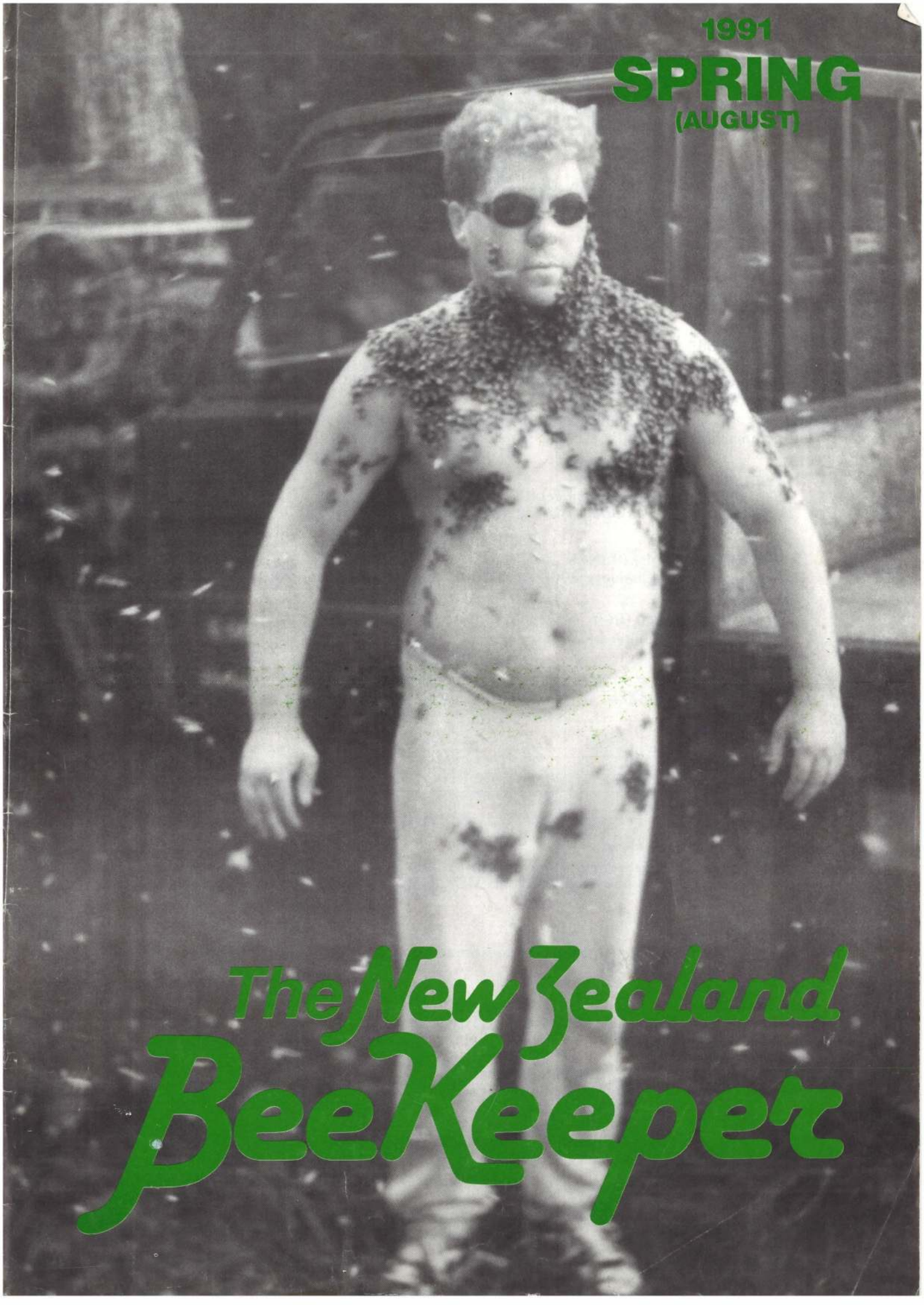

1991
SPRING
(AUGUST)

The New Zealand BeeKeeper

The New Zealand BeeKeeper

OFFICIAL PUBLICATION OF THE NATIONAL BEEKEEPERS' ASSOCIATION OF NEW ZEALAND INCORPORATED

CIRCULATION, 1,550. . .
To Members of The National Beekeepers' Association of NZ Inc. who own more than 50 hives each and so are legally subject to the annual hive levy. **THESE HIVE-LEVY PAYERS OWN APPROXIMATELY 87% OF ALL BEEHIVES IN NEW ZEALAND.**

To Beekeepers with less than 50 hives who subscribe to the journal at $33.75 a year (incl. GST) which also includes membership of the National Beekeepers' Association of NZ Inc.

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FRONT COVER: This photo of Karl Christopersen at the BOP Field Day, March 1991, needs no caption. Photo: Courtesy Murray Reid

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THE MEDICAL MARKET

From Ham Maxwell

For as long as we have had the printed word, the message has been that the honey bee provides not only food but also medicinal products. This claim has persisted despite the tendency of the medical profession to assert otherwise. Why is it that to be recognised in today's medicinal markets a product must be seen to have been produced from chemicals, to have been produced under so called "ideal" conditions, and to be marketed only by the large multi-national corporations?

That we have allowed ourselves to be so manipulated must surely be worthy of question. After all, we should have the say of what we allow to be pumped into our bodies. In my case, I have only the one body, and intend to look after it as best I can for as long as I am able. it seems that the application of chemicals applied to my system over the years by knowledgeable persons has now resulted in my developing a sensitivity to antibiotics. This reaction produces unpleasant symptoms, leading me to wonder if the cure is not worse than the complaint.

A coincidental attendance at a conference on alternative medicine aroused my interest in that field. Large on the agenda was the use of hive products, based on "folk lore" which has been with us for some time. Actively promoted were some IMPORTED hive products. I asked why it was necessay to import them and was told that New Zealand beekeepers were not interested in providing them because they required a high labour content and were not economical. Further enquiries solicited the information that the active product was a very low percentage of the material imported. Yes, despite a so-called total prohibition on the importation of hive products, a calculated risk had been taken when allowing these products in. We may suppose each batch is first tested in an overseas laboratory, and as the active content is so small it has been considered that no harm will come to the domestic honey industry.

Enter my native curiosity, or naiveness. As a beekeeper, is it fair to allow such importation? What steps have been taken to ascertain that it is too labour intensive in New Zealand to gather hive products for medicinal use? Were local beekeepers offered the opportunity to participate in what appears to be a lucrative industry?

To date my enquiries among beekeepers has failed to elicit positive answers to the above questions. Coincidently, a pamphlet just received offering me a lot of money for propolis from my hives, has gone part way to providing the answer I have been seeking. Do I intend to take advantage of the offer received? Yes. Do I expect to make a fortune? No.

If I ignore the opportunity offered I will be party to suppression of initiative. It seems the company involved has got off its butt is endeavouring to promote the use of propolis, also royal jelly. Whether they succeed or fail is over to us beekeepers. We are the ones with the hives, we have to open those hives periodically and clean them, so why not gather the products when the opportunity presents itself? From small beginnings, mountains surely grow. If every beekeepers retained the propolis normally discarded and regarded as a nuisance, there may be no need to import hive products, no need for our industry to be at risk from disease "accidentally" arriving in imported products.

If beekeepers elect to enter this product promotion and so get away from the bogy of honey prices being the lowest on record, they may end up employing staff, thereby reducing unemployment. So it is not only the beekeeper who would benefit. Our national pride would be boosted as unemployment figures fall. perhaps having to tolerate the smirks on the faces of politicians should such a thing happen would be tolerable, if unpalatable. Your choice.

LETTERS

Dear Sir,

We have received a letter from a Papua New Guinean beekeeper who on behalf of himself and other beekeepers in that country, is looking for beekeeper penfriends in New Zealand.

I am forwarding their names and addresses to you in the hopes that you will print them in the next issue of "The Beekeeper" so that they have a good chance of finding someone who will write to them.

They are as follows: John Boiwak, Matthew Give, Joseph Koima, Ola Mondo, John Dekene.

They are Beekeepers in the Western Highlands of Papua New Guinea and can be reached at the following address:
P.O. Box 262
Mt. Hagen
Western Highland Province
PAPUA NEW GUINEA
Veronica Marton
Airborne Honey Ltd.

