



QUANDONG

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Newsletter of **WANS** the West Australian Nutgrowing Society

The Society's membership now stands at almost 300, including members now in six overseas countries. This is a remarkable achievement in just over one year, and reflects a great underlying swell of interest in nutgrowing.

Articles in this issue include a list of SEED SOURCES, an article on the PECAN from a Queensland nursery, the second article on TAXATION for the nutgrower, and a continuation of Tim Lynn-Robinson's epic tour article.

For members with an interest in growing nuts commercially, the big news is that the Society's cooperative, West Australian Nut Supplies Co-operative Limited, was formally registered on the 27th of July. The cooperative will be familiarly referred to as **WANSKO**. Members will appreciate that the Society is a fairly informal, loosely-organized body, and so is somewhat restricted in what it can do for members. To be able to contract to buy supplies, own machinery or plant, etc., a more formal arrangement is required, and this is provided by the cooperative. Members of WANS can buy into the cooperative for a once-only cost of \$10.00, but as shareholders in a limited company are fully protected from any business mishaps which could occur, in **WANSKO**.

WANSKO

The WEST AUSTRALIAN NUT SUPPLIES CO-OPERATIVE LIMITED was registered on July 27, 1976, by the Cooperative Federation of W.A., a most helpful organization set up for this purpose by Wesfarmers. Wesfarmers were set up in 1914 and are now one of the biggest businesses in W.A., with 16,369 member-shareholders. WANSKO starts off with 5 shareholders, and with 2 directors, Edmund Czechowski (Secretary), and David Noel.

WANSKO activities will be limited in scope at first, the main ones being to sell nuts produced by members and others, and to develop the nut market by importing supplies of various nuts. Later developments, such as cracking and processing facilities, will be determined by the shareholders themselves.

The Articles set out that from 10 to 100 shares at \$1.00 each can be applied for. Shares will be sold ONLY to WANS members. To take part in this worthwhile venture, write to the Secretary at P.O. Box 12, Wanneroo 6065, saying how many shares you want. All profits from the Cooperative will be returned to members through dividends and bonuses. We need \$200 now to pay the cost of setting the cooperative up, so don't delay!

Any enquiries on selling or buying nuts can be directed to WANS member and WANSKO shareholder Catie Ruben at 'Genesis', 1d, Violet Grove, Shenton Park, WA 6008. Telephone number is (092)-811579.

QUANDONG

is edited by David Noel and is the Official Newsletter of the

WEST AUSTRALIAN NUTGROWING SOCIETY

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members' notes

Mrs Katharina Titelius, Lot 2185, Stradfield
Hedges Road, GLRN FORREST 6071:

We have planted 24 pecan nut trees here, on a terraced hillside. These have a trickle system. The trees need shelter from wind, and protection from the sun and browsing kangaroos. All trees look healthy and are growing well. We had the trees from Langbecker Nurseries, Bundaberg, Queensland.

We have also planted macadamia trees. When they arrived by rail, half of the trees had dried out during the journey. Of six trees, two died due to dehydration. The soil in our area is clay with some subsoil. Pecans do best in straight clay with minerals and manure added gradually. Macadamias need more attention than pecans.

Ivor Davies, 57 Gloster St,
SUBIACO 6008:

I wrote recently to CSIRO Horticultural Research Division, Merbein, Victoria, about pistachios. They replied that the Division will supply seed of Pistacia atlantica for rootstocks, and limited quantities of scion wood of Pistacia vera cultivars. Two nurseries have started to propagate pistachios - Weares Nursery, PO Box 736, Griffith, NSW 2680, and Buckingham & Martin, 123 San Mateo Ave, Mildura, Vic. 3500. In conjunction with the W.A. Dept. of Agriculture we have established a pistachio variety trial at Muresk Agricultural College. These should give an indication of the best varieties for your area, and also serve as a source of budwood."

"The rainfall at Koorda is too low to permit regular cropping of pistachios, and supplementary summer watering (probably 10 cm in November and end of December) would be necessary for commercial production."

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FREE CATALOGUE

When Spanish and other European explorers came to North America, they found Indians eating many foods never before seen in the Old World. The Pecan was one of these foods.

The Indian introduced the pecan to the white man and then began trading them for the white man's tools and trinkets. The first record of shipment of pecans from North America to England was in 1761.

Enterprising men of that day began to realise that domestic production of Pecans could be profitable. Pecans for reproduction were first planted in a nursery in 1772 and by 1871 several good sized groves had been planted.

The pecan nut (*Carya illinoensis*; family Juglandaceae) is closely related to the walnut. The tree is a member of the hickory group, native to North America. It is tall and shapely, rather thinly foliaged and bears its flowers in conspicuous racemes. The nut is smooth, brown and thin-shelled of an oblong shape and slightly pointed, well filled with a sweet kernel of good texture yielding from 55 to 60 per cent by weight and nuts may go from 35 to 70 to the pound (77 - 154 per kilogram) depending on variety and growing conditions.

