QUANDONG

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February 1980
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Newsletter of WANS the West Australian Nutgrowing Society

1980 - THE YEAR OF COMMUNICATION

At the Annual General Meeting held on November 27, 1979 it was decided that in future quarterly meetings will be held by the Society.These will be held at SUBIACO LIBRARY MEETING ROOM (Cnr of Rokeby Road and Bagot Road).

The First of these meetings is to be held on February 26, 1980.

PLEASE NOTE VISITORS WILL BE WELCOMED AT ALL MEETINGS.

Mr Alex Sas will give a talk on *The Basic Principles of Grafting*, answering such questions as why grafting is necessary. The talk will take the form of a practical demonstration of Mr Sas' methods, some of the problems that you are liable to meet and ways of overcoming them.

SUPPER will be provided and Mrs Sas has kindly agreed to make for us a Continental Walnut Roll.
Various types of nuts will also be available for tasting
Publications received by the Society will also be avaliable for perusal.

SWAP OR BUY As many members find it difficult to obtain trees we are introducing a new idea to our meetings and thatis a swap or buy. Bring along your trees (limit of three per person) and you may find a swap. Even if you can't bring a tree you may be able to buy just what you want. Any of the more unusual varieties would be especially appreciated.

As the heading said we want this to be the Year of Communication, so: ANY SPECIFIC TOPIC THAT YOU WISH TO SEE COVERED AT MEETINGS please contact the Secretary and we will do our best to arrange it. Suggestions will be most welcome any time.

The DATES for the other meetings to be held in 1980 are:

May 27, 1980
August 26, 1980
November 18, 1980

West Australian Nutgrowing Society

WANS

Phone: (09)381 8656
Mail Address: P.O. Box 27, Subiaco, W.A. 6008, Australia.

BOARD OF DIRECTORS

Peter Good (President) 341 4741, Paul Sinclair (Vice President) 386 6519, Bethia Bryant (Secretary/Treasurer) 459 2449, David Noel 381 7341.

WANS CONVENORS

Cashew: Derek White, P O Box 249, Kununurra, 6743
Little Known Nuts: David Noel, P O Box 27, Subiaco, 6008
Marketing: John Mercer, 45 Bridgewater Drive, Kallaroo,6025 Tel. 401 4031
Nutrition: Alex Sas, 52 Croyden Road, Roleystone,6111 Tel. 397 5628
Seed Supply:Milan Mirkovic, P O Box 69, West Perth,6005
Tree Supply:Tim Lynn-Robinson, 1 Alice Drive, Mullaloo, 6025 Tel. 401 1852
Walnut: Tom Speer, P O Box 71, Bridgetown, 6225 Tel. (097) 61 1713

Society Publications

WANS publishes its newsletter QUANDONG 4 times a year. This is devoted to news of meetings and events, details of tree and seed sources, notes about books and pamphlets dealing with nuts, reprinted shortarticles, notes from members, and other items of interest. The major publication is the annual WANS YEARBOOK, which contains articles drawn from Australia and overseas, covering any aspect of nut horticulture and production, and is regarded as an important research journal in this area. Members receive one copy of each WANS publication as a subscription benefit.
Yearbook Editor: Dr. B. Dell, School of Environmental and Life Sciences, Murdoch University, W.A. 6153.
QUANDONG EDITOR: Otto Mueller, 86 Marlow Street,Wembley 6014 tel 387 1347.
Back Numbers: WANS began publishing in 1975. Back numbers of publications are still available. Some issues of QUANDONG are available only in photocopy form. Cost of each Yearbook is $6.00, cost of a 1-year set of QUANDONG (3 or 4 issues) is $2.00. Contact theSecretary for back numbers.

MEMBERSHIP
Any person or organisation interested in growing or production of nuts may subscribe for membership. Members are welcomed from outside Western Australia and overseas, as well as in W.A. Write to P.O. Box 27, Subiaco.W.A. 6008. The current membership subscription rate, which runs for a calendar year and covers all publications issued in that year, is $10.00.

