then close the heap off by watering well, then covering with biscuits of lucerne hay or old carpet. Leave it to cook - don't add more to it. In weeks or months (depending on the season) the pile will have shrunk to approximately half size, the original substances will be largely indistinguishable, and there will be few worms or signs of life, as these will have done their job. Time to start spreading it and watch your garden grow!

I have three bins, each of which holds about 1 cubic metre. One is cooking, one is in preparation and one is just about cooked. They are in a shady corner of the vegie garden, an area too shady for growing vegies, but ideal for keeping the compost moist. They are made of three hardwood pallets standing upright against the boundary fence. One mistake I made was to line the insides tightly with old fence palings, which, while stopping compost from rotting the boundary fence, has meant a lack of aeration.

Consequently, the finished product is very damp and dense and has to be cut with the spade! A 10 to 15mm gap between the palings lining the bins would have been better I think. As the layers pile higher in a fresh bin I close off the front with an old sheet of plywood or whatever (amazing what you can find at Canberra's tips isn't it?).

Although the above may sound like a lot of work, it really isn't that bad, as compost making can be spread over a whole year, and is one operation you can do during winter when there is not much else happening in the garden. Most materials can be got for free or next to nothing. I have not had to buy any other fertiliser for this garden in the 5 years since we moved here. The vegie garden is semi-all-yearround, about 10 square metres. We have 18 fruit trees (5 mature) on this large suburban block, as well as vines, berries, kiwifruit and flower gardens.

References/Sources of Material for Composting

- <u>Composting, Making Soil Improver from Rubbish</u>, CSIRO Division of Soils, Kevin Handreck, 1978
- 2. Commonsense Compost Making, May E. Bruce
- Deciduous leaves: available May to September from Canberra streets, especially older suburbs. Small leaves break down quicker than larger ones.
- Grass mowings from you lawn or local City Parks Depot, or ask your neighbours for theirs.
- Animal Manures: local stables, farms or the racecourse (mixed with sawdust). Sheep manure from Murrumbateman Scout Group (ph 227 5768 or 227 5861) or Don Sutherland (ph 064 554 025).
- Spoiled or slightly mouldy lucerne hay: Pialligo, phone 247-6911, or try Loriendale, phone 230 2557.
- If you want to shred larger prunings and add them to your compost heap, COGS has 2 shredders (see COGS Noticeboard for information).

Happy Composting!

To Till or not to Till?

If you find digging in that green manure is a difficult chore, you will be pleased to hear the results of a study by US Department of Agriculture scientists: Apparently they found "that amounts of nitrogen released from residues of alfalfa, wheat, and sorghum hardly differed at all whether the plants were tilled into the soil or just left there, untilled and unchopped on the surface"¹ 1 "Organic Gardening" Dec, 1993 p15

REMEMBER THAT GREEN MANURE!

by Michelle Johnson

Autumn is an ideal time to plant green manure crops in those beds emptied of this Summer's harvest. These crops can then be dug in Spring prior to planting your crops for next Summer. If you are unfamiliar with the advantages of green manuring please refer to the sources listed at the end, but briefly the benefits include: providing nutrients for following crops, providing organic matter for soil organisms to convert to humus, providing soil cover over winter to prevent erosion and weed investation, and helping to aerate the soil. The following Table is a list of suitable crops for Autumn for this region (list supplied by Joyce Wilkie), along with brief comments which may help you decide which crop to plant.

AUTUMN GREEN MANURE CROPS

Legumes: (fix nitrogen)*
Broad	Produce a large amount of organic
Beans	matter. Can be sown late in Autumn. Will
	stand some waterlogging. Sow 35gms/sq m.
Field Peas	Similar to above
Lupins	Effective phosphorous gatherers. Contribute
KE mont all	lots of organic matter. Not usually
	susceptible to fungal diseases which may
	affect peas and beans. Sow 16gm/sq m.
Sub Clover	Very effective nitrogen fixer. Not large
	amount of foliage. Sow 1gm/ sq m.
Tic Peas	Cheaper alternative to Broad Beans
Vetch	Large bulk. Competes well with weeds.
* Some luce	ernes may also be suitable
	should be a firmer of the second strength of

Non-Legumes:

Barley	Vigorous grower. Increases uptake of phosphorous in following crop. Peter Bennett
	recommends planting 2 cm deep, 3 cm apart,
	15cm between rows.
Oats	Grows in wide range of soils. Doesn't mind
	acidity. Broadcast 10gm/sq m
Rye	Large amount of organic matter. Drought
	resistant. Sow similar to oats.
NB. 1.	Some legumes need to be innoculated to ensure
	the right bacteria is present in your soil.
2	Flowering crops should be dug just before

- flowering, cereals before producing head of grain
- A crop will decompose in 4-6 weeks in late Octearly Nov, but may take longer if it is a cold Spring.