(CLIMATIC CONDITIONS)

The pecan will grow well under a wide range of climatic conditions but favour those regions with regular frosty periods during the Winter months. This ensures a completely dormant period which has a direct beneficial effect on cropping. For example, it has been found that, in the Gympie area colder southern slopes give better results than the warmer northern slopes.

Late Spring frosts are injurious to young trees and precautions must be taken to prevent them from injury. The pecan grows in the tropics without frost but its cropping capacity is inhibited to some extent and research needs to be carried out in relation to suitable varieties for the warmer climates. Strong winds may be detrimental either in breaking limbs or reducing the set of nuts. Drying winds during the blossoming period will quickly dry out the receptive parts of the female or pistillate flower. This reduces pollination and fewer nuts are set.

In Queensland, orchards have been established in Atherton Tabeland and south of Rockhampton at Gladstone, Bundaberg and Gympie. There are scattered plantings around the Eastern coastal belt extending to Adelaide fair to good results have been reported.

(SOIL AND CULTURAL REQUIREMENTS)

Deep, well-drained soil is necessary for the pecan. Clay loams and loams overlying a free draining subsoil support vigorous trees and should be given preference when selecting the orchard site. Complete absence of impervious layers of clay or hard-pan are necessary for best results and longevity. A good root system will not develop if there is a water-table close to the surface. The soil should be slightly acid in reaction with Ph. from 5.5 to 6.5. Pecans will grow and produce a small crop with little attention, but they respond generously to good management.

(FERTILIZING)

Large quantities of nutrients are required from the soil for the growth and development of the tree and nuts. Therefore fertilizer applications will be necessary to supplement the nutrients and organic matter supplied by cover crops and mulch. The greatest demand is for nitrogen, which may be supplied by leguminous cover crops supplemented by a mixed fertilizer. However, the planting of leguminous crops is not particularly recommended until the tree has established an extensive root system when it will benefit from the nitrogen thus supplied and until it has grown to a sufficient height to make weed control around it reasonably convenient. Until this time nutrients are best introduced by fertilizing around the 'drip' area, with a formula based on the recommendations of the Dept. of Primary Industries after soil tests are taken and having taken due regard to soil type, rainfall, cover crop programme etc. For bearing trees, fertilizer application should be split into several applications throughout the year, principally through the Spring and Summer months.

(WATER SUPPLY)

Pecan trees do well in soils where plenty of moisture is available, provided good drainage is present. Good soil moisture throughout the whole year ensures the best conditions for good tree growth and regular crops of well-filled nuts. If moisture stresses do occur the tree may be unable to produce adequate numbers of strong shoots carrying the clusters of female flowers from which the crop will develop.

Insufficient moisture in the Spring and again in the period from mid December to mid January will accelerate the natural falls of nuts which occur at these times. The final yield can be further affected by reduced nut size and the kernels, instead of being plump, may be pinched and of poor quality.

(POLLINATION)

The pecan carries male and female flowers separately on the same tree. This sometimes leads to difficulties with pollination. In certain varieties, the female flowers become receptive to pollen at about the same time as pollen is shed from the male flowers. With such varieties, there should be no difficulties with regard to self-pollination. In other varieties, the female flower mature and the stigmatic surfaces dry out before the pollen shedding takes place. These varieties require the presence of other varieties which will provide pollen at the

appropriate time. It is fortunate that the self-pollinating varieties also shed their pollen during the receptive period of those varieties needing cross-pollination, thus, not only ensuring their own pollination but also serving as pollinators for other cross-pollinated varieties.

(PLANTING)

July to mid September is the best time for planting bare-root nursery grown pecans as the trees are dormant during the winter months. Ground should have been prepared by this time, to conserve moisture and reduce weed infestations.

Holes to receive trees should be prepared and spaced at least 40 feet apart according to soil fertility. (Spacing of 40 feet will give an intensity of 27 trees an/acre.)

When they arrive, dampen the packing media and plant immediately or place in cool storage. If trees must be held several days, heel them in with moist, very sandy loam water heavily and provide shade and shelter from wind. Drying out before planting could be disastrous.

When planting, place soil firmly around the carrot like roots, use a plunger to compact the soil so that firm contact is established between roots and soil. This is the most important part of the planting procedure.

The trees should then be thoroughly watered and mulched with straw, leaves or the like to conserve moisture. As pecans are always planted in the winter when evaporation loss is low, the first watering will last, depending on soil texture and weather, from 2 to 5 weeks. Never let the ground dry but at the same time do not overwater so that it is constantly soggy.