Dear Sir,

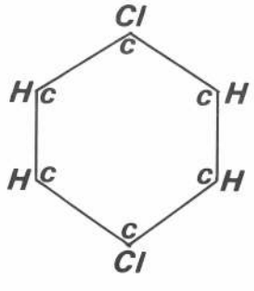
Thank you very much indeed for sending the complimentary copies of the New Zealand Beekeeper. It will be interesting to see what response we get (if any) from the Bumby descendants around Thirsk when they receive their copy and the account of the 150th celebration in the Hokianga.

Your New Zealand Beekeeper is internationally respected. Carry on the good work.
William B. Bielby
F.R.E.S., M. Inst P.I., retired
Adviser in Beekeeping for
North Yorkshire Education Centre

Dear Sir,

Colin McLean requested this information in the last Beekeeper.

Paradiehlorobenzene is made by direct halogenation of benzene by chlorine in the presence of aluminium chloride. New Zealand supplies of p.d.b., used as a moth repellent and air freshener/deodorant, are usually imported from China.



$C_6H_4Cl_2$ (1.4) Melt Pt 53°C Boil Pt 173°C
Gilbert Smith

KEEP THINGS SWEET

From Ann Pharazyn

Beekeepers can do themselves and their fellows a disservice by not being precise with the owners or occupiers of land on which they put their hives. Often it's only a matter of 'what's in a word'. 'A few' might mean three or four to a landowner but 10, 12 or more to a beekeeper. Usually, what happens is that the few hives which turn out to be in a very good spot go on expanding in number. In one instance "About 8 or 9" became: "dozens and dozens of the things all over my best hogget wintering paddock." Always be specific about the number of hives you wish to put in a certain place. If you want to increase the number, discuss it with the landowner first and give him the chance to say whether there are any problems with the existing arrangement you have with him.

The busy time in spring when hives might need a lot of attention often coincides with the busy time on some sheep farms. As a rule of thumb, if there are lambs on the place where your hives are, check whether your comings and goings might interfere during docking. It takes very little to cause chaos in a mob of ewes and lambs which are on the move. A fluffed docking muster can be more than just a set-back for the sheepowner. It can sometimes be a near-disaster. Chances are, the sheepowner has been too busy to even think about your possible comings and goings and in any case might not think it necessary to say anything as it's so obvious — to him! If you aren't welcome during lambing no doubt you will have been made aware of it, but do check in good time and remove your hives if you think you should. Sheep are like bees. Their temperament varies between breeds and to a lesser extent between flocks. What might be quite acceptable behaviour for people on one place could be all wrong on another. Cattle and deer are different again.

Will anyone else be visiting your hives? If so, let the landowner know; preferably with a description of any vehicles he doesn't already recognise. This is more of a security measure — for your property as well as his.

If you have an agreement to give a certain amount of honey in exchange for your site, keep to your side of the bargain unless you are physically unable to produce it.

Even then, explain why you can't perform. You'll be surprised how much sympathy you get: everybody knows about bad seasons.

Without increasing your workload one iota you can do many things to keep a good relationship between beekeepers and landowners. Mostly it's common sense and good manners.

Kiwifruit Pollination Association Beehive Auditing Programme 1990

The name of this contributor has inadvertently become lost. Will he please get in touch. Editor

The 1990 hive inspection started with the usual meeting of the four hive auditors, two KPA committee members, and the MAF apiculture officer. The meeting is designed mainly for the practical application of the inspection programme. Inspectors from the four main regions of inspection, Whakatane, Tepuke, Tauranga and Katikati are required to access hives with accurate and reliable consistency. KPA members hives are also audited in the Waikato and Coromandel areas.

MAF is employed to set up the sampling system which will be used. The system concentrates more on problem areas rather than where auditors field reports show that most hives are of a very high standard. The standard used by the KPA states that a hive must have 12 full-depth frames covered with bees and seven full-depth frames 60% covered in brood (from egg stage to unhatched bee). The hive is also required to have room for expansion, a young active queen, adequate stores, and no foulbrood disease.

A problem encountered in the past season was the very strong early nectar flow. This caused major congestion in many hives and meant that beekeepers needed to monitor hives more often to add supers, and split or transfer strength. Swarming was a related problem.

The general feeling from orchardists was that the auditing of KPA hives is very positive. Some even insist on KPA hives. The future of all industries and businesses calls for higher standards. Businesses without such standards may find survival difficult. The kiwifruit industry is under enormous pressure and only the best will do. This is where I believe the KPA comes into its own.

MIXING AND USING PROTEIN

By Bryan Clements

There are many well written scientific articles on the benefits of feeding protein to beehives and so this article documents protein mixing and feeding from a beekeeper's experience.

About five years ago we started mixing the Beltsville Bee diet of:

12 kg Lactalbumin
24 kg Brewer Yeast
65 kg Sugar and Water.

To mix this we had to ask our local baker to loan us a commercial mixer. Unfortunately his biggest mixer was too small to mix the Diet. We had to add too much water to prevent the machine stalling. So we first mixed it dry and spread a fine layer of yeast powder through the bakehouse. After much trial and error we still could not get a good firm mix that would not slump through the frames.

Our next mixing effort was to pile all dry ingredients on a sheet of hardboard and mix it with a spade in the same way that concrete is mixed by hand. We found this worked well with small quantities. In the early spring, when we had spare time, this method was cost effective but each year, as we used more protein, there were too few hours in the day. To produce enough protein for one day's feeding of 300 hives it required one day mixing protein for two men. In other words it doubled our labour.

It was also hard, dusty work and the honey shed smelt of yeast for some time.

Patties were all formed by hand and if not used immediately they were put in the deep freeze. We experimented with different types of paper to wrap the patties and found waxed lunch paper to be best.

When the protein was fed the bees looked great, the results were good, but the effort to make the mix was too costly. What we needed was a good mixer!

We made enquiries through a food technologist and then through a machinery broker. Eventually the eager beekeeper and the aluminium monster meet face to face. With a 25 HP direct-drive motor and our electrician reading a German manual, the star delta start and other electrical intricacies were finally sorted out. To my relief it ran like a charm and completed a full mix in a few seconds.

I now had a mixer that could mix more than just my own needs and so SPITFIRE PROTEIN became a reality and 2,000 kg was used last spring by 12 commercial beekeepers.

After trying different containers we found a 10-litre bucket was best for storing the mix. A large hive tool easily dispenses it from the bucket.

Although the yeast is inactive, the brew of sugar and yeast will encourage mould to grow on the top of the bucket and the mix may acquire a sweet smell after six weeks. At the sweet smell stage it is still attractive to the bees with 1.5 boxes of bees devouring 500 gm in the normal time of three or four days.

A cool room is the best place to store the mix in summer, although this is not essential as we have used it successfully after 12 months ordinary storage.

When the protein is fed during cell raising the benefits were not all that apparent, although small specks of Lactalbumin were visible in the royal jelly, so we presumed some positive effect. Here, further tests need to be made.

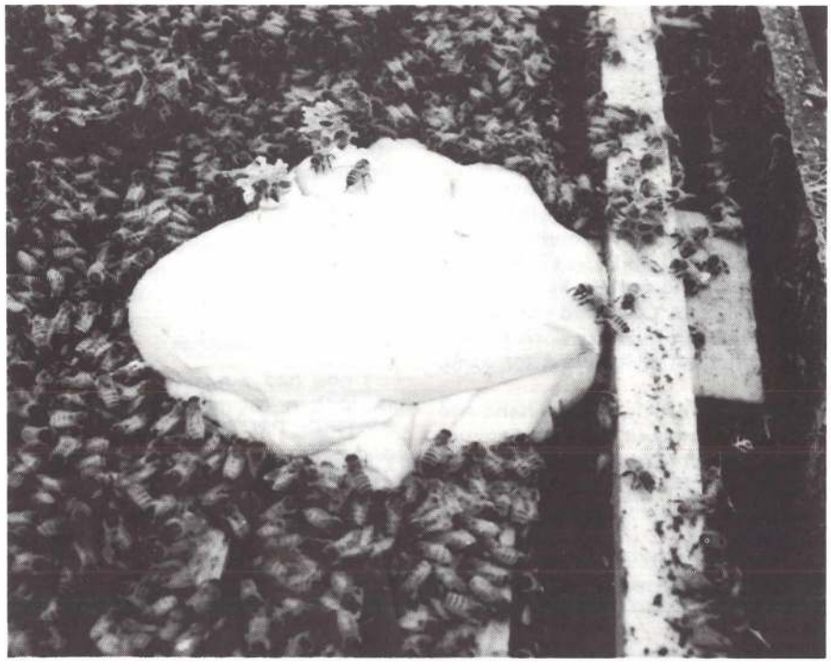
Our best successes have been:

1. Feeding prior to an early bush flow
2. Feeding prior to a late summer flow
3. Feeding prior to the hives going on kiwifruit pollination.