References:

1."Green Manures" by Tim Marshall, Acres Aust. V1, No9 p33

- 2. COGS Newsletter Sep 1992
- 3. "Organic Gardening" by Peter Bennett

Book Review:

Jackie French's "CHOOK BOOK"

by Annie Brent

As my interest in organic growing has developed over the past couple of years, I have become increasingly aware that I really should try and incorporate a few chooks into my "system". The trouble is that while I've read several books on the subject, observed various chook-keeping friends' backyard set-ups, and consulted at length with our own COGS Chook Guru, David Odell (whose talk to one of our meetings last year was no less inspirational for the fact that he was upstaged by a curious hen, eager to exit her box and take a good look at the proceedings), I've never actually taken the plunge. Jackie's latest offering will, I think, provide the necessary impetus.

This is a book designed for the novice chook-keeper or would-be chook keeper. If you already know what you're doing in the chook world then it probably won't add greatly to your knowledge, but I recommend it as an amusing read anyway. But if you're on the verge of becoming chookified then get hold of it.

Jackie starts by explaining why she thinks we should all keep chooks. Apart from the obvious benefits of providing eggs and fresh meat, their value to the gardener in the form of compost recyclers, poop producers, vegie patch preparers (they do a great job at clearing and fertilisers the spot) and pest consumers, cannot be overstated.

The book then goes onto what sort of chooks to acquire. If you're anything like me you'll be pleased to finally understand a bit more about those poetic names you see on the cages at your local show: Australorp, Rhode Island Red, Leghorn and the like. Jackie talks about how many chooks you should acquire, where from and of what age. She also broaches the question "to rooster or not to rooster?". Did you know that "roosters are randiest between 4pm and 6pm, about fifteen hours after they wake up" and that " they mate anywhere between one and fifty-three times a day"? Nor did I.

In her chapter on keeping chooks Jackie tells you what sort of accommodation you'll need to provide for your feathered friends, depending on whether you want to adopt a freerange, deep-litter or chook-house system. There are sketches of different types of abode, as well as information on what to feed your chooks and how to attend to their other needs: water, shade, nesting boxes, perches etc. It wouldn't be a Jackie French book if it didn't have a problem solving section, so topics such as predators, diseases and soft-shelled eggs all get a look in. By the way, if you've always wanted to know how to hypnotise a chook, this is the place to look.

A chapter on chook extras tells you how to use feathers to make a quilt, a mattress or a quill pen, as well as how all the other by-products can turn into useful and or decorative items (soap, blown eggs, shampoo etc). Last but not least an extensive collection of recipes for chooks of various vintages, in case you are brave enough to behead your charges once they're no longer useful to you in other ways. These look absolutely mouth-watering as do the many ideas for using the eggs themselves.

Let me recommend this book as an entertaining and informative read for anyone who doesn't already know a fair bit about chooks.

PS As well as the reviewed book, the library has recently acquired Jackie's "Organic Control of Common Weeds", David and Yvonne Taylor's "The Compost Book", and Sandra Clayton's excellent "The Reverse Garbage Garden".

Cotter Community Garden by John Flowers

This month, instead of itemising the successfully grown edible products of the garden, let me get something off my chest. Its nice to think of our plots as "community garden". Is the group that scratches dirt on our exclusive patch really a community?

We now and then have levies but these reflect an administrative division of our collective financial commitments. How many of us see a bin full of couch grass and think "I'll empty that"? Of course, if one believes in the Tooth Fairy she'll do all those odd jobs when she's not replacing baby teeth lost by young children with nice shiny coins. On a practical note, who says "I'll dig out that grass before it spreads to my neighbour's bed", or "I'll ensure that those weeds in my bed (or on the path) don't seed and multiply elsewhere"?

Working bees help with jobs of a general nature but are these the best solution? Every voluntary group has the same story to tell - of course its left to the usual half dozen. No doubt excuses for non-attendance are as genuine as they were some two thousand years ago when invitees to a wedding "all with one consent began to make excuses". A pattern seems to have emerged over the years when one looks at the members who turn up.