The frequency of watering should increase when the trees come out of their dormancy into full growth and the weather becomes warmer. After planting, provide the trees with a twiggy shelter to prevent dehydration. Experiments have shown that dehydration can also be prevented by the use of plastic paints which can be diluted with water then painted all over the trees.

(NEVER USE OIL BASED PAINTS)

Pecans go through a definite four to five months dormancy period which lasts until mid October and as with some other deciduous trees, cannot be induced to show signs of growth before the advent of spring. Attempting to encourage growth before such time by excessive watering or fertilizing will achieve nothing but may well have an adverse effect on the trees.

(PRUNING AND TRAINING)

Pecans develop into large trees and require a spacing of about 40 feet. No systematic pruning is necessary beyond removing dead wood and branches which are out of position once a symmetrical tree has been established.

Proper pruning of pecans will result in the development of a good system of scaffold limbs thus enabling branches to withstand high winds and the weight of heavy crops.

To train the young tree during the first and second growing seasons, let all shoots on the trunk above the graft union grow. When shoots on the lower portion of the trunk start vigorous growth, cut them back to a length of 4 to 6 inches and keep them at this length. By keeping some foliage around the trunk, sunscald and wind damage will be prevented. This will enable the trunk diameter to increase at a much faster rate than otherwise.

"V" shaped crotches should be avoided as they will split easily in excessively strong winds. Wide crotches are desirable for strength.

At the end of the second or third growing seasons the canopy will shade the trunk sufficiently to allow the lower branches on the trunk to be removed. The desired height of the permanent lower limbs on the Pecan tree will be then determined by the climate, spacing and cultural procedures.

(HARVESTING)

Preparation for harvesting the nuts in autumn should be made by removing excess grass etc. by mowing and, if necessary, levelling under the spread of the trees.

When ripe, the husk around the nut opens, releasing the nut. The fall can be assisted by shaking and jarring the branches using a light pole or in the case of big plantations a tractor mounted vibrator/shaker can be used.

After collection, the nuts should then be spread out on a well ventilated floor or racks to cure for 2 to 4 weeks when they should be dry and shrinkage complete. They should be graded to size and damaged and deformed nuts removed.

They can then be stored until completion of the harvest and marketed in one move.

(YIELDS)

Age at which trees start to bear is influenced by many factors such as variety, seasonal conditions, district, management etc. and can vary from 3 to 6 years with worthwhile commercial production in from 8 to 12 years. The average rate of production per tree or return per acre has not yet been determined in Australia.

With good management, their commercial life can be extended up to 100 years.

Crops can be similarly influenced and if existing individually, established trees may be taken as a guide to production, then they will produce varying from season to season, 50 to 100 lb (22-45 kgs) per tree at the age of 20 years.

Crops of 1500 lbs or more per acre have been achieved in U.S.A. in established plantations.

Pecan growing must be regarded as a long term investment. Nuts are always in heavy demand. Tree production at the nursery level is very limited, overproduction cannot be anticipated for many years to come.

(DISEASES)

Pecans in Australia have been relatively healthy as the worst diseases encountered overseas have been kept out of this country.

On zinc deficient soil an affliction known as 'rosette' occurs and this can be partially prevented by application of zinc sulphate.

(MANAGEMENT)

In the initial stages, some form of small cropping may be contemplated between the rows and where it is necessary to bring valuable ground into early production growers may inter-plant pecans with fruit trees which come into production at an earlier age. (Citrus, Bowen mangoes and even avocados and in temperature areas Pome and stone fruits may be used.) Pecans will also tolerate intensive farming or vegetable growing.

Care should be taken not to cultivate too deeply in established orchards, as to damage the surface roots of the trees. Small crops or cover crops should be fertilized according to their own requirements as well as those of the pecans.

When trees are of sufficient size to escape injury, stock could be run in the plantations.

Grass or cover crops should not be allowed to reach a condition where they would present a fire risk or become competitive with young trees.

(IMPORTANT REMARKS)

As with Macadamia nuts the thinner shelled varieties of pecan should not be grown commercially as these nuts become very vulnerable to moisture or insects. Clients are usually warned about these weaknesses at Fitzroy Nurseries.

THE BOARD OF DIRECTORS

In accordance with our by-laws, Director Paul Sinclair, our Vice-President, has retired from the Board of Directors, but has indicated his willingness to continue if re-elected. In addition, Edmund Czechowski has offered to fill the extra vacancy on the Board which is created by the increase in members (the by-laws provide for 3 Directors plus 1 for each hundred members).

Any WANS member interested in serving as a Director of the Society, please contact David Noel.

From Beeton's Dictionary of Every-Day Gardening (circa 1890) :-



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They must have had some big canaries in those days!