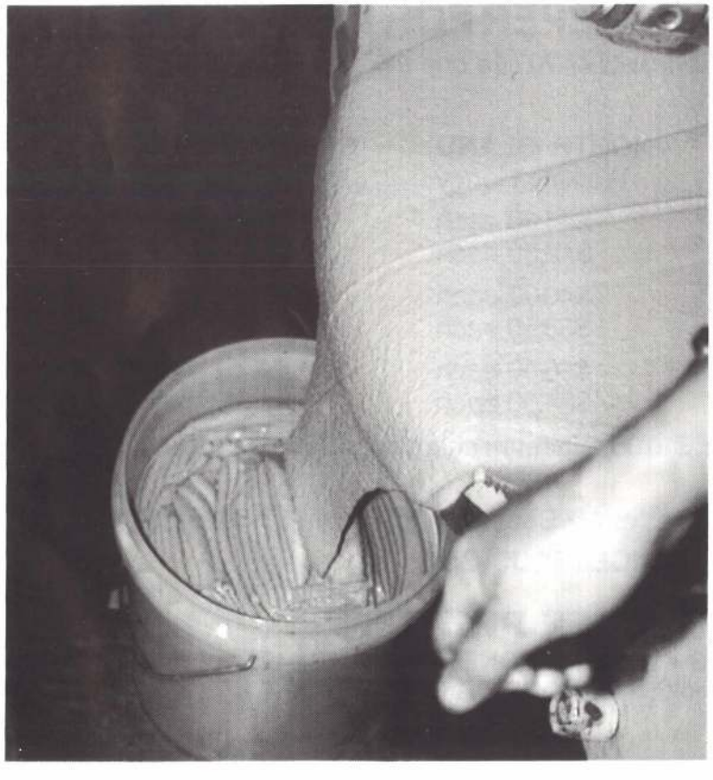
Prior to a bush flow, Diary Notes

29/7/90 Fed all sugar syrup - Spitfire Protein fed

Bees gather round for a meal.



Below:
Spitfire protein being poured into a bucket. The mix looks wet, but it will stiffen as moisture is absorbed.



Right:
Grant Redshaw feeds Spitfire protein to a hive.

22/8/90 Fed all eight litres sugar syrup - Spitfire fed

26/9/90 Fed all one litre sugar syrup - Spitfire Protein fed Protected cells in all

28/10/90 Sugar fed to single hives only - some queens laying. Three boxes of room.

13/12/90 Five tonnes per 100 of Rewa Rewa removed than resupered

9/5/91 Four tonnes per 100 White Honey - wintered heavy!

Total nine tonnes per 100 hives, with the white honey being a bonus as the

QUEEN PRODUCTION RESEARCH
COMPARISON OF WET GRAFTING WITH DRY

By Reg Clarke

Summary.

This trial compares the results obtained by grafting "wet" using royal jelly diluted 50/50 with water, to grafting dry. Five successive grafts were tested (540 cells), using 12 finisher hives. Wet grafting gave a 25% increase in cells accepted by queenless starter hives. The mean weights of pupae were not significantly different at 275.3 mg. wet and 274.6 mg. dry, but high weight pupae (of 290 + mg.) occurred more frequently in the wet group, in the proportion of 75 to 58.

Mixing and Using Protein concluded

other bush sites that had not been fed Spitfire Protein gathered very little after the bush flow.

Feeding Spitfire Protein before pollination has greatly increased the number of bees in our hives after pollination and this has increased our ability to gather a honey crop.

Hints on handling feeding Spitfire Protein:

1. Store in a cool area.
2. When feeding transport each bucket in an empty bee box and tie the boxes in a row across the back of the truck. That stops the buckets bouncing all over the road.
3. Dispense with a large hive tool.
4. Place on top of the brood, between the 1st and 2nd box.
5. Don't give too much at once to nucs or small hives.
6. Feed approx. 500 gm to 1.5 to two boxes of bees.
7. Don't feed protein to pollination hives too early or your sugar bill will be enormous.
8. Smoke the top bars before placing protein. This gives the queen a last chance to move.
9. If bees in a hive do not eat their feed it indicates that the queen is old.
10. A 500 gm feed of protein and liquid sugar will produce four full frames of brood by the next visit.

We beekeepers have become used to growing sugar-feeding costs. A cost of $20.00 per hive for sugar is quite common.

I believe we can reduce costs by feeding two x 500 gm amounts of protein for a cost of about $3.00.

The savings should be made by saving on one sugar feed and by the more effective build up in the bee population.

Introduction.

Grafting wet with dilute royal jelly has been advocated by a number of queen breeding experts to improve the rate of acceptance of cells. However, it is believed that the effect on pupal development has not been previously studied.

This trial was carried out under Autumn conditions between 15 March and 1 April. The effect on acceptance was monitored, and the weight of each pupae was recorded one or two days prior to emergence.

Materials and Methods.

For each graft, a single mother queen was used. Grafting was carried out under a magnifying lamp, using the youngest possible larvae as judged by eye. Bozi plastic cell cups that had been previously used were prepared by placing them in the starter hives for 24 hours prior to grafting. Larvae were transferred to the cell cups using a small brush. The grafting room was not temperature and humidity controlled, but larvae were covered with damp cloths so far as possible while working. Larvae were out of the hive for up to one hour.

For wet grafts, cells were liberally primed by brushing the whole inside surface of the cell with royal jelly diluted 50/50 with water. The royal jelly was obtained from three-day old larvae, and was stored in a domestic freezer between uses.

Two starter hives were used. These were strong two-storey units with the main entrance at queen excluder level. One or two frames of brood were lifted into the second box once a week, and at four-day intervals, the upper box was made queenless with a split board four to five hours before introducing prepared, grafted cells. After 24 hours, the started cells were removed for transfer to queenright finisher hives, and the queen excluder replaced. Each starter hive was given both wet and dry grafts in equal proportions (96 cells per graft), using different coloured plastic cups to identify the treatment. Started cells were removed to the work room, counted and transferred to fresh cell bars using wet and dry cells alternately.

Twelve finisher hives were used. These were queenright two-storey units with no brood in the upper box. The cell carrier frame was placed in the centre position, with a division board feeder next to it. Hives were fed each second day with one litre of sugar syrup. At four day intervals, a bar of eight to 10 started cells was introduced, in the lowest position just above the queen excluder, and the previous grafts moved up one space. The ripe cells were transferred to an incubator prior to examination, one or two days before emergence.

Each pupae was weighed to + 1 mg accuracy, and the treatment group and presence or absence of residual larval food noted.

Results.

Five successive grafts, at two-day intervals were evaluated. The wet grafts were accepted in greater numbers, but the amount of food provided for each cell appeared to be the same under each treatment. In one graft, acceptance was equal for both treatments, and in the other four there was a clear advantage to the wet grafted group. Total cells accepted and well fed were: Wet — 349, and dry — 278 (25% difference).

The pupal weight data, comparing mean values, shows no significant difference due to treatment. With all cells counted, the mean weights were: wet, 275.3 mg; dry 274.6 mg. When cells with no residual food are purged from the data, the mean values are: wet, 283.5 mg; dry 284.25 mg.

When pupae weighing 290 mg or more (the top 38%) were separated out from the data, it was found that there were 75 in the wet group and 58 in the dry.

Conclusion.

Under the conditions described, starter hives accepted wet grafts more readily than dry when given equal numbers of both. There were 25% more cells started successfully when primed with 50/50 royal jelly, compared to the dry graft treatment.

Mean pupal weights were not affected by whether the grafting was done wet or dry, but there were 29% more pupae of 290 mg. or above in the wet treatment group.

A cautionary note should be added. Based on a few observations not reported here, it is possible that undiluted royal jelly may produce a different response. It is suspected that it causes a more rapid larval growth rate in the two days after grafting, but a decrease in pupal weight.

MAF QUALITY MANAGEMENT REPORT

From Murray Reid

1.0 ORGANISATION

During the year MAF's Policy and Delivery functions were separated. The parts of MAF that give policy advice to government, set specifications on legislation and audit these specifications, were formed into a Policy Services Unit.