WANSCO CO-OPERATIVE
Members of the Society own a limited company, West Australian Nut Supplies Co-operative Limited, a commercial organisation set up to buy and sell nut and nut products.
Shares in WANSCO must be applied for on the printed form available from the office.

wansco supplement

ISSUED WITH QUANDONG Volume 6 No. 1 February 1980

It was reported at the Annual General Meeting held in November, 1979 that after careful consideration of alternative premises,costs of moving premises, expected future trading figures and additional capital required, the trading facilities of the Squirrel Nutkin Shop at Onslow Road would close at the expiring of the lease and activities would go into hibernation. It was further explained that the Co-operative would be involved in trading at peak periods such as Christmas and Easter in order to build up capital reserves. When this is achieved it is hoped to re-open a trading post.

In lieu of the shop closing Mr D. Noel advised the meeting the Directors had agreed to give Miss Margaret Hudson the use of the Squirrel Nutkin trading facilities/name for a small fee. The shop premises will be at 403 Hay Street, Subiaco,with Margaret controlling all aspects of trading. At the same time surplus stock and furniture and fittings would be sold at a price agreed by the Directors.

As a Co-operative accounts will still be presented yearly and an Annual General Meeting held.

Mr Wayne Geddes was elected to replace Mr Edmund Czechowski as a Director.

"SQUIRREL NUTKIN

The Squirrel Nutkin has moved location to 403 Hay Street, Subiaco (opp. Tip Top bakeries). The shop site is two storey with large rooms upstairs and down.

A group of us are interested in promoting the business as a *job creation* scheme, using potential nut sales outlets as work for unemployed. The upstairs and backyard area is to be for goods made at home or on site and needing a retail outlet. (Hopefully nut trees can be included).

We would be interested in promoting talents and crafts (particularly of the unemployed) in the shop, which will be opening in February.

Combine a visit to the Nutkin with a perusal through the craft market. "

TREE STUDY PROGRAMME

Pecan industries would like to hear from any members knowing the whereabouts of any trees suitable for a study programme. There are a lot of trees in gardens and on farms that should be recorded for size and bearing characteristics.

The importance of members learning about the environment in which some species will survive and flourish cannot be stressed enough. An example of this is the carob. We have had reports of them growing in places such as Wiluna, Coolgardie, Trayning and Moora.

Some other varieties that we would also like to hear about are Honey locust, Black honey locust, Hazelnut, chestnut and pistachio and jojoba. Both grafted and seedlings are important - can seed be obtained from these trees, what is the growth habit of the tree?

The information gleaned from any reports will be correlated and published, with any acknowledgements in the Year Book.

We will follow up this information and record any exceptional trees. These will be published. To enable this venture to be successful the full co-operation of members is requested.

Replies to :

M. Mirkovic
P O Box 69
WEST PERTH, 6005

GARDEN WEEK

Garden Week 1980 will be held from April 17-22. Once again WANS will have a display area in the Horticultural Council tent. Members assistance will be required to man the area.

If you can assist even if for a few hours only, please contact the Secretary, Bethia Bryant.

IMPROVING HAZELNUT PRODUCTION

Dr D.W. McKenzie
D S I R
HAVELOCK NORTH

(Source: Journal of the New Zealand Tree Crops Association)

When proper pollination is provided, hazelnut bushes can crop heavily in New Zealand, especially in Hawkes Bay and Nelson. In order to extend hazelnut growing to other districts it is necessary to obtain more accurate information of blossoming behaviour. In 1980, Dr Maxine Thompson, a world authority on hazelnut production will be invited to spend six months to investigate the full potential of nut growing in New Zealand. Dr Thompson will observe the blossoming response of our population of seedling hazelnuts to a wide range of soils and climates. Members of the Association are asked to take part in a preliminary study of our hazelnut trees in 1989, so that Dr Thompson can prepare a programme of work.