NUT TREE VARIETIES IN AUSTRALIA . 2

The information below is a continuation of that in QUANDONG Vol.2 No.1, taken from R. Ikin's list. The letters H and C mean Dept. of Health (Plant Quarantine) and CSIRO Divn. of Horticultural Research, while N, Q, S, T, V, and W mean the six State Departments of Agriculture.

6.1 Almond (Prunus amygdalus)

Biggs Hardshell S
 Brandes Jordan CNSVQ
 Brandes White SV
 Bruce S
 Burbank V
 Californian Papershell (syns. Nonpareil Hatches;
 CNWSVQ Nonpareil Papershell)
 Chellaston CNWSVQ
 Common Hardshell V
 Commercial (syn. Harriott) SV
 Davey NS
 Drake N
 Duggmore S
 Early Jordon (syn. Jordon, Early) CN
 Eureka V
 Golden State SV
 Gross Tendre V
 Hage S
 Harriott (syn. Commercial) SV
 Hatch's Nonpareil (syn. Californian Papershell;
 CNWSVQ Nonpareil Papershell)
 I.X.L. CNWSVQ
 Johnsons Prolific CNWSV
 Jordan, Early (syn. Early Jordan) CN
 " Papershell V
 " True SV
 Jordarpla NS
 Joses B.1 SV
 Kcanes S
 Ne Plus Ultra NWSVQ
 Nonpareil, Brown V
 " Hatches (syn. Californian Papershell)
 " Papershell (syn. Hatches Nonpareil)
 " White NSV
 Peerless WSQ
 Peerless, Riverside NV
 Pethicks Wonder S

Riverside Peerless NV
 Roos S
 Stockhams Papershell N
 Strouts Papershell NSVQ

6.2 Cashews (Anacardium occidentale)

Seedlings in Qld., C.S.I.R.O., & W.A.
 Q C W

6.3 Filbert (Corylus spp.)

Althaldens Leberer N
 Atlas N
 Ayelline N
 Barcelona V
 Blumberger N
 Buettnes N
 Cosford Z TN
 Daviana V
 Duke of Edinburgh (syn. Duke of Eden)
 Du Provence (syn. Provence) N
 Fertile Du Cantana N
 Fructu Rubie N
 Grosfruit Ronde N
 Guberina N
 Gumleber N
 Hallesche Rilsen N
 Hempels N
 Imperial De Trebizonde Italian N
 Italian N
 Large Round Fruit N
 Macrocarpa N
 Multiflora N
 Provence (syn. Du Provence) N
 Purpurea N
 Red Skin Fructu Rubie N
 Roshale N
 Tonollo N ← Spathe Ronde d'Affoer N

Wandils Pride T
Waterloo N
Webbs Exhibition N
Webbs Prize Cob VT
Webbs Prize Redskin NV
Webbs Prize Whiteskin N

(continued above in box)

SEED SUPPLIES

I know of no seedsman who deals exclusively in nut seeds, but those listed below include some nuts among their range. The list is not complete, if you know of a good source, please let the Editor know.

1. Tropical Seeds, PO Box 53, Kuranda, Nth Queensland 4872. Easily the best Australian source of tropical nuts. Include: *Elais guineensis*, *Orbignya cohune*, *Cycas* species, 3 *Pandanus* species, *Alarifes molluccana* (candle nut), *Barringtonia* spp., *Castanospermum australe*, *Eleocarpus grandis*, *Terminalia catappa* (sea almond), *Terminalia okari* (okari nut), *Canarium (pili)*, *Anacardium occidentale* (cashew), *Litchi*, *Artocarpus*.

2. H.G. Kershaw, PO Box 88, Mona Vale, NSW 2103. Large wholesale seed suppliers. Stock includes: *Calodendron capense*, *Castanospermum australe*, *Macadamia tetraphylla*, *Pistacia chinensis*, *Quercus palustris*, *Ginkgo biloba*, *Pinus coulteri*, *P. pinea*, *Macrozamia spiralis*

3. K., R., & G. Merrett, 406 Talbot St, Ballarat, Vic. 3350. Not commercial, three young brothers will collect seed locally in season, including *Aesculus hippocastanum*, *A. carnea* (white, pink horse chestnut), *Quercus cerris* (Turkey oak), other oaks.

4. L.S.A. Goodwin & Sons, Mangalore, Tas. 7406. Good range at retail level, aimed at home garden market. Offer: *Calodendron capense*, *Castanospermum australe*, *Corylus avellana* (hazel), *Fagus sylvatica* (beech), *Ginkgo biloba*, *Macadamia*, *Juglans regia*, *J. nigra*, *Pinus cembra*, *P. korzensis*, *P. ponderosa*, *Pterocarya fraxinus*, *Quercus* species, *Torreya nucifera*.