We shouldn't need working bees if we all were imbued with a spirit which Boy Scouts are understood to have. Alas we haven't a Chairman Mao among us who can move people to frequently quote, and apparently believe in, such public signs which were seen all over China as "Serve the people". We can't bring back the stocks, public floggings or transportation for those who don't keep their beds and surrounds weed free, alas!

Perhaps you have a solution which you can share with us?

Your Rural Correspondent David Odell A Long Hot Summer

When does a drought begin? Of course we know the blessed relief of drought breaking rains as we smell the freshened air and watch the pastures greening when the waiting is finally over - and the only question remaining is whether there will be suitable follow-up rains - but the approach of drought is more insidious and misleading. There is the false promise of rain which, if it falls, barely settles the dust, the gradually increasing workload in making sure that the garden is watered and mulched, the anxious checking of the water levels in dams and water tanks and also in the gradually increasing the amount of hay given to the stock as the pastures shrivel up.

All of this comes at a cost, not only financially but emotionally and physically as one works harder just to maintain the *status quo.*, but my indicator of a drought tightening its grip is in that nasty little wind that seems to have no purpose but to orbit in on itself, to wilt and dessicate all that lays before it, the wind that saps energy as well as moisture, the wind that pleasures in the dust it raises. The sort of wind we have right now!

Of course another indicator of these extreme weather conditions is in the early onset of bushfires which have ravaged the East coast of New South Wales and parts of metropolitan Sydney, an unusual weather condition which saw the winter wind pattern combine with extremely hot and dry conditions of a late summer and one which provided a potent cocktail for the activities of arsonists. Our sympathies and support continue for the victims of those fires and our appreciation of the work of volunteers and officials who fought those fires has been given the national recognition it deserves, however it has brought home the message that fire is a good servant but a bad master.

As a rural landholder I have been encouraged to prepare for such eventualities and, with modifications, such practices could be adapted for those who live in the cities. First, clear the rubbish away from the house and make sure that the gutters are cleaned out so that they are able to be blocked at the outlets and filled with water when the emergency arises. Wind-blown sparks get in at the eaves to start the house fire and rubbish surrounding it will add to the conflagration. A good idea is to install a sprinkler on the roof but make sure that any pump used to drive an alternative sprinkler system is not electrical but is petrol or diesel as usually the electricity supply is the first service to go. I had two big irrigators to the north and west of the cottage as a wet buffer against the prevailing wind (incidentally giving the garden a much needed soaking) with the powerful Hatz diesel engine and Southern Cross pump testing out the hose connections to their limits to the extent where I had to replace them with "superclamps" in order to make sure that the pressure was maintained.

Other preparations had taken place earlier, even as far back as last winter, when loose timber had been piled and burnt to not only to reduce the fuel hazard but to provide vehicular access to combat the possible ground fire before it used the trunks of the Stringybarks as a fuse to light the canopy. A groundfire can be contained by backburning but a crown fire can only be watched - and the sparks from a crown fire on this escarpment could devastate the village of Bungendore under the conditions of the prevailing winds during the bushfire season. Further preparations also included keeping the vegetation down around the perimeter of the cottage by a variety of methods. There is the obvious one of mowing or slashing but also I used the sheep and cattle to eat down the spring growth (yes, it did rain then) before using the chisel plough to provide a rough fallow in anticipation of being able to sow some grasses and fodder crops in the Autumn. And of course I paid my annual subscription to support the local bushfire brigade.

I mentioned in the last COGS Quarterly that Les and I were working on some much needed fencing. Well, that work has been completed to the extent where only some minor details are required to finish it off (in my "spare" time) and it now provides a focus for expanding the market garden/free range poultry project which I believe is an essential basis for a small, integrated organic farm. Of course, much more remains to be done but the framework is in place - and in taking a little more time to get it right in the first place will save time and expense later on rather than having to correct mistakes made in the first rush of enthusiasm.