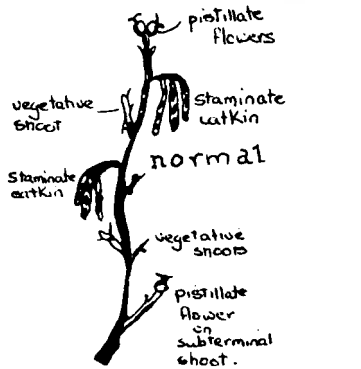
Each branch should locate hazelnut trees in their own area, beginning work towards the end of this year, 1978. Local newspaper reporters and radio people can usually be persuaded to assist in publicising the search for hazelnuts and public response is always very good. One concerted effort will produce a lot of replies and a follow-up one month later will generally gather in another group almost as large as the first. It also tends to increase membership of the local branch.

Each district should then prepare a file of owners of hazelnut trees, and where possible make site plans for easy location of the trees. With the owners' agreement, details of blossoming behaviour should be recorded, in 1979, for as many of these trees as possible, starting in April and at monthly, or two-monthly intervals, until August. In many instances, it may be possible to have the owners collect blossoming data. Data sheets will be prepared and distributed for this purpose. The success of the project depends upon the distribution of the data sheets, while only a few minutes observation for each tree would be necessary.

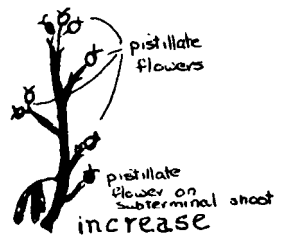
Information on the range of blossoming times can be sent to Dr Thompson, to form the basis for her studies in New Zealand. It is hoped that all members of the Tree Crops Association will assist in this most interesting project. When district lists of seedlings have been completed,the appropriate number of recording charts can be ordered from the National Secretary at Lincoln, or the accompanying sheet may be photocopied.

The recorder is asked to observe the hazelnut bush at intervals to note when the male catkins are shedding pollen. The catkins are mature when fully expanded with bright yellow pollen sacks clearly visible between the segments. In dry weather, clouds of pollen will be shed if the twigs are sharply tapped, proving that the male catkins are fully open. Sometimes only part of a catkin will open, but this should be recorded as positive. The earliest and latest dates of pollen production are useful if frequent observations are possible, but monthly or two monthly records would suffice for the 1979 survey if time is limited.

The female catkins usually appear later than the male catkins, and very much later in warm climates. The flower buds are more rounded and plumper than the vegetative buds. The bright scarlet stigma is the only visible part of the flower, protruding from between the scales of the apparently dormant bud and requires very close observation. Each stigma has 2-6 lobes, 1 mm in length recurving like tiny rams horns. They remain bright scarlet for several days,then darken and finally wither leaving a few fine black threads. Several flowers may be formed within some of the buds, but they usually do not mature together, but at intervals.



NORMAL FLOWERING BRANCH WITHOUT LEAVES.



INCREASE IN FEMALE CATKIN FORMATION IN NEW VARIETIES.

WANTED GRAFTED CHESTNUTS

Any member who will have approximately twenty three to four year old grafted chestnut trees could you please contact the Secretary. These are required by one of our members.

Please give such details as cost when replying.

FURTHER POINTS ON RAISING PECAN TREES
- Based on U.S.A.(Texas) Recommendations

Ex Journal of N.Z. Tree Crops Association Vol 2 No 2

1) Site for Planting - soil which will allow for a deep tap root to grow - does not preclude all clays - but avoid clay pan and heavy blue clays. Red clay is assumed to be a derivative of oxidization of the iron in the soil. The roots need both moisture and oxygen so choose a soil which will give reasonable aeration plus reasonable moisture holding properties.

2) Nitrogen is important but ph level can be between 5 and 8 on the ph scale.
Added phosphates are of minimal benefit and added potassium is reported to be little benefit except perhaps to neutralise nitrogen scorch.