OVERSEAS

5. Peter B. Dow & Co., PO Box 696, Gisborne, New Zealand. Big firm, glossy coloured catalogue, seeds expensive but good, aimed at wholesale market, often sold only in large quantities. More unusual nut items include: *Araucaria angustifolia*, *A. araucana*, *Cycas* spp., *Encephalartos* spp., *Dioon edulis*, *Macrozamia* spp., *Pinus sabiniana*, *Zamia fisherii*.

6. Honinoklip Nurseries, 13 Lady Anne Avenue, Newlands, Cape, South Africa. Supply *Brabejum stellatifolium* (Van Riebeck almond).

7. Clyde Robin Seed Co., PO Box 2855, Castro Valley, California 94546. Wildflower specialists, big firm, main market is home gardeners, rather remote to deal with. Offer following nuts: *Ginkgo biloba*, *Pinus gerardiana* and many other pines, *Torreya californica*, *T. nucifera*.

8. G. Ghose & Co., Townend, Darjeeling, India. Many Himalayan and tropical nuts, including cashew, *Pinus gerardiana*, *Corylus ferox*, *Quercus incana*, *Q. glabra*, *Barringtonia acutangula*, *Santalum album*.

OTHERS.

Kings Park Board, Perth, W.A. 6005, supply some seed of West Australian natives, including *Santalum acuminatum*, *S. spicatum*. Forest Dept., Barrack St., Perth 6000, supply *Santalum spicatum* (sandalwood). You may have success germinating nuts from your Fruit Store with Chestnuts (in season), almonds, walnuts & pecans (if local). Raw peanuts from a health food store germinate well. Look round for local trees for Oak species, bunya pine (*Araucaria bidwillii*).

INTERNATIONAL SEED LIST. If you are interested in unusual tree nuts, you may find a source when all else fails from the Forest Tree Seed Directory, 1975, published by the Food and Agriculture Organisation of the United Nations. Many thousands of tree species are listed, with country of seed supply, harvest season, germination codes, etc.

IMPORTING SEEDS. Most nut seeds can be sent to you from overseas, but are subject to fumigation and inspection by the local Agriculture Dept. Chestnuts and peanuts, however, are prohibited for excellent reasons.

TRAVELS WITH TIM (PART 2) - TIM LYNN-ROBINSON

.... as soon as we stepped onto the property we could see the problems encountered by trying to do too much too quickly. This owner was unlucky in that he was suddenly landed with thousands of seedling trees from Stehmann Farms, Moree (whom I'll mention later), and tried to organize them into the field in one hit. This meant that on the old kikuyu grass based dairy pastures the weed control was bad, and possibly getting away from him. The young trees were showing signs of stress, and many of his budding attempts had not taken, so that in the future great unevenness would appear in this grove. I was told, at a later stage in our tour, the vital importance of never allowing any competition to occur with young pecan trees.

I encountered this inability to control weeds with other, smaller groves, and the problem really lies in the fact that they are not full-time operations, because of the long interval between planting and the first commercial cropping. This growth of weeds would not be quite the same problem here in W.A. as it is in Queensland, where they seem to grow overnight and need mowing every week.

This owner was apparently trying to find a way to import some of the newer varieties from America, but the regulations here, we were told, made this virtually impossible. This might be a vital issue to us here in Western Australia, because I believe that the newer varieties developed in America for climates such as California and Texas might be more suited to us in the West, where we have a hotter, drier climate.

Disease and insect problems are immense in sub-tropical and tropical climates, and there is no knowing how many of these would apply to us, even under irrigation. Phytophthora comes up time and time again as a rather disastrous disease as far as tree crops are concerned. My opinion now is that the 3 W's are the major things to watch for - Wogs, Weeds, and Water. There is no doubt that nut trees are reasonably hardy, but to produce high quality, marketable, full kernels, the 3 W's are vital.

To mention again the time interval between planting and commercial crop, the owner of the Bellinger grove did try to grow a cash crop of maize in between rows, but to be successful here some extra machinery and expertise was required, which one way or another was lacking, and the cash crop wasn't as rewarding as envisaged.

There seems to be no real criteria on tree spacing. With pecans, some plantings have been 30'x60', with the intention to remove alternate trees later (who wants to remove a tree after ten years growing!?!), others 45'x50', and also in 60' squares with an extra tree in the middle of each square.

The Agriculture Department itself was doing nothing in the nut tree crops, except observing.

One point worth noting is that the chilling requirement which pecans have doesn't necessarily mean that frosts are needed - cold mountain winds can do a good enough job.

* * * *

Our next appointment was with the Department of Agriculture in Lismore, where we met Mr Ross Loebell, who was a veritable fount of information on macadamias (which are natives of that part of Australia, and are still called by some people the 'Queensland Bush Nut'). Ross does a lot of the technical work such as soil and leaf analyses for the growers in the area. He is also personally very interested in Macadamias.