The National Apicultural Business Unit (NABU) remained in the delivery arm of MAF Quality Management, and work done on policy was contracted to Policy Services. The process of joining the research arm of MAF (MAF Technology) and DSIR together as crown research institutes was begun. It is likely that MAF Quality Management will be formed into a similar structure known as a crown owned agency. The possible corporatisation of MAF Quality Management is an attempt to make our services more cost competitive by removing the restraints of operating under the Finance Act and State Sector Employment Act. Instead the crown owned agency would operate under the Companies Act and Labour and Employment Act.

2.0 STAFFING: NATIONAL APICULTURAL BUSINESS UNIT

Andrew Matheson, apiculture consultant at Tauranga, resigned to become the Director of the International Bee Research Association in Cardiff. Andrew has given 13 years service to the beekeeping industry in Nelson and Tauranga and his efforts and support are gratefully acknowledged.

Cliff Van Eaton, formerly AAO, Gore and Whangarei, was appointed to the position in Tauranga. Dr Stephen Ogden, formerly Apiculture Scientist with MAF Technology, was appointed Apiculture Services Manager based at Lincoln.

Apiary registers and systems were maintained and disease control programmes operated by apicultural advisory officers at Whangarei (Derek Bettesworth), Hamilton (Murray Reid), Tauranga (Cliff Van Eaton), Palmerston North (Ted Roberts) and Lincoln (Stephen Ogden). Field Officer Mathew Sole (Alexandra) and Livestock Officer Dave Grueber (Blenheim) spent between one third and half their time on apiculture.

Brian Milnes (field officer) Lynfield continued to provide a disease diagnostic service. Other bee pathology services were provided by MAF Technology, Ruakura, and DSIR, Mt Albert, Auckland.

3.0 BEEKEEPING STATISTICS

3.1 BEEKEEPERS, APIARIES AND HIVES

There were 5,774 beekeepers owning 312,242 hives of bees at 30 June 1991. (Fig 1) Beekeeper numbers decreased by 436 or 7% over last year while hive numbers declined by nearly 6,000 or 1.9%. A small decline in beekeeper numbers can be attributed to continued pruning from the apiary registers of beekeepers who cannot be traced. New registrations continued to be made despite an impending apiary levy.

3.2 HONEY PRODUCTION

The total crop was assessed at 7,290 tonnes (23.3 kg/hive) compared with last year's crop of 8752 tonnes (27.5 kg/hive) and the six-year average of 8,184 tonnes (25 kg/hive) (Fig II). Exports to the year ending December 1990 were worth $5.5 million and involved 1,253 tonnes of bulk, retail, and comb honey and honeydew (Fig III).

3.3 AMERICAN FOULBROOD DISEASE (AFB)

The 3,733 diseased hives found by MAF inspectors, or reported by beekeepers, were a decrease of 218 over last season. The number of infected apiaries also decreased by 98 from 1660 to 1,442 (Fig IV).

The overall incidence of infected apiaries was down on last year as beekeepers appreciated the need to examine both brood boxes and more frames to increase the chance of finding low levels of AFB. Continued testing of adult bees showed relatively high levels of hives with AFB spores but no visual symptoms, which accounts for some of the increase in AFB in recent years in hives managed for pollination.

The decrease in infected hives occurred despite several severe infections in small numbers of outfits. Over 220 hives were destroyed in one operation and 300 in another. Every apiary district has one or more operations that are of concern because of their disease history and management. They are potential time bombs that require continuous surveillance.

More than 270 beekeepers volunteered their time and vehicles to help inspect hives for AFB. These teams together with MAF officers inspected 13,465 hives (4.3%) in 2,345 apiaries and found 242 hives of disease. (Fig V). The assistance of beekeepers is gratefully acknowledged but especially those who did more than their share.

3.4 QUEEN AND PACKAGE BEES

New Zealand producers exported 26,230 queen bees worth NZ$283,000(fob) and 12,166 1 kg equivalent packages worth NZ$424,300(fob). Most bees went to Canada but other shipments were also made to Japan, UK and the Pacific Islands. Package bee exports were up 2,570 on last year's figures while queen bee shipments were down 4,000. The total fob value of $707,300 was up $87,300 on last year's exports for live bees.

4.0 POLLINATION

MAF continued to provide a quality systems audit for the Kiwifruit Pollination Association (KPA) in the Bay of Plenty. MAF audited the management system of KPA members and this assessment was used to prepare hive inspection specifications for the KPA's own hive auditors.

MAF also contracted with growers, with beekeepers and with other pollination associations to audit hives to pre-determined standards. In all cases permission to check hives was obtained in writing from the beekeepers concerned. As the kiwifruit industry retrenched some beekeepers were forced to hold or reduce their pollination fees and compete for contracts while others managed to raise prices. Growers were more aware than ever of the need for specifying and demanding good colony performance.

5.0 MAF SYSTEMS

5.1 SURVEILLANCE

MAF operated two surveillance systems during the year.

5.1.1 RESTRICTED BEEKEEPING ZONES

One hundred permits were issued for beekeepers to operate hives in the two restricted zones. Fifty four beekeepers with apiaries registered in the restricted zones failed to apply for their annual permits. A number of beekeepers failed to remove honey from their hives by the due date but all complied when served notice.

One case of toxic honey poisoning occurred from an unregistered hive with the victim requiring hospitalisation for three days.

5.1.2 EXOTIC BEE DISEASE PROGRAMME

Apiculture officers operated a strati-

fied sampling programme which involved identifying 500 hives in designated risk areas. These areas were places with high populations, sea ports or airports, dumps, tourist spots, military bases or large hospitals etc. Bees were sampled and routinely analysed for trachael mites (436 samples), *Varroa* mites and the Asian mite *Tropilaelaps* (454 samples). Twenty four suspect European foulbrood specimens were also tested along with five suspect Africanised honey bee samples.

A number of specimens were also tested from live been exporters for mites. No positive specimens of these exotic diseases were found and our trading partners and the Office International des Epizooties (OIE) in Paris were assured of our good bee health status.

FIG. 1 BEEKEEPERS APIARY AND HIVE STATISTICS FOR NZ APIARY DISTRICTS AS AT 30 JUNE 1991

	Beekeepers		Apiaries		Hives	
Register Location	1991	1990	1991	1990	1991	1990
Whangarei	1,307	1,580	3,046	3,576	32,475	33,982
Hamilton	649	659	3,105	45,661	47,596	
Tauranga	619	656	3,541	3,664	53,717	54,764
Palmerston North	1,340	1,391	3,917	4,064	40,528	39,728
Blenheim	505	548	1,972	2,052	23,284	23,713
Lincoln	768	783	4,937	4,848	58,239	59,677
Alexandra	586	593	4,482	4,475	58,338	58,743
Total	5,774	6,210	25,000	25,786	312,242	318,203

FIG II NEW ZEALAND HONEY PRODUCTION IN TONNES AS AT 30 JUNE ANNUALLY

Year	Northland, Auckland, Hauraki Plains	Waikato, King Country, Taupo	Bay of Plenty, Coromandel, Poverty Bay	Hawkes Bay, Taranaki, Manawatu, Wairarapa	NORTH ISLAND	Marlborough, Nelson, Westland	*Canterbury N. Otago	South & Central Otago, Southland	SOUTH ISLAND	New Zealand	Yield per Hive (kgs)
1986	1498	1492	1150	887	5027	871	950	2623	4444	9471	29.0
1987	1122	1506	1450	1012	5090	966	1070	2965	5001	10,091	29.7
1988	480	1298	976	834	3588	807	1503	1850	4160	7748	23.1
1989	379	730	401	530	2040	621	1290	1801	3712	5752	17.4
1990	660	1154	1296	894	4004	471	2774	1503	4748	8752	27.5
1991	668	1057	1470	811	4006	265	1965	1054	3284	7290	23.3
6 year average	801	1206	1124	828	3959	667	1592	1966	4226	8184	25.0

* Includes honeydew

Five manuals, describing how the MAF would respond to the arrival of an exotic disease were drafted. The technical specifications have yet to be negotiated with the beekeeping industry.

5.1.3 ENDEMIC DISEASE CONTROL

It is government policy that the cost of inspection services should be recovered from those who benefit from the service. The beekeeping industry has said that as all beekeepers benefit then all should contribute to the maintenance of the MAF service. the Commodites Levy Act was made law during the year and the industry now has a vehicle to levy all beekeepers if they are agreeable. The proposed basis for the levy was the apiary.