3) Get rid of all weeds especially couch grass.

4) If phosphates are used apply small quantities at a time - as pecans need a lot more than a trace of zinc and while a tree can take up a little zinc from acid soils any sudden raising of phosphates or lime levels can effectively prevent the tree from obtaining zinc through the roots.

5) Zinc is needed for the formation of indolealetic acid which is necessary for plant growth. Zinc deficiency is characterised by both small leaflets and yellowing.
As zinc does not move readily from one part of a tree to another, therefore it is recommended that the tree receive a thorough covering with zinc foliage spray during the spring and while the tree is putting out fresh leaves until all compound leaves have large healthy leaflets.
Zinc Sulphate should be used at the rate of 0.2kg/100 litres (2lbs/100gal.) of water- applied preferrably once per fortnight.

6) Train your tree to a single, strong central leader, do not allow permanent side branches to form less than 1.5 m from the ground. To strenghten this single central leader, cut back your tree to about one half of its height above ground, during the dormant season. Select a strong shoot as they form in the spring to grow as a central leader and pinch back all other shoots after they have grown about 300mm. These side shoots will grow leaves which will supply food to thicken and strenghten the trunk. Repeat this during the second dormant season by cutting back half the new growth.Allow side shoots that start more than 1.5m above the ground to grow into healthy limbs starting from the same level and avoid the formation of weak narrow crotches.

7) Overseas experience indicates that any commercial nut production, in the even slightly less satisfactory districts, will not survive in the long term, while there is competition from an area that is particularly well suited to nut production, and can handle current demand for the product. Therefore, it is important to make sure that from the first only the most promising areas (mainly climatic requirements and soil fertility factors) or best sites on your land are used to produce nuts commercially.

RESEARCH COMMITTEE REPORT

Pollination has been very much a grey area, and the following report submitted by Research Committee member Mr John Stocks, of C S R Limited makes interesting reading :-

POLLINATION REQUIREMENTS OF MACADAMIA IN AUSTRALIA

INTRODUCTION

There is evidence from Hawaii to demonstrate that macadamia benefit from cross pollination with another variety. However, there has been very little work in Australia on the value of pollinating macadamia. Here the trees flower very heavily and are grown under more variable climatic conditions than in Hawaii.

MATERIALS AND METHODS

The sites for this work were the C S R Ltd orchards at Baffle Creek just north of Bundaberg on the east coast of Queensland. The Hawaiian varieties HAES 246 and 508 trees all eleven years of age and variety HAES 660, eight years of age were chosen for this work.

In 1978, beehives at two hives per acre were placed among the 246 and 508 trees, but few hives were placed on the other orchard with HAES 660.

From a number of trees racemes were selected at random for each particular treatment. If bees were excluded, this was done by tying off a fibreglass flywire mesh bag, covering three racemes on average with each bag.

THE TREATMENTS

1. The racemes bagged, left untouched to natural self pollination.
2. The racemes bagged and 'hand selfed' (manipulated) by transferring pollen between racemes within the same variety.
3. The racemes were not bagged, but left open to visits by bees.
4. Bag racemes and cross pollinate by hand.

Between 100-200 racemes were included in each treatment for a particular variety.

Treatments 2 and 4 were hand pollinated using four inch long cylinders made from waxed lunch wrap. Each raceme was gently pollinated with the cylinders once a day while the florets were open. Variety 246 trees were crossed with 508 pollen, 508 was crossed with 246 pollen and 660 with 333 pollen.

The bags were removed when all the racemes had passed anthesis in late September early October. A count of nuts was taken, before natural thinning (early nut set) and the nuts which remained until maturity.

RESULTS AND DISCUSSION

The results are summarized in Table 1.