I think Les may have been also looking to extend his contract when he suggested erecting the cow shed but his suggestion suited me and solved another problem of what to do with this gigantic meccano set that had been lying unused on the ground for far too long. The first problem was to correct the mistakes made by the concretor when he installed the anchor bolts in the foundation piers. I had employed him as an expert but he floored me with his comment (after he'd finished) that he "couldn't guarantee" the accuracy of their placement. Naturally, if the foundations weren't square or the bolts weren't in their right places how could the shed be properly erected to its modular design? 'Les, with his ingenuity and his welder, and a copious supply of dynabolts, managed to rectify that problem. "When all else fails read the instructions!" is another admonition to myself as I tried to rely on my memory and my far from perfect system of numbering the various parts but without too much rancor and readjustment we managed to put together a very presentable shed in about twice the time it would take a professional erector (that makes us experts too as we now have on-the-job experience!)

Between the fencing and the cow shed we had to take time out to complete a couple of portable chicken sheds, steel framed on skids and clad in corrugated iron, in order to get the Isabrowns out of the brooding shed. These portable rearing sheds were made to my own design and have proved very successful in practice and with a little modification can be adapted for laying hens. At present they are located in the vineyard where the pullets with their obvious health and demeanour demonstrate the benefits of good rearing under open range conditions In fact, even with my extensive experience in rearing poultry, I have never been so pleased with this new breed which suprised me with their first eggs at just over 4 months of age - very precocious.

Because I was concentrating my efforts elsewhere the vines became sadly neglected and needed a great deal of effort with the slasher to bring the competing growth under control. With this done I had to devise a method (which didn't involve spraying with herbicides) to prevent this problem reoccurring. I had tried chipping but this has proved quite laborious and time consuming so the only logical alternative was heavy mulching. But where to source a suitable supply at a price I could afford? I had done my calculations on the basis that one bale of straw would cater for four vines and for this project I would need at least 1000 bales or roughly three truck loads.

When talking to a friend from Coolamon on his way with his family to the coast for the summer holidays he mentioned that he had about a thousand bales of weathered straw that would suit my purpose and it would be preferable to use these for muching rather than having to dispose of them by burning. So a deal was struck whereby he would arrange for the first truckload to be delivered the following weekend if I covered his initial costs of baling plus the transport cost at so much per bale (the freight costing as much as the bale itself) but even so it is the most cost effective solution that should have beneficial long term results in weed control and in the conservation of moisture. So if any of my readers also wish to benefit from this source of mulching straw I should have some surplus at the minimal cost of \$3.00 a bale "at the farm gate".

The Eliot Coleman seminar held at Gundaroo in late October was a delight. Not only were the topics relevant and informative but were delivered by Eliot in his inimitable fashion that held the capacity audience for as long as he wished to speak. As was pointed out by Michael Burlace at the conclusion of the seminar it wasn't sufficient just to imitate Eliot's methods in their entirety but to adapt them to one's own situation. It was a measure of Eliot's success as a speaker and writer that we were all imbued with his ideas and enthusiasm.

My garden this year is showing the benefits of the two crops of green manure that were rotary-hoed in as preparation for planting the main crops, the carrots especially are producing exceptionally well as also are the beans and broccoli. One variety I enjoy is kohl rabi as I find it adds a picquancy to soups and casserols but I have found that it is a vegetable that is not very well known or appreciated by others. The corn and climbing bean experiment to which I referred in my last article was not a success as the germination of the corn in the soil was patchy (although it germinated well under damp paper for a subsequent crop to be planted out) and at the time of planting the beans the soil was still too cold for effective germination. I'll try again next season perhaps. An experiment that was a success was to plant potatoes in two-tier tyres. The lower tyre containing the soil, a handful of dynamic lifter and the single seed potato while the top tyre held the (prime) lucerne hay as a mulch. One point I did have to watch though was to see that they were adequately watered as within the confines of the tyres the soil tended to dry out as it was above the normal soil level. But the results were tremendous as the potatoes were abundant, large, clean and, above all, delicious.

What a difference a day makes! The violent storm which brought the Bungendore Show to an abrupt end when huge hailstones were dumped on the village at least brought a change in the weather pattern. Now, at least, there is some moisture around to feed the possible afternoon storms as a preliminary to getting back to a more "normal" weather pattern. Just for fun I entered some eggs from my Barnevelders in the Show - and won first prize - the comment from the Stewardess to the effect that she had never seen such brown eggs!

I have decided to take an extended holiday in order to travel around Australia, and possibly overseas, to familiarise myself with some of the developments taking place in organic growing methods and sustainable lifestyles. During my absence my brother and his family will be looking after the farm so as far as that is concerned it should be 'business as usual'. I also intend to continue to be your "roving" rural correspondent as I will take this WP with me to record my impressions so as to keep you up to date with those developments.