I usually start out by being positive about a tree, but there a few definite donts with macadamias as they are a rain-forest tree.*

Macadamias don't like : FROSTS ; COLD WINDS ; SOGGY GROUND ; WATER

STRESS ; or HIGH WINDS. Frosts and cold winds decimate young tender shoots, soggy ground encourages Phytophthora infestation, water stress stops fruit set. The macadamia actually has a high water requirement due to the nature of its root system. High winds will just blow trees down due to lack of tap roots. The cyclones that we hear about occurring in Queensland have taken their toll.

The 'Alamo' grove that we were first taken to was in the higher plateau country that Lismore itself sits on, but it undulates, and the trees were planted on a more sheltered hillside of volcanic origin, which of course is well drained. Even with the high rainfall received in this coastal region, irrigation is carried out in the spring months with a trickle system. This grove, being one of the earliest commercial plantings, had good sized trees (10-15 ft. high) bearing well, with many clusters of nuts visible.

We soon learnt that there were two basic types of macadamia, the TETRAPHYLLA and the INTEGRIFOLIA. The tetraphyllas have the wilder characteristics - prickly leaf margins, and rough-shelled nuts. The integrifolias are more domesticated, these are the ones the Hawaiians are working on and prefer. When I posed the question on which of these we should use in W.A., opinion was divided, with the technical types like Ross Loebell saying base your plantings on tetraphyllas, and the processors (Nutta Products - a subsidiary of Meadow-Lea Margarine) saying that the integrifolias were 20 years ahead, and produced a more acceptable product. I guess we will have to do some of our own evaluation.

One note of caution which I did receive from Nutta Products was that if both types were grown, they should not be mixed together, as in the roasting one stays a very acceptable cream colour, while the other turns a grey colour which when mixed with the creamy ones looks 'off' and quite unacceptable.

At 'Alamo', the manager, 'Ned', told us that they had 14 varieties, among which several seem to crop up again and again :

Hawaiian - 246, 508, 660, 333 (all with Hawaiian names difficult to remember) ;

Others - Own Choice, Renown, H2, B6.

Talking to Ross and Ned, each appeared to have its own advantages and disadvantages. 'Own Choice' was by far the heaviest producer of nuts, but the fruit doesn't fall, it hangs on for months. Varieties that were highly praised in Hawaii didn't fare as well when they had been tried in Australia. Four or five varieties are apparently necessary for good cross-pollination.

Now we come to the sad part of the operation -- weed and grass control and insect pests. Being native to Queensland, some insects have developed life cycles on the macadamia (and we in Western Australia must realize that we might not be exempt because the macadamia is a member of the banksia family). Some of these are as follows:

1. The flower caterpillar
2. The fruit spotting bug
3. The nut borer
4. The twig girdler
5. The leaf miner

All of these we saw evidence of, even under Ned's good management.

Not in the insect field, but still a big headache, is the fungal disease Phytophthora cinnamomi, which causes trunk canker and root rot.

(to be continued

WEST AUSTRALIAN NUTGROWING SOCIETY

Vol. 1
1975

YEARBOOK

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NUT GROWERS SOCIETY OF OREGON AND WASHINGTON

PROCEEDINGS and GROWERS HANDBOOK - 1976

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NUTGROWING SOCIETIES ACTIVE

WANS is in contact with a number of nut growing societies and organizations around the world. To keep members abreast of what these others are doing, we shall reprint Contents Pages of some of the most important of their publications. In this issue we reproduce our own 1975 WANS YEARBOOK contents, and the recent 1976 issue of the Nut Growers Society of Oregon & Washington-Proceedings and Growers Handbook. This society is principally interested in hazel nuts (filberts) and in cold-hardy walnuts.

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information

BOOK REVIEW

SUNSET WESTERN GARDEN BOOK: By the Editors of Sunset Magazine.
Published 1967 by Lane Magazine & Book Company, California. 3rd
edition, 11th printing, revised Spring 1973. 448 pages, \$7.95.

Members who are keen gardeners will find this book exceptionally useful. It is quite unlike the general run of gardening books, which tend to be full of glossy photos, but light on information and poorly organized. The 'Western' in the title is the western United States - Washington, Oregon, California, Idaho, Nevada, Utah, and Arizona. This region corresponds quite well with Western Australia as far north as Geraldton or Laverton.

Two-thirds of the book is devoted to the 'Western Plant Encyclopedia', covering over 5000 plants suited to the area. This is clear, detailed and authoritative - nothing as good exists outside such works as the Royal Horticultural Society's Dictionary of Gardening, and there is nothing else which applies so well for West Australian conditions.