TABLE 1

	HAES 660	HAES 508	HAES 246
1. Natural self-pollination			
ENS/rac.	2.8	0.04	0.4
Mature nuts/rac.	0.3	0	0
2. 'Hand selfed'			
ENS/rac.	5.4	0.6	5.5
Mature nuts/rac.	0.7	0.02	0.1
3. Bee pollination (not bagged)			
ENS/rac.	8.1	1.5	11.9
Mature nuts/rac.	1.2	0.2	0.1
4. Cross pollinate			
ENS/rac.	28.2	9.4	34.1
Mature nuts/rac.	2.5	0.4	0.1

An extremely low set was achieved with self pollination, especially variety 246 and 508. These results alone would indicate that some form of cross pollination is needed to set a crop.

'Hand selfing' gave an apparent improvement, but the mechanism is not known.

The bee pollinated treatments gave a further improvement in early set indicating that bees are effecting cross pollination. However, the best early set came from hand crossing pollen with another variety.

In all treatments the heavier early sets resulted in more mature nuts per raceme for all varieties except 246.

A possible explanation for the apparent lack of crop response by 246 to the bee and cross pollination treatments is thatthe cropping capacity in the lower more shaded region of the tree is not as great for this variety. A contributing explanation may be that a high early nut set is not always an indication of effective pollination and perhaps variety 508 is not in fact a good effective pollinator.

However, the other two varieties HAES 660 and 508 showed an apparent benefit in crop from bee pollination and a further increase from hand pollinating. This result seems to indicate incomplete pollination by bees. Two hives per acre introduced for var. 508 may be insufficient to effectively pollinate the heavy flowering experienced under Australian conditions. For example 10,000 racemes have been recorded on trees only 7-8 years of age.

Further work is continuing to demonstrate whether tree yields can be increased by saturating a particular section of a large orchard with bees.

EXECUTIVE OFFICERS

President	Mr Eric Cottam Peachester Road BEERWAH, 4519 QUEENSLAND Telephone (071) 94 9560
Vice President	Mr Keith Ainsbury C/- Macadamia Plantations of Australia P/L DUNOON, via LISMORE, 2480 NEW SOUTH WALES Telephone (066) 89 5233
Secretary	Mr Frank Rivers 5 Orville Street GEEBUNG, 4034 QUEENSLAND Telephone (07) 59 5071
Treasurer	Mr Ian McConachie 6 Champagne Street CARSELDINE 4034 QUEENSLAND Telephone (07) 263 6470

SOURCE:- AUSTRALIAN MACADAMIA SOCIETY NEW BULLETIN

SUBSCRIPTIONS FOR 1980 ARE NOW DUE

IF YOU HAVE NOT ALREADY PAID YOUR SUBSCRIPTION FOR 1980 or

IF YOU WISH TO PAY IN ADVANCE FOR 1981 or 1982 PLEASE PAY NOW BY RETURNING YOUR REMITTANCE ALONG WITH THIS SHEET. FEES FOR EACH OF THE THREE YEARS WILL BE $10-00.

MEMBERS GET ALL PUBLICATIONS ISSUED IN THE CALENDAR YEAR AS PART OF THEIR SUBSCRIPTIONS.

THE 1979 WANS YEARBOOK WILL BE SENT OUT SOON AFTER THIS ISSUE OF THE NEWSLETTER.

SUMMARY:- DIEBACK: A DESTRUCTIVE FOREST FUNGUS
(Source : ECOS 15 February 1978)

1921 was the first indication of what came to be known as Jarrah dieback disease. By 1978 dieback had ravaged about 10% of the 1.8 million ha forested portion of the south-west of Western Australia. In 1964 it was confirmed that the cause was a *Phytophthora* species, *P. cinnamomi*.

As well as trees and other vegetation the fungus can be a serious problem in heathlands, tree plantations, orchards and gardens : in fact more than 400 plant species are known to be susceptible and include peach, plum and avocado trees.

However, this is not the only fungus causing dieback. Others include *Armillaria* fungi, fungi that attack leaves, many types of insect and tree parasites such as mistletoe.