Good-bye for now. David.

Gardens of Friendship by Helen Taylor

Early mornings spent in the garden provide me with a very special joy.

They give me an opportunity to absorb nature and to contemplate life. Recently such contemplation revealed the many values of friendship the garden represented.

Plants and other aspects associated with the garden received from friends have special meanings in my heart.

The comfrey, calendula and green oakleaf lettuce, all now regenerating for several years originally came from Betty to help establish my organic garden.

The black currant plants came from Mary's canes pruned by her daughter ruth. Because the cuttings struck so well plants from them have in turn been given to others. The alpine strawberries, asparagus, yarrow, parsnips and borage along with many other useful ideas on permaculture come from Judith and David. Rocket, parsley, thyme, dill, sage, oregano, basil and Vietnamese mints come from Corrin, along with useful ideas on there maintenance and uses.

Just starting to make a show are the beautiful rainbow chard plants grown from seed given to me by Anne and Winston, and so the list goes on. In addition some of the other joys are:

-Sharing seeds, seedlings, cuttings and produce from your garden

-Pleasant chats with neighbours whilst tending the garden

-Sharing information through garden visits, talks and the written word and

-Pleasant social gatherings where fare from the garden is partahen.

-A garden does indeed in so many ways provide a wonderful vehicle for friendship.



Of all the parameters of the weather, the one uppermost in most people's minds at the moment is the rainfall. It will come as a surprise to nobody to read that, up to the time of printing this magazine anyway, the summer has been very dry. Statistics from the Bureau of Meteorology show that the rainfall totals in December and January for Canberra were 23.2mm and 9.2mm(!) respectively, well below the longterm averages of 53.9mm and 58.9mm for these months.

Looking ahead the rainfall forecast from the Bureau for February through to April is more optimistic, with close to average rainfall being forecast for this region. This means totals close to 56.5mm for February and Autumn values of 55.0mm and 52.1mm for March and April. The average for May is 52.1mm.

According to the Bureau, farmers on the NW, W and SW slopes and the Riverina can expect higher than average rainfall (let's hope they're right) but it will continue to be dry on the Far North Coast of NSW.

Although watering our gardens may be our top priority at the moment (early February), it won't be long before we must also keep an eye out for that unexpected first frost in Autumn. Do watch for frost pockets, particularly in low lying areas on clear bright nights.

The earliest the first frost of the season has ever occurred is the 2nd March in 1940, and in 54 years of data from the Bureau, the first frost has occurred sometime in March 17 times i.e. there is about a 30% chance of the first frost being

in March. Certainly don't count on vegetables maturing in May since there is more than a 90% chance the first frost will have occurred by the end of April. The 9th April is the median date for the first frost.

If the first frosts are light, you can protect your crops by covering them with an old blanket or shade cloth or some other cover. Some mulches may help eg pebbles, but others such as straw are believed by many to attract frost. If your plants are damaged, spraying with water before the sun gets on them may help.

Handy Hint: Lacewing Hotels by Michelle Johnson

Lacewings are very welcome insects in any garden. There are many different species in Australia, distinguished by their transparent wings. Of these, green lacewing larvae feed only on aphids, and it is estimated that each female lacewing lays about 300 eggs, and each larvae then eats between one thousand and ten thousand aphids! Others prey on red spider mite.

To help the lacewing overwinter in your garden, the Henry Doubleday Research Association in England, suggest using "lacewing hotels".¹ These hibernation sites are simple home-made refuges made out of plastic drink bottles which are then hung from branches of trees, shrubs or fences at the level of maximum foliage.

Make each one as follows:

"Cut out the base of the large 1 or 2 litre) plastic bottle. Do not wash them out (*Ed. note: adult lacewings eat nectar and will be attracted to the sweet residue left*) Cut a piece of corrugated cardboard about 80-100cm long to fit the height of the bottle, roll it up and put inside (see diagram). A thin piece of thin wire pushed through both sides of the base will keep the cardboard in place. Leave the top on to prevent water getting in." (page 20, Newsletter 132 HDRA)



¹. Newsletter 132, Summer 1993 HDRA.