The book starts with descriptions and maps of 24 different climate zones in the area. Plant descriptions are keyed into these zones, so by working out your own zone from the descriptions you can assess the chances of successfully raising each plant. Many nuts are included, e.g. 3 species of chestnut, 6 types of hazel, 6 species of walnut, plus usually neglected nuts like jojoba, torreyia, and jubaea. Over a million copies of the book have been sold, and you have only to examine it to see why. Available through the WANS Bookshop Service - see below.

BOOKSHOP SERVICE

The Society has an arrangement with the UNIVERSITY BOOKSHOP, Stirling Highway, Nedlands, W.A. 6009, (Telephone 865578), by which the Bookshop maintains stocks of recommended books on nutgrowing and allied topics. Members can call in, or order through the post - for postal ordering or by phone, the Bookshop first sends you an invoice (including postage cost), and if you pay this, they send the book. On most books WANS members can get 10% discount. Prices change rapidly.
Current recommendations: (Note: (Q1-3) means reviewed in QUANDONG Volume 1, No.3). Ratings run from **** down to *.

- **** JAYNES, R.A. - Handbook of North American Nut Trees. \$13.30 (Q1-2)
- *** RIOTTE, L - Nuts for the Food Gardener. \$4.50 (Q2-1)
- *** SMITH, J.R. - Tree Crops. \$8.95 (Q1-1)
- ** REED, C.A. & DAVIDSON, J - Improved Nut Trees of North America. \$10.00
- ** MOYER, J - Nuts and Seeds. \$2.95 (Q1-2)
- ** SUNSET Western Gardening Book. \$8.80

IN A NUTSHELL (No.8)

There are a number of edible nuts which grow under water or in saturated, marshy soil. The most important of these are the Chinese water chestnut (Eleocharis dulcis), various species of Trapa (e.g. T. natans - Jesuit's nut), the lotus (Nelumbium nucifera), and the tiger or chufa nut (Cyperus esculentus). Trapa floats in water, lotus has surface leaves and underwater roots, Eleocharis and Cyperus grow on edges of lakes. The 'nuts' are the bulbs, tubers, or rhizomes of reed-like plants.

TAXATION, INVESTMENT, & THE NUTGROWER - Pt 2

Edmund Czechowski

In the first article in this series, I described what a Primary Producer was and the advantages of being recognized by the Taxation Office as a Primary Producer.

This article will attempt to clarify the savings obtainable by investment allowances and double depreciation.

INVESTMENT ALLOWANCE

Plant costing \$1000 or more. Taxpayers can claim as an outright deduction 40% of the cost of any eligible plant, providing this plant was ordered between January 1 1976 and June 30 1978 and was installed and ready for use on or before June 30 1979. The plant must be new. This allowance is available to anyone running a business, so the plant or equipment need not be agricultural plant.

Example: Cost of plant, \$1500;
Investment allowance = 40% of \$1500 = \$600.

Plant costing between \$500 and \$1000. A partial allowance can be claimed. The deduction for plant costing \$600 is 8% (\$48); for \$700 it is 16% (\$112); for \$800, 24% (\$192); for \$900, 32% (\$288).

Plant costing \$500 or less. This does not qualify for the allowance.

For plant ordered between July 1 1978 and June 30 1983, and installed ready for use by June 30 1984, the investment allowance will be 20%.

DOUBLE DEPRECIATION

A deduction of double the normal depreciation, that is at twice the rate normally allowed by the Taxation Office, can be claimed on most new plant or equipment provided that it was installed and ready for use between July 1 1975 and June 30 1976.

Any plant ordered, installed, and ready for use between January 1 1976 and June 30 1976 will qualify for double depreciation AND the investment allowance.

This explains the position as it stands today. This position may change from time to time as new legislation is enacted. Members who are interested in growing nuts commercially will find it worthwhile to always seek advice of their accountant or financial adviser before making investment decisions; a few dollars in fees could save you money and avoid losses.

BLACK WALNUT TIMBER

WANS member Dr. Dolph W. Zink contributes an interesting story which illustrates the worth of black walnut timber. Dr. Zink owns a property in Pennsylvania on which stood three black walnut trees, believed to have been planted around 1885 as specimen trees by the then owner, a German brewer with an interest in the landscape.

Dr. Zink was telephoned in Perth by a timber dealer in New Jersey who wanted to buy the trees; he refused. Six months later the dealer again phoned from America, repeating the offer. After a third call, Dr Zink succumbed and agreed to sell the three trees for \$2000!

new members

Welcome to the following new members, who joined the Society between March and July, 1976.