NOTE: Drought and fire can play important roles in increasing the susceptibility of trees and other forest plants.

P. CINNAMOMI -

was not discovered until 1922. Some details of its life in soil and roots are still unknown. Much evidence suggests that the fungus relies mainly on asexual reproduction to build its populations to destructive levels. Its asexual life cycle has a number of distinct stages. One stage, the chlamydospore, can apparently survive for considerable time in dead roots. When conditions in the soil are sufficiently wet and warm (above about 15°C), chlamydospores produce sporangia and tubular material known as mycelium which in turn produces more sporangia. When these ripen they release zoospore.

Zoospores are attracted to roots by amino acids, sugars, and alcohols in chemicals that roots exude. Then they produce mycelia that penetrate and destroy root cells, reducing the ability of plants to take up water and nutrients.

NOTE: P. Cinnamomi is most destructive when drought follows a period of warm wet weather.

NOTE: In general plants growing in poorly drained, infertile soil with a low organic matter content and small population of microorganisms are more likely to succumb than those in well drained fertile soil.

Researchers are trying to find out why some trees and plants are more susceptible than others.

NOTE: The first sign of Phytophthora in a jarrah forest is the rapid death usually in Autumn of most understorey plants including wildflowers, banksia, blackboys and zania palms. Areas of forest most at risk are valleys with poor soil.

During the past three years, 500 000 ha of forest have been placed in quarantine to prevent *Phytophthera* spreading.

What are the prospects of control?

1. Fungicides on the scale required is uneconomic and are not being researched.

2. Control by seeding with micro-organisms antogonistic to *Phytophthera* is another approach but the strains still have to be created or isolated.

3. A possibility being examined is lime added to soil but much research needs to be done.

4. The planting of casuarinas. These suppress activity of fungus in susceptible plants nearby by building up soil microbe population - they also add nitrogen to the soil.

5. Fire - it is a natural part of jarrah forest environment. The possibility of changing the managed-burning routine to produce a *Phytophthera* - inhibiting understorey. Heavier burning increase legumes in the understorey. As legumes add nitrogen to the soil this increases the vigour of the forest and possibly increases the resistance of plants to attack. Lower soil temperatures also occur with the greater cover. This is the most promising approach to date.

ARMILLARIA

Attack by *Armillaria* is a much more obvious business than attack by *P. cinnamomi*. Fungal material first penetrates woody roots, and then moves up inside the bark, spreading around the base of the tree. It kills the vascular cambium, the growing area of the roots and stem - in effect ring-barking the tree. Visible signs of attack include strands of whitish material on the trunk near the ground, dark brown stains in infected bark, and, in autumn, fruiting bodies growing around the tree.

NOTE: When a tree is felled, the stump becomes more susceptible to attack by fungus. It serves as a large food base and allows fungus to spread to roots of surrounding trees.

CONTROLS

1. Remove stumps and dead roots to decrease food base.
2. Change forest management from selection cutting to clear-felling.
3. Use chemicals to encourage invasion of other fungi to compete for food reserves.

MEMBERS ACTIVITIES CORNER

Alex Sheppard and Milan Mirkovic
P O Box 69
WEST PERTH, 6005

Telephone Alex 446 2316

We have been establishing a nut tree nursery in Pinjarra where we produce seedling nut trees. In future we will also be producing grafted trees.

In addition to tree sales we offer an orchard development service. This involves full development as well as after care and advice.

For full development we supply the trees, layout and plant, grafting, irrigation design and layout (if necessary) and managing the orchard. We also offer partial development whereby doing only those stages the owner requires, eg. only supplying trees or only planting, or supplying and grafting.

To date we have developed Pistachio, Pecan,Chestnut and Jojoba orchards.

We are not only developing nut trees but also trees for animal fodder eg. carob, honey locust, lucerne tree.