Further submissions were made to government to continue funding this work in the public good. Unless the government directs otherwise or the industry contracts MAF to deliver a disease control service the Ministry will cease its activities in this area. A report was prepared for the Executive on feeding drugs to honey bees to control bee diseases. The report looked at the effects of drugs and chemicals for both endemic and exotic diseases and discussed some of the implications of using these chemicals.

FIG III EXPORT FIGURES FOR HONEY, HONEYDEW AND BEESWAX FOR THE YEAR TO DECEMBER 1990

PRODUCT	TONNES	NZ$ (FOB)	NO. OF COUNTRIES	$/kg
Bulk Honey	678.22	1,836,275	11	2.71
Retail Honey	131.45	627,696	22	4.78
Comb Honey	272.95	1,743,057	12	6.38
Honeydew	170.53	414,674	6	3.02
TOTAL Honey	1,253.15	4,722,702		
Bees Wax	144.21	790,037	13	5.48
Total Honey and Wax Exports	1,397.36	5,512,739		

Source: NZ Customs

5.1.4 APIARY REGISTERS

The seven computer data bases were maintained at Whangarei, Hamilton, Tauranga, Palmerston North, Blenheim, Lincoln and Alexandra. The database contains over 30,000 names and addresses including beekeepers and apiaries. Temporary sites used for fruit and vegetable pollination were not included.

The MAF continued to fund the maintenance of the registers as part of the surveillance and emergency response programme.

Beekeepers were still not very diligent in returning their statement of inspection forms and this added to the cost of maintaining the registers. Less than half the statements were returned to MAF by the due date of December 7 with a further 10% still outstanding, after two reminder notices. These beekeepers (about 250) were contacted by phone.

The usual problems of beekeepers shifting or disposing of hives without informing MAF were encountered. Consideration was given to changing the

reporting period to the autumn but this requires a change to the Apiaries Act.

5.1.5 MARKET ACCESS

A number of submissions were made to the United States Department of Agriculture and the Agricultural Quarantine and Inspection Service for New Zealand bees to be allowed access to the U.S. Problems over Kashmir bee virus in our bee stocks still have to be resolved. Documented evidence of our freedom from disease, and control systems was requested by Canada and Japan.

Exports of honey to Australia and Papua New Guinea resumed following resolution of export protocols. These required that all honey be heated to 70°C for two hours and each batch tested and found free of chalkbrood spores. A zoosanitary certificate is required from MAF for honey to both Australia and PNG.

FIG IV AMERICAN FOULBROOD DISEASE LEVELS IN APIARY DISTRICTS TO 30 JUNE 1991 (1990 FIGURES IN BRACKETS)

Register Location	Diseased Apiaries				Diseased Hives				% Apiaries Inspected by MAF Inspectors	
	No.		%		No.		%			
	1991	1990	1991	1990	1991	1990	1991	1990	1991	1990
Whangarei	192	175	6.3	5.0	667	521	2.1	1.5	18.1	4.7
Hamilton	232	390	7.5	12.5	559	641	1.2	1.3	14.1	14.6
Tauranga	351	362	9.9	9.9	1,115	863	2.0	1.6	9.1	7.0
Palmerston Nth	119	136	3.1	3.3	272	253	0.7	0.6	9.2	7.7
Blenheim	218	242	11.4	11.6	453	497	2.0	2.0	6.7	10.4
Lincoln	148	209	3.0	3.6	255	694	0.4	1.1	5.5	5.6
Alexandra	182	146	4.1	3.3	412	362	0.7	0.6	6.2	6.3
Total	1,442	1,660	6.6	7.0	3,733	3,831	1.2	1.2	9.8	8.0

NEW ZEALAND BEEKEEPER, APIARY & HIVE STATISTICS BY APIARY DISTRICTS AS AT JUNE 30 1991

	1-5 Hives			6-50 Hives			51-250 Hives		
Register Location	Beekeepers	Apiaries	Hives	Beekeepers	Apiaries	Hives	Beekeepers	Apiaries	Hives
Whangarei	949	1,048	2,093	297	661	4,409	29	268	3,586
Hamilton	398	450	955	185	384	2,740	31	276	3,787
Tauranga	343	398	799	179	394	3,119	51	430	6,400
Palmerston North	882	975	2,065	388	824	5,597	40	426	4,281
Blenheim	327	387	695	124	328	1,951	29	338	3,914
Lincoln	480	563	999	183	514	2,899	59	619	7,546
Alexandra	335	376	744	149	325	2,322	45	541	5,327
NEW ZEALAND	3,714	4,197	8,350	1,505	3,430	23,037	284	2,898	34,841

	251-500 Hives			501-1000 Hives			More than 1000 Hives		
Register Location	Beekeepers	Apiaries	Hives	Beekeepers	Apiaries	Hives	Beekeepers	Apiaries	Hives
Whangarei	14	225	4,776	11	353	6,993	7	491	10,618
Hamilton	11	263	4,267	11	410	9,073	13	1,322	24,839
Tauranga	20	475	7,988	12	416	9,177	14	1,428	26,234
Palmerston North	14	368	5,051	10	452	7,171	6	872	16,363
Blenheim	11	324	4,696	11	388	7,696	3	207	4,332
Lincoln	18	315	5,873	14	875	10,893	14	2,051	30,029
Alexandra	18	519	6,478	24	1,137	16,713	15	1,584	26,754
NEW ZEALAND	106	2,489	39,129	93	4,031	67,716	72	7,955	139,169

	1-50 Hives			More than 50 Hives			Totals		
Register Location	Beekeepers	Apiaries	Hives	Beekeepers	Apiaries	Hives	Beekeepers	Apiaries	Hives
Whangarei	1,246	1,709	6,502	61	1,337	25,973	1,307	3,046	32,475
Hamilton	583	834	3,695	66	2,271	41,966	649	3,105	45,661
Tauranga	522	792	3,918	97	2,749	49,799	619	3,541	53,717
Palmerston North	1,270	1,799	7,662	70	2,118	32,866	1,340	3,917	40,528
Blenheim	451	715	2,646	54	1,257	20,638	505	1,972	23,284
Lincoln	663	1,077	3,898	105	3,860	54,341	768	4,937	58,239
Alexandra	484	701	3,066	102	3,781	55,272	586	4,482	58,338
NEW ZEALAND	5,219	7,627	31,387	555	18,273	280,855	5,774	25,000	312,242

5.1.6 CONFORMITY CERTIFICATION

Some exporters requesting a MAF zoosanitary certificate (one declaring the product or area of production to be disease free) were offered the choice of entering a conformity certification programme or having their products 'end point' inspected.

A conformity certification programme involves the exporter in documenting his production and packing systems and describing how the conditions required by the importing countries are being met. It is a cheaper option than 'end point' inspection.

5.1.7 ORGANIC HONEY

A commission was undertaken on behalf of the Executive, to examine and report on the existing organic standards and certifying agencies in New Zealand. A set of organic standards was drafted for adoption by the EEC. If these are accepted they will become the standards for organic honey to most of Europe.

Until the EEC formulates its standards these 'MAF' standards, are available for the NBA or honey exporters association etc. to promote as their own. The MAF could act as an auditing and certifying authority to these standards if requested.

FIG V NUMBER OF APIARIES AND HIVES WITH AMERICAN FOULBROOD DISEASE FOUND BY MAF OR REPORTED BY BEEKEEPERS TO 30 JUNE 1991 (1990 FIGURES IN BRACKETS)

	No. Apiaries	No. Hives	% Apiaries Inspected	% Hives Inspected
Inspected by MAF	1,287 (889)	7,606 (8,728)		
Inspected by beekeeper inspectors	1,058 (1,077)	5,859 (6,040)		
Total Inspected (275 inspectors)	2,345 (1,966)	13,465 (14,768)	9.4 (8.0)	4.3 (4.8)
AFB found by MAF or beekeeper inspectors	242 (181)	950 (644)		
AFB Reported by Beekeepers	1,200 (1,479)	2,783 (3,167)		
Total AFB	1,442 (1,660)	3,733 (3,831)		

5.1.8 CONSULTANCY

MAF continued to earn income from external clients in a number of areas. These included:

- Auditing pollination systems and hives.
- Producing 'Buzzwords' and a revision of 'NZ Beekeeping Industry Profile'
- Secretarial services to NZ Queen Bee Producers' Association
- Support services to the NBA executive.
- General consultancies including overseas aid projects in Tonga and Papua New Guinea.
- Import and export certification and quarantine inspection.