- 206 Mr R A Sippe PO Box 433 Albany 6330
207 Mrs M Boteje Post Office Ruby Vale Qld. 4702
208 Mr I R Campbell 8 Todea Ct Duncraig 6023
209 Mr R B Eardley Carburup River 6222
210 Mrs I Skipsey PO Box 96 Pingrup 6343
211 Mr J Guhl 8 Edward St North Beach 6020
212 Mr C S Maloney Watervale South Australia 5452
213 Mr M Schultz PO Box 328 Katanning 6317
214 Mr R B Hawkins 20 Hope Cres Lesmurdie 6076
215 Mrs I Browning 11 Francis Rd Walkville 6169
216 Mr J H Imrie Post Office Wilga 6243
217 Mr K Hauter 248 Nicholson Rd Subiaco 6008
218 Librarian WES 605000 CSIRO Hortic Research Merbein Vic 3505
219 Mrs T L Bell PO Box 71 Moora 6510
220 Mr C S Edwards 87 Gloster St Subiaco 6009
221 Mr A J Walsh 888 Toodyay Rd Red Hill 6016
222 Mr W T Grady 'Greenslopes' O'Grady's Ridge Rd Foster Nth, Vic 3960
223 Mr R J Smit 345 Riverton Drive Shelley 6155
224 T N Lawrance 7 Broлга Promende Willetton 6155
225 Mr D C Bruce 5 Minerva Way Carine 6020
226 Mr I G Tyrer 1 Williams St Brookton 6306
227 Mr P Houlahan 44 Lisle St Mt Claremont 6010
228 E W Buck PO Box 30 Gingin 6503
229 K Heckford 8 Steward Way Orelia 6167
230 Mr J Nash 3 Dicali Rd City Beach 6015
231 Mr R S Woodward Lacey St Sawyers Valley 6074
232 Mrs S P Marks 45 McLean St Melville 6156
233 Mr P Lewis PO Box 4 Balingup 6253
234 L Campbell PO Box 23 Bell 4ld 4408
235 Mr P Thomson Star Route Box P Bonsall California 92003 USA
236 Mr T M Sharman PO Box 98 Koorda 6475
237 Miss F Morris 2 Staines St Victoria Park 6160
238 Mr F J Hynes 226 Royal St Mt Yokine 6060
239 Mr D A Harvey 29 Taylor Rd Nedlands 6009
240 Mr B Sargent 71 Dorothy St Gosnells 6110
241 Mr R L Creagh 25 Wotan St Innaloo 6018
242 A J Pettigrew Private Bag Glenhope via Nelson New Zealand NZ
243 Mr F Vloth 9 The Promenade Mt Pleasant 6153
244 Mrs R Mattson Mirboo Kojoneerup East Rd Wellstead 6330
245 Mrs M L Uechtritz PO Box 995 Lae Papua New Guinea PNG
246 Mrs V Sobon 145 Rochdale Rd Mt Claremont 6011 6
247 G H Brittain PO Box 38 Greenbushes 6254
248 Mr R H Houlihan 36 Norton St South Perth 6151
249 Ms B O'Hare 10 Buckingham St Mt Tarcoola Geraldton 6530
250 Mr C Hopkins 4 Britannia St Pennant Hills NSW 2120
251 Hamersley Iron Pty Ltd PO Box 21 Dampier 6713
252 Mrs J Croasdale PO Box 1124 Geraldton 6530
253 Dr J D Skoss RMB 28 Donnelly Mail Service Manjimup 6258
254 Acquisitions State Library of NSW Macquarie St Sydney 2000

NUT NEWS

PEANUTS IN THE NORTH. Once again peanut plantings in the Kimberleys are in the news. The 'West Australian' of March 2 carried an item noting that the Desert Seed Company had 100 hectares of peanuts growing, and was to plant 100 ha next year. The Agriculture Department considers peanuts to be an economic crop in the Ord.

Special note on the CONSERVATION FARMING SOCIETY

The Conservation Farming Society was founded in 1971 to get groups of people together to buy areas of land, part under natural bush, part cleared and farmed to provide running expenses. Each group manages its own land independently. Members can use the property for week-end or holiday visits, for retirement, for subsistence, or in any agreed way.

Three groups have been got together by the CFS, with blocks at Manjimup, Margaret River, and near Perth. As an example, one has 12 members who contributed between \$1000 and \$6000, mostly in instalments. Each member is entitled to up to 1 hectare for his own purposes, such as building a house, but the group as a whole owns all the land.

The CFS is quite interested in nutgrowing. Any WANS member who would be interested in starting a nut orchard, but who does not have the resources or inclination to cope with a large block by themselves, could well find the CFS a great help in arranging this. If enough WANS members were interested, they could jointly buy a property on which to grow nuts, and each have a week-ender to go to.

Members interested in this idea should contact the President of the CFS, Dr. Duncan Merrilees, at 17 Albina Road, Maida Vale, 6057, telephone number 605178. At present the CFS is getting together a group to select and buy a hills property within easy reach of Perth.

NUT QUOTE, No.1:

"NUTS ARE GIVEN TO US, BUT WE MUST CRACK THEM OURSELVES."

(Old English proverb)

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