We would like to hear what other members are involved in, no matter how small your progress has or has not been.

NURSERIES

Two members of the Society have informed us of the types of nut trees available in their nurseries.

1. C T A Fruit and Nut Nursery, 7 Bellata Street, THE GAP, Queensland 4061, advise that they can supply all cultivated varieties of macadamia. These can be shipped by air and meet with all W A phytosanitary requirements. They can also supply litchi, avocado, kiwi fruit and pecan nut. All cultivated varieties are available.

2. Mr K. Bellairs, C/- Rosebrook Store, Western Australia 6285 has started a nursery in the Margaret River area and can be contacted at the above address for supplies of chestnuts, walnuts and pecans.

RECIPES

(Tried and much enjoyed)

WALNUT CAKE

3 eggs
1 small cup sugar
1 large cup flour
1 cup chopped walnuts
1/4 lb butter
1 dessertspoon ground cinnamon
2 teaspoons baking powder
a few drops vanilla essence

Beat butter and sugar to a cream, add eggs separately, then flour and cinnamon through sifter, and lastly, add baking powder and walnuts. Bake in moderate oven.

(From : The C W A Cookery Book).

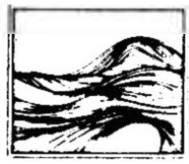
FILBERTIGIBBETS

½ cup shortening
½ cup butter
1 lb brown sugar
2½ cups sifted flour
1 cup chopped filberts
2 eggs
½ teaspoon soda
1/4 teaspoon salt
1 cup chopped dates

Cream together shortening, butter and brown sugar. Add eggs and beat well. Sift dry ingredients together, gradually add to creamed mixture, beating after each addition. Stir in nuts and dates. Drop from teaspoon onto greased tray. Bake at 350 degrees for 10-12 minutes.

(From : A Treasury of Prize Winning Filbert Receipes,
Oregon Filbert Commission).

ERNEST NEW & ASSOCIATES
170 Dee Street Box 1328 Telephone 86 069 Invercargill



planners

building surveyors

property consultants

26th October, 1979

The Secretary
West Australian Nut Growing Society,
P.O. Box 27
Subiacio
Western Australia 6008
AUSTRALIA

Dear Sir,

N1.26.1 - N.Z.T.C.A. CONFERENCE 1980

New Zealand Tree Crops Association conference will be held in 1980 at the Lake Hayes showgrounds, in the Wakatipu, near Queenstown. It will commence at 9.00 a.m. on Friday, 25th April (Anzac Day) and will conclude in the evening of Monday, 28th April, 1980. This year there will be a complete departure from the format used previously and the learned paper type conference will be dropped in favour of continuous teaching workshops, some at Lake Hayes and some in the field.

The workshops will include such items as tree registration, tree protection, grafting, budding, propagation, irrigation, shelter, pests and diseases. We will hold practical demonstrations on beekeeping and handling, as well as practical tree work at Bendemere near Lake Hayes in the walnut orchards and amongst hazels.

All the crops will be catered for during the different workshops, that is to say, almonds, hazels, chestnuts, walnuts, pistachio, pine nuts, macadamias, oaks and hopefully all the sub-tropicals including avocados as well as the bee and animal fodder trees.

On the Friday afternoon there will be a seminar covering export, the subject being dealt with by speakers under the chairmanship of Ian Howat, Vice President, N.Z.T.C.A. North Island. The speakers will include the Executive Director of Hortex, representative from Trade and Industries Department, representative from New Zealand Standards Association, Export Manager of Wilson Neill, a Dunedin based exporter. There will also be someone present from the Ministry of Agriculture and Fisheries to deal with phytosanitary certification.

The centrepiece of the conference is on the Saturday afternoon titled 'Tree Crops in the High Country which will test the hypothesis that by the introduction of suitable tree crops, i.e. nectar producers which will also be a long term timber resource, it is possible to encourage the establishment of a new type of beekeeper who will take and manage bees to a higher altitude, relying upon tree crops for nectar and pollen, at the same time providing a pollination service to the legumes that have been oversown in the high country; this leading ultimately to increased productivity in the agricultural sense.