6.0 ACKNOWLEDGEMENTS

The co-operation and support of my colleagues in the apiculture unit, and in MAF Quality Management, Dr Mark Goodwin and his team, and members of the executive are gratefully acknowledged.

EXPORTING

The NBA has, with the assistance of its members, established an export liaison group. This group will assist members who:

a) may be considering exporting

or

b) wish to discuss an exporting matter with someone else in the industry.

The following members will be pleased to provide information for members new and inexperienced in the export of honey.

ORGANISATION	CONTACT PERSON	TELEPHONE NO.	FAX NO.
Airborn Honey	Peter Bray	(03)243569	(03)243236
Arataki Honey	Percy Berry	(070)775790	(070)775076
Ceracell Products	Stephen Mahon		(09)2740368
Kintail Honey	Dudley Ward	(0653)48301	(0653)49209
	Jane Ward	(0728)58038	
NZ Honey Producers Co-Op	Kevin Ecroyd	(056)48882	(056)84859
Southern Honey Exports	Allen McCaw	(03417)7198	(03417)7198
Waitemata Honey	Neil Stuckey	(09)4038491	(09)4038556

HONEY, SWEETER THAN WINE...

By Bill Floyd

When I was first approached and asked to present a paper on Marketing to this Conference my immediate reaction was:

Honey...mmmm. I put it on toast. I like it on fresh Sunday bread sandwiches...there's a marinade I use for lamb that has a tablespoon of honey in it...and is that it?...yeah, it is, crikey...there must be more to honey than that...so this'll be interesting..."sure Sue (Sue Jenkins, one of the Conference organisers), I'll do it."

A few weeks later Sue asks me for a title to use in the Conference literature...all I could think of was the song, "lips like honey...sweeter than wine" ...and so knowing I could easily prepare an address using that as a theme, gave it to her.

I wish I hadn't.

Over the last few weeks, as I've got background information for this paper, I've spoken to a number of people: beekeepers, executives in the food ingredient industry, dieticians...and honey has a problem...people think it's sweet, full stop.

When your potential customers think of honey only as an attractive way of getting some sugar in their system, of sweetening their toast...you have a problem.

While honey is battling for breakfast table space with jam and marmalade...and that's about the only time people think of it...you are very vulnerable, above all else, vulnerable to being treated as one big sticky tablespoon of homogenous product, and therefore, in the patois of the marketing professional, dealing in a very price sensitive commodity line with virtually no loyalty for individual producers or brands.

Couple this product positioning with the fact that the New Zealand food retail industry is entering its most competitive and aggressive era ever, and the honey industry could be taken to the centrifuge, and the profits extracted won't be going back to the industry itself.

I've had two occasions to negotiate for clients with senior food retail chain executives recently...the last one, about three months ago, meant a trip to Auckland and into the lions den...waiting in the foyer to see the same Executive Buyer were two pairs of company managers, looking for all the world as if they were about to be executed...my own client was lucky, we didn't need the deal and could walk out, but if you are negotiating with a food chain and they sense you have to sell, you'll be lucky to recover the cost of your time and packaging let alone the honey inside...the chains are not to blame...they have a job to do...you as an industry are to blame if you split yourselves up and shoot each other in the foot with a poor industrial strategy.

Delegates at today's conference who have tried to get their honeys into a national chain will know what I'm talking about.

I was impressed with the comments made in the Airborne Circular. No 19 about the New Zealand domestic market...obviously a number of companies in the industry are very aware of the problems ahead.

Amongst other points, Airborne notes that: the average consumer believes that Honey is Just Honey, the industry isn't tackling the problem of getting more honey consumed, that 'supermarket-own' brand honey is taking an increased share of the market, and driving prices down all round.

Without research I'm still prepared to agree with Airborne...this a spiral situation that ends up in economic disaster for the New Zealand industry.

I understand that Australian honey is going to be allowed into New Zealand, probably from the end of this year.

General feeling amongst the beekeepers is that we have been lucky to keep them out for so long. I know that there will be some obvious benefits from that in that there **should** be opportunities for you in the Australian market, and it allows New Zealand beekeepers to export more honey without creating shortages on local market, but my dealings with those food executives I have alluded to would indicate to me you have a very difficult time ahead.

I am mindful of a discussion I had with the General Manager of one food chain about three years ago when he said to me he "was bloody annoyed at the profits that were made in whitebait" so his company was going to import Chinese whitebait and break the back of the price regime in New Zealand whitebait.

Sure enough they have been importing Chinese whitebait.

Personally I am pleased to say that the stuff is tasteless and it shows that New Zealand whitebait prices are reflecting a difference in quality.

We have to hope that the same scenario would happen if Australian honey was used to force your own retail prices down.

So a result of all these things, I think my address should have been labelled ...The Future for Honey, is there Life After Toast.

The answer of course is Yes...and it could be surprisingly profitable!

My address is about marketing and before I go any further I want to define with you what Marketing is...

Marketing is a buzz word at present. It's being presented as some sort of panacea to New Zealand's trading ills...but most people who use it don't know what the word means...

Marketing is not Advertising
Marketing is not Research
Marketing is not Selling...

Marketing is, simply, all of those things, plus!...it's the concept by which a business makes a profit by identifying a need within a group of people and fills that need, usually by having the right product, in the right place at the right time at the right price, after it's been promoted in the right way...

Most New Zealand agricultural based industries have been production led...we have taken our superb and unique natural resources and produced milk and meat and honey and more...and then looked for people to buy what we produced.

Industry needs to take the marketing concept on board...it is of course common sense to provide what people really want, it's amazing how often it isn't done.

Marketing is only a recent theory...it actually started in the States in the 1920's...it certainly wasn't around in 1848 when William Charles Cotton wrote his book Manual for New Zealand Beekeepers.

Cotton writes with a passion and a love of bees that is quite amazing, but he is only concerned with producing...if the quality is right, you shall surely quit all that you make, is the only reference I can find to anything like the question of markets and sales.

I also note his enthusiasm for the fact that honey makes such a wondrous beer. What hardworking man can have any excuse for the sotting in a pothouse when he can have a drink so strengthening and wholesome that his wife can share it.

Marketing is an essential way of thinking for any company, any industry: If the New Zealand honey industry is to succeed without Government help, and possibly in an environment where retailers can import honey to knock your prices down even further...then you have to rethink what it is you're making and why...you have to think the marketing concept.

There are four basic areas or elements to the Marketing Concept...the product, the price, the placement (or physical distribution), and promotion.

As an industry you can influence all of those to varying degrees. In my address today I want to concentrate on Product and Promotion.

HONEY THE PRODUCT

A product is not just the tangible things you can see, touch, taste, use...but also the intangibles...the types of feelings the product arouses in people who buy it. For example: what is Coca Cola...people buy Coke because it's the right stuff to be seen drinking, in their minds eye they perceive themselves as being what the admen have inferred they will be...cool, switched-on, with-it. A t-shirt...you can buy a plain white one $25, or go into an upmarket clothing shop and you can pay up to $125.00 for the same thing, except that it will have a small label on the side that says Jag or suchlike...and that label shows you can afford to pay $100 too much, that you recognise the right names, that you belong to your crowd...look at whisky. Most people cannot recognise different brands but they still buy and swear by their favourite...a product is not just what it is, but what people think it is...and there often doesn't have to be a lot of difference in tangible attributes for the perception that there is a very real difference.

HONEY

Is it the wonder food of all time: that can cure high blood pressure, be enjoyed by diabetics, solve hangovers and sober drunkards and so much, much more...or is it, as two dieticians I interviewed as part of the preparation for this paper said, "no more than a very attractive and enjoyable way of eating sugar".

Those attributes I quoted above were set out in a 1970 paper by Douiw G. Steyn, Emeritus Professor of Pharmacology, University of Pretoria.

The answer to that question: is honey more than just a sugar, is vital to the whole question of what we should be telling people in the marketplace, how people will perceive honey and how it should be promoted.

Many of the claims made for honey are not made by the industry itself, but by the alternative medicine and alternative lifestyle people who are themselves attracted to its very naturalness...but these people, with their passionate embrace of your product, alienate mainstream professionals.

Given the very wide array of literature and research material that seems

to be available through international honey organisations, I would have thought proof existed one way or the other on this single issue.