Accommodation Available - Inner North

Self-contained garden flat in North Lyneham. Close to bus and bike paths to Civic, Belconnen, Dickson. Includes garage and storage space, use of large solar heated inground swimming pool and a newly established organic garden with a variety of edible and other plants including apples, nectarines, plum, grapes, kiwi fruit, passionfruit, currants, strawberries, herbs, flowers, natives, vegies etc. Rent \$125 per week. If interested please phone Julie on 248 5192 and leave a message on the answer phone.

STORING VEGETABLES IN THE REFRIGERATOR

In late Summer particularly we often pick more vegetables than we need to use right away, so the following are some hints on how to store that excess in the refrigerator:-

Beetroot:

Cut tops off beetroot, leaving a 25-30mm stem. Place tops in crisper. Wipe beets with a damp cloth to remove any mud, then place in crisper.

Blackberries and raspberries:

Better to eat straight away, but if you must store them, place on a tray lined with a paper towel, in a single layer, then cover loosely with plastic. Check and remove "bad" berries daily.

Carrots:

Twist off the greens; don't wash! Place in crisper or in a plastic bag with a paper towel.

Capscicum:

Store loose in crisper, or cool but not cold section of the fridge. Wrap hot peppers (in a paper towel, or greaseproof) to separate from other vegetables.

Cress (Land and Water):

Highly perishable. DO NOT WASH BEFORE STORING. Wrap in moist paper towels and put in crisper. Alternatively, place in a jar with a damp paper towel in the bottom.

Cucumbers:

Store in a fairly cold section of the fridge

Herbs:

It is preferable to harvest these as you need them, but if you have too much, wrap in a lightly moist paper towel, put in a plastic bag and use as soon as possible.

Lettuce:

If the whole plant is harvested with the roots attached, then set the roots in a container of water. Enclose it all loosely with plastic wrap. For bunches of leaves, place on paper towels in crisper, or alternatively wrap in moist paper towels and put in a paper bag in the refrigerator.

Mushrooms

Don't wash. Pack loosely in a container with no lid, or in a brown paper bag. Do not use plastic bags. Alternatively wrap loosely in paper towels and place in crisper.

Parsley:

Place in crisper wrapped in a dampened paper towel, or place a dampened paper towel in a large glass jar and then put in the parsley heads and cut off stems. Screw lid on tightly.

Radish:

If a bunch is tied together, remove tie. Cut off tops, leave about a 25mm stem. Place in crisper.

Water Chesnuts:

Peel and then cover with water.

Don't store in the fridge!

Sweet potatoes (place in cool dark place for short time)

Ordinary potatoes

Tomatoes (NB. firm ripe tomatoes should be stored at 7 to 10^oC, storage at lower temperatures can shorten the life of the fruit.) Pumpkins, squash or onions (except for those that have been cut)

References:

"The Harvest Gardener", Susan McClure "The Fresh Vegetable Cookbook", Vo Bacon "Growing Vegetables", John Mason and Rosemary Lawrence

STIR FRY VEGETABLES

(recipe supplied by Traudi) <u>Ingredients</u>: use any 8 or more vegetables in season: asparagus, baby squash, beans, broccoli, cabbage, capsicum, carrots, cauliflower, celery, mushrooms, onion or shallots, parsnip, pumpkin, snow peas or sugar peas, zucchini, any chinese vegetables,

plus 2-3cm piece fresh ginger, grated or finely chopped; 1-2 cloves garlic, grated or crushed 1 tbls oil (or sesame oil) 1-2 chicken or vegetable stock cubes or soy sauce dissolved in 1/3 cup water 1-2 tbls instant coconut milk powder, optional <u>Optional extra</u> - chopped cold chicken or fish can be added at the end just to heat through

Method: Precut all vegetables diagonally in pieces or slices or sticks where appropriate. Do not cut vegetables too small, but leave in chunky bite-size pieces. Use wok or large frypan, heat oil, add ginger & garlic, then add dense vegetables, e.g. carrots celery, beans, pumpkin. Stir and cook for 1-2 minutes. Add remaining vegetables. Do not overcook. Stir & add stock and water etc. Ready to serve in 5 minutes. Serve with long grain rice.

RECIPES from Linda Hyslop SAVOURY ZUCCHINI

SLICE

Ingredients: 3-4 zucchini (600gms), grated 1 cup of grated cheese 1 chopped onion 1 or 2 rashers of bacon 1 cup of wholemeal SR flour 5 eggs 1/2 cup oil. <u>Method:</u> Mix all ingredients together and place in a greased shallow baking dish. Bake in moderate oven for approx 40 mins. Nice hot or cold.