The symposium 'Tree Crops in the High Country' will be under the chairmanship of Mr. Nick Tripe, chairman of the National Research Advisory Council (the body that advises the New Zealand Government on where research funds should be spent). The panel will include Mr. MacKay of Moa Flat, a high country farmer who has a reputation for being interested and very capable at planting trees and also believes in

(2) continued.....

bees in the high country as well as in coastal Otago. Ivan has held senior positions and still does, in the New Zealand Beekeepers Association, and the honey marketing authority. Nick Ledgard of Forestry Research Institute, Rangiora, who has had considerable experience in planting trees in the high country, Chris Kerr of Tussock Grasslands and Mountainland Research Institute at Lincoln College, Dr. Rod MacFarlane, Entomologist, D.S.I.R. Lincoln, who is already carrying out a research programme on trees for bees. The other member of the panel is Bob Hathaway, Ministry of Works and Development, Plant Materials Centre at Akoutere near Palmerston North. Bobs work is mainly in erosion control in the high country and using trees for this purpose. All in all this one looks like a good one. We have allowed an hour for discussion so there will be plenty of opportunities for participation from the floor.

Returning to the workshops these are on an eyeball to eyeball teaching situation not where people give papers. The workshops will be going continuously on Friday and Saturday, with perhaps a little slowing off during the symposium on the Saturday.

Sunday morning for most, except the Executive of N.Z.T.C.A. will be free for going to church, relaxing or a round of golf, and Sunday afternoon will be the N.Z.T.C.A. annual general meeting. It is at this meeting that our guest for the conference the President of the New Zealand Institute of Foresters, Geof Chavasse will address us.

There will be a continuous plant materials sale, Friday, Saturday and Sunday morning, and items not sold during that period will be auctioned by President, Roland Clark after the annual general meeting.

On the Monday, we hope to offer two alternative field trips, one to the head of Lake Wakatipu, to Glenorchy and to Camp Hill, mainly to give people an idea what sheep stations look like going up the Lake, a brief look at the wetter end of Otago at the edge of Mount Aspiring National Park and the early and very beautiful plantings of exotic trees at Camp Hill.

The other field trip will be down through the Gorges looking at pip and stone fruit, some nut plantings, the hydro development on the Clutha River and a visit to Jolyndale Park. Jolyndale Park is an experiment by Jolyon Manning in the Planting of trees in desert conditions which has been very successful and has been granted reserve status.

Full conference details will be released towards the end of the month once we have one or two acceptances from workshop leaders. I am confident that the outdoor type atmosphere of a working conference in the beautiful setting of Lake Hayes in the autumn has all the makings of a new style of conference where those attending are able to participate effectively, rather than passively, sitting on their butts in air conditioned hotels, which are completely out of context with the subjects being discussed.

The objective in writing is firstly to ask you to give some publicity through your magazine to the conference and hopefully either you or a representative from your Society will be present so that the proceedings and details of the conference can be reported in your magazine. We would also like as much publicity as you can get for us into Australia,

(3) continued.....

because we will be making the conference an open one on a daily registration basis, that is to say it is not just for N.Z.T.C.A. members it is for non members too. They can register for the whole conference and we are quite happy to make reservations for their accommodation, we can also provide discount for internal air travel in New Zealand both by Air New Zealand and Mount Cook airlines, or alternatively, if they can add it to part of a New Zealand vacation, they can come and register for the days in which they are interested.

We look forward to seeing you at the Tree Crops Conference in April, 1980. If anyone requires any further information, ask them to contact me at the above address, or alternatively P.O. Box 124, Queenstown.

Yours sincerely,

Ernest New
Vice President,
N.Z.T.C.A. (South Island)
Conference Convenor.

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