I had faxed to me a copy of a table from Whitney, Hamilton, Rolfe's 'Understanding Nutrition' — this is one of the basic bibles for New Zealand Dieticians...it shows that honey is a form of carbohydrate, and that's all. Dieticians believe the amount of micronutrients in honey are so small as to be irrelevant.

A first priority of the National Beekeepers' Association should be to make formal presentations to the Health Department and the National Dieticians' organisation...identify what reference material they have for Honey, and on what basis they would accept new reference material.

Honey is covered by the Food Regulations and, where we want to infer unique curative qualities, under the Medicines Act/Related Products.

We need to identify the prevailing views and if we disagree with them, prove our case with facts — the industry could for example, encourage a doctorate student to look at honey and its nutritional curative attributes as part of his or her thesis.

It may be that we want to let sleeping dogs lie and those people who enjoy honey as a pleasant taste experience and are mildly amused or tickled by its purported curative powers can continue to purchase for their reasons whilst the alternative lifestylers can continue to embrace their own feelings about the product.

We run the risk if we do demand a final decision on honey's nutritional values, of LOSING.

The purpose of my discussion in a number of ways is to raise points so that they can be talked through by the industry. I can't, won't, be able to resolve them as of here and now.

If it is decided that honey's curative powers are not to be alluded to, then it may be we promote honey as the natural sweetener WITH FLAVOUR, that it adds a true multi-dimensional taste to any ingredient as opposed to the one dimensional sickly sweet blandness of sugar.

There is an interesting book on Marketing that is quite fashionable at present: it's called Marketing Warfare.

The writers claim that business is a wargame...except that it ain't no game. I like their concept and believe it has relevance to the honey industry.

Marketing Warfare says that to sell a product you must decide who the enemy is, i.e. your competitor, and that successful marketing is taking that competitor's profits.

In the case of honey the enemy is...SUGAR...or to be more specific Chelsea refined cane sugar. It's not that long ago that refined sugar was the baddie...responsible for erratic behaviour in children, for weight problems, and a whole host of ills...it was the very nice but naughty unnatural way to get a sweet taste. At the same time, honey was the natural sweetener.

But then John Walker came onto our screens sweating syrup and charm from every pore, sugar's retail packaging became soft and attractive, designer-beautiful...and everyone realised that sugar came from sugarcane and ipso facto: SUGAR'S perfectly natural.

At the same time Chelsea created positive communication links with dieticians all over New Zealand, and made sure everyone in the food industry and people who wrote about food, got the message, and got it good.

When I asked one of the dieticians how sugar could be natural when it was refined, she agreed that it took, I think, a foot of sugar cane to provide a teaspoon of sugar, and that sugar was refined, but, it was still no different to honey...she also disputed sugar creating behavioural problems in children, what happened was that parents who became concerned started paying more attention to children, the children responded to that attention and behaviour improved...sugar was never the culprit.

When sugar decided to be the product people thought of when they wanted a natural sweetener...who were they standing on: Honey.

However, I doubt Honey entered into their thinking, they were almost certainly positioning themselves against the artificial sweeteners, but in the process...you people get hurt the most.

So, within the framework of the Marketing Warfare ethos, I believe that the honey industry should carefully, calculatedly, and very publicly, declare War on Sugar.

What would this mean:

Well, for a start I think you had better value very highly the pens you received as part of your conference kit.

Chelsea have very kindly helped to sponsor this conference and so I feel slightly embarrassed in suggesting this course of action, but as Chelsea would readily agree "business is business."

So on to our advantages from such a move:

The media would enjoy the sensationalistic approach to the exercise, it will make good copy.

The public will either think you're right or wrong, but either way, they'll be thinking about you...you'll be more than just a breakfast spread...suddenly, maybe, you're the product that should be going into chutney's, sweet'n sour sauces, marinades, adding new flavours to recipes, manuka honey used instead of brown sugar...clover honey instead of white sugar, suddenly you're David versus the great sugar cane colussus...or, as I prefer to see them, the Cane Toad and the Honey Bee...now with that sort of imagery, Honey's got a very good chance of coming out, not only with a lot of good publicity, but also increased sales.

You don't want all of Chelsea's business of course, what you do want is your own piece of action, so take Chelsea on at the top end of the market, where people can be persuaded that their sweeteners in their favourite dishes should be more than just lollypop dust...there's a lot of work to be done on this concept, but I not only believe it could work well, but the cost of introducing it would be minimal compared to having to buy, through conventional advertising, the publicity you should get from it.

In the same way that the judo exponent uses the weight of his opponent, you use the massive weight of the sugar industry to your advantage.

One of my own clients is the Nelson-based Tasman Milk Products; one of New Zealand's leading spray-dry processors.

Some weeks ago I discussed the concept of developing a new milk-shake drink with them...this would be a skim-milk and honey powder mix, aimed at females concerned about osteoporosis...the success of this idea would depend on validating previous research that suggests that when milk is ingested with honey, the bodies metabolism makes more effective use of the calcium in the milk...the commercial success of such a product, both nationally and internationally, could be huge...but not only would it provide for honey sales for manufacturing that drink, but the concept that honey helps other foods be better for you would also be implicit in that success, adding to sales of honey by itself.

Last week my research showed that there's a company in Auckland, Foodtech Ingredients Ltd, that is already an international leader in honey ingredient development.

I spoke to John Beishuizen, the managing director, about his work with honey and it makes for exciting news: food manufacturers have a choice between honey and what are insidiously known as "nature-identical" flavours...in other words a scientist can make a honey essence from chemicals and no one knows the difference, not only that, but the artificial (nature identical as they call it, anything to get the word nature into the title) is a lot cheaper.

Up till now John's company has only

been able to get honey powder to 30% honey pure and this has created problems with a number of overseas buyers, especially the Japanese...the good news is that John now believes they can get the honey to 50% pure and that will have major benefits for manufacturing honey sales.

For those not familiar with the product, John has sent some sachets of honey powder...perhaps we can use it instead of sugar for afternoon tea.

Other comments John made that are very relevant to this group are: there's a real need for good strong flavoured honeys such as Kamahi, the stronger the flavour the less has to be used by the food manufacturer as an additive and therefore the product is more price competitive when sold to a manufacturer.

I was interested to note that John saw no real competition from the chemical flavours...the world-wide trend to real natural products is working for you there.

Another concern for Food Tech ingredients was the need for a less sticky honey...he wondered if you could have a talk with your bees about that.

The other comment John made was that there could be more communication between your industry and his...on his last world trip he went to Canada, Europe, and Singapore, with more than 25 products...spray-dried honey was the one most asked about in every country.

Companies like Foodtech are essential to develop a position for honey where it is less price sensitive — they can add values to your product.

It would be quite easy within the New Zealand context to get the name of every food manufacturer; from this list your association can target each of those to identify where sugar, honey or honey substitutes are being used and look at educating those buyers to the advantages of natural honey.

HONEY LISTINGS

As well as existing honey or honey substitute users, you can use information such as the USA Honey Product Introduction Listings to identify new opportunities for food manufacturers.

This set of listings has some exciting new products in it, especially in the areas of sauces and condiments, and baked products; by working with Foodtech Ingredients and other manufacturers the possibilities are endless but you, as the producers need to make it happen, you can't assume the food-ingredient industry is going to automatically think of honey as an idea for a new product.

A number of comments have been made to me about the lack of customer loyalty to honey brands...there are obvious differences between Marlborough Gold Manuka Honey and Airborne's Clover Honey...but how many can tell the difference between various clover honeys.

I understand that its been an unfortunate practice for some honey companies to go into an export market and undercut an existing supplier because New Zealand honey is just that, New Zealand honey, the overseas market is happy to go with the cheaper alternative...they probably can't believe their luck (although quietly wondering about the craziness of it all).

Some years ago I brought the owner of one of Texas's largest Supermarket chains to New Zealand for a clients' food conference.

It was about the same time as the New Zealand Dallas Trade Development Board Promotion was happening...one of the sponsors of the Conference was Sealords of Nelson...they created some very positive connections in Dallas and things augured well for that market...and then along came another New Zealander who went around the same Distribution and Retail channels and undercut Sealords ...Sealords were very unhappy, the Dallas market found it hard to believe...and the New Zealand Trade Development Board saw their multi-million dollar project start going sour.

Not only does this type of scenario happen far too often in a number of industries now, it could get worse...one of the themes of the Porter Report is the abolition of Producer Boards and the single seller concept...this is the concept whereby organisations such as the Dairy Board control all exports of their own industry's products.