BEAN SALAD

Ingredients: fresh green beans (or yellow or both) fresh dill 1 small onion finely sliced 2-3 tbls white vinegar, 1/2 tsp sugar and 1 tbls oil (or a commercial salad dressing) <u>Method</u>: Steam beans until just tender. Whilst hot transfer to salad bowl. Add and mix together the other ingredients, allow to stand for at least 1/2 hour.

TRAUDI'S TOMATO CAKE

Ingredients: 125g butter 3/4 cup sugar 3 eggs 1 cup chopped tomatoes 1/2 cup sultanas or raisins 2 cups SR flour 1/2-1 cup milk

Method:

Cream butter and sugar, add one egg at a time then chopped tomatoes and fruit, and mix in flour alternately with milk to form a soft dough (but not a batter). Place in 2 loaf tins (or 3 slim tins). Bake at 180°C (or 975 F) for about 35 mins.

AMERICAN COLESLAW

(Keeps for several weeks in fridge) Ingredients: 1/2 small cabbage, shredded 2 large carrots, grated 1 cup white vinegar 1/2 tsp celery seeds 1 cup sugar 1 tsp mustard seeds (black and/ or white) 1/4 cup oil Method: Place vinegar in a medium to large saucepan with sugar and spices, heat gently and stir until sugar is dissolved, add shredded cabbage and grated carrots. Stir and just bring to the boil. Stir, cover and let stand. Refrigerate.

REFRESHING CARROT

SALAD Ingredients: 2 grated carrots 1/4 cup currants, rinsed 1/3 cup shredded coconut juice of one orange juice of half a lemon <u>Method</u>: Mix together and serve.

COGS NOTICEBOARD

NEXT MEETING: Tuesday 22nd February, 1994, 7.30pm, Room 4, Griffin Centre TOPIC; A Panel Discussion on growing and novel preparation of vegetables (Marjatta Asa will speak on growing organic turnips and unusual preparation methods with other speakers).

There will be the usual library, seed exchange and produce table. Visitors are most welcome

Next Committee Meeting: Tuesday, 7.30 pm 1st March at the Environment Centre.

AGM this will be held on Tuesday, 22nd March, at 7.30pm at the Griffin Centre. At this meeting the annual election of the COGS Committee will be held.

SEED EXCHANGE:

Now is the time of year to start saving seed from some of your favourite non-hybrid vegetables. If you have an excess, please remember the COGS Seed Exchange and bring some along to our Seed Librarians to share with other members.

THANKS TO LINDA HYSLOP:

Our cake stall at the Hall Markets in December successfully raised over \$250 for the COGS Library. We would all like to thank Linda for a marvellous job organising the stall, her enthusiasm was contagious and made the whole day an enjoyable one. A special thanks from Annie Brent to Linda. Thanks also to all the people who cooked for the stall, and those that came along on the day to help. Thank You All!



COGS MULCHERS:

The two COGS Mulchers are available for use by COGS Members. Enquires can be directed to John Ross Northside (including Queanbeyan and Bungendore) ph 241 4063

and Richard Blyton (Southside) ph 231 6219

President's Comments

Welcome back! I hope you had a refreshing break over the holiday period. Another year has started for COGS, and already its time to start thinking about our AGM. The most important business to be attended to is the election of a new Committee. At the beginning of the meeting all positions will be declared vacant. We need a full complement on the Committee if we are to carry on the work, and in particular we, like all organisations, need new people, with new ideas and talents, to keep the Committee fresh and enthusiastic. While all positions are important, I must mentioned two particular ones: the Secretary and Membership Secretary. I have been informed that the two people currently holding these positions will not stand again this year and so we need nominations for their roles. These two positions are fundamental to the day-to-day administration of COGS and must be filled. If you are interested, please give me a call, or better still, contact the present office bearers and discuss the positions with them. Nomination form can be obtained from the Secretary, at the February meeting, and the form will be printed in the March Flier. Please considering standing for one of the positions.

Speaking as Editorial Coordinator, I want to thank all who have contributed to this issue of the Quarterly. To be out in Mid-February, preparations must begin in December at the latest, and a lot of work must be carried out in January - not the best time to be asking people for articles and assistance in putting the magazine together. So a special thanks to all who took time out to help.

> Hope you have a wonderful harvest from your garden Michelle Johnson.