As a result there's no cheddar cowboys, at present, but there probably would be if that single-seller protection was lifted.

There certainly won't be any new industry protections put in place: your, shall we call them affectionately, price cutting honey-hoons, aren't going to have their activities restricted by government...unless individual growers can create their own mystique about their own products and brands, can make them unique, then New Zealand honey will always be just that, New Zealand honey, and as such will be a price sensitive commodity line and any exporting achievements can be threatened by poaching by other New Zealand honey manufacturers.

I was asked to make specific reference in this address to the Wine Institute and its Exporters Guild; this Guild has been set up by a number of New Zealand companies, all with a view to the UK market...a fundamental difference between honeymakers and wine makers is that each winemaker has his or her own position in the marketplace...the difference between a bottle of Cloudy Bay Sauvignon Blanc and Hunters Sauvignon Blanc is the stuff

that fills pages and pages of reviews, and yet they are the same grape varietal, same production techniques.

BUT...wine is not a commodity...Hunters and Montana and Stoneleigh and Cloudy Bay and more can all work together to promote openings in the UK for New Zealand wines, and then work to create opportunities for themselves within that opening...the price of one brand is not relevant to the price of another, because each has its own identity and set of tangible and intangible values as a product.

The cheese industry produces cheddar, some of the finest in the world...the various companies in New Zealand all make their own cheddar but take pride in their own being indistinguishable from the others...this is so the Dairy Board can sell the one generic all-New Zealand cheddar anywhere in the world...with supplies coming from any one of its independant dairy company manufacturers.

But if the Dairy Board export system was to be dismantled cheese companies would have a problem...similar to what Clover honey producers have now.

Another group with a similar problem is the mussel industry...a New Zealand mussel is a New Zealand mussel, all that stops mussel company client-poaching is a general agreements to leave each others customers alone — it's an uneasy truce.

I understand that a subgroup has been formed from the Honey Packers' Association which has responsibility for developing a honey exporters' industry.

The objectives are to act as a support network for supply and to develop good communication which will hopefully engender a sense of trust between companies and allow them to work together minimising what I call "shooting each other in the foot" export price strategy.

I note that the honey industry is opposed to the single task policy because it did not work previously.

It is obvious from what was said to me that it didn't work because it was not done well.

Your Guild is a good idea, communication does make it easier to develop trust and appreciation of an overall plan, it may also result, eventually, in some producers/packers combining to work under a common export brand...a scenario that I believe is inevitable in the longterm.

If that happens it will have evolved because of relationships that have been set up from what you started yesterday, that's a good thing.

The only thing going for an unfettered free market system for is that eventually people find the niche they're good at in product style, or create a distribution channel that is very effective (the links and contracts with certain groups that ensures market penetration).

A Japanese company has a packaging facility based in Marlborough that is a good example of how a commodity product can be made into something more profitable by going into non-traditional distribution channels.

Mussels are normally sold through supermarkets and for the disgustingly low price of 95c/kg.

I shudder to think how much the producer is actually getting for those mussels but Nirai Kanai have developed packaging that allows mussels to be cooked and require no refrigeration or chilling at all.

As a result, these mussels will be sold through gift shops, fruit shops, wine bars and the like and be able to command a far higher retail price than if they had been positioned in conventional food outlets.

Another option individual honey makers have is to develop a brand name that becomes uniquely promoted, known and asked for; but this requires immense promotional budgets, and beyond the scope of smaller honeymakers.

I understand from American honey industry literature that apricot and honey spread has proven to be the most successful of any honey spread combinations...but has anyone tried it here, has the NZ honey industry been guilty of complacency in product development?

If the New Zealand industry isn't constantly innovative, demanding better and more imaginative products from itself for its customers, someone else will...that's the first law of business.

Right or wrong, the Porter Report argues that only the fit can be allowed to survive in New Zealand because only that natural selection creates companies fit enough to take on the world.

That's the reality...and a small producer catering for the Clover Honey market with no unique characteristics to his or her product will soon find that the returns are just not there.

So to recap on Honey the Product...there have been some very imaginative claims made as to its powers...these claims have probably alienated mainstream professionals who in many cases will have taken a firm stance against honey as being anything other than a sticky sugar.

To develop a marketing programme you need to decide what your product is: first, establish whether honey is, once and for all, more than just sugar...and do this through independant research, for example, through a Doctorate thesis in Food technology.

Once you have your product defined as to what it can do, you can set about creating the total product package that includes the tangible and intangible benefits, then position your product against what people are spending money on now, and in our case, that could mean Sugar...let the Cane Toad and Honey Bee wars begin.

I said that I would not be spending any time on discussing Price and Placement strategies; however, it's wrong of course, for a group of suppliers or manufacturers to get together and set prices...the Commerce Commission frowns on such behaviour; but you should make sure, as an industry, that selling opportunities occur for domestic and export consumer packs and for manufacturing so that your members have less need for cutprice sales.

PROMOTION

Marketing Promotion includes all those activities such as advertising, sales promotions, public relations, selling as an industry you can create some very effective promotional strategies for your members.

I've already suggested a possible strategy utilising the sugar industry...this could gain considerable media publicity at very little cost.

I also like the idea of promoting honey as the natural sweetener with flavour — as opposed to the one-dimensional sweetness of sugar.

Promotion can make or break a product...one of the problems of the honey industry is that the product is good, there is real value to it, and so producers are lulled into a sense of "right will prevail, our product will be seen as value for money, people will buy it", but unfortunately, that's not true. Success in business goes to those who get their marketing strategies right, not necessarily to the people with the better product.

On the basis that we have defined our product, sorted out the nutritional benefits, we can then approach the promotion.

Conference delegates who read the Marlborough Express will have seen the half-page article by Food Columnist Sue Jenkins...sheer coincidence I know, but last night's article was about Honey...and of course, Sue is a Beekeeper.

If the Honey industry had to purchase that space, it would have cost $1,100.00...as it was Sue was actually paid by the newspaper to prepare it for publication.

New Zealand has a phenomenal number of newspapers, community giveaways, general and specialist lifestyle magazines...articles on honey, honey recipes, and its various cosmetic uses should be developed as part of a

planned promotional campaign this could also include sets of recipe cards being available through retail outlets.

A term we use a lot in marketing is Centres of Influence.

These are people who can influence large numbers by their own endorsement for your product; we've already discussed dieticians (many of whom write food columns), and food writers. Others include: schoolteachers (a school kit should be developed), chefs and restaurateurs, these people should be encouraged to feature honey as part of their dishes.

An annual award for the most innovative use of New Zealand honey could be looked at polytech's/chef training schools, once again, the honey industry should be influencing tomorrows users.

Plunket Nurses should be given comprehensive information kits about honey.

New parents — I was interested to get this promotional kit in the mail last week, its the book that's sent out to all parents on the birth of a child...inside it includes general nutritional information as well as a set of suggested recipes for babies and children...in all of these, there is only one recipe that mentions honey, and one teaspoon of honey is suggested, but I'm sure you get the general picture...it's possible to develop a programme that gives honey a positive profill through people that you target as important, as Centres of Influence.

By using the right sort of promotional tools your message is not only communicated for little cost, but because of the medium, the information has more credibility than if you purchased advertising to do the work.

When I was first asked to talk to this Conference I was given some general informations about the Honey Industry, about Beekeepers; it's an intriguing blend of passionate amateur and skilled professional...within this room there are people who see beekeeping as a hobby/lifestyle/occupational blend, and those who see it as a business, pure and simple.

There are those who wage business aggressively, and those who are happy for a reasonable living, and wonder why the world has got so...well, dollar and profit hungry.

The Beekeepers' Association has to represent all these people, but it has to give first consideration to the principles of business, to let its members pursue profits...without profit there is no industry.

Profit is measured in dollars, dollars is to business what time and the stopwatch are to an athlete, a performance measuring device...that's why marketing has to be concerned with the attainment of profits.

This paper has addressed areas of potential activity to achieve those profits...New Zealand's clean and green image is about to pay dividends on our export markets.

Two weeks ago I gave some samples of products to a Swede who was in New Zealand looking for upmarket food and wine products for a distribution chain that could be developed through the whole of Scandanavia.

He came to Marlborough because of this clean, green, gourmet image and I really believe, given the pollution in the Mediterranean and the acid rain and Chernobyl ad nauseum, that we are about to reap the dividends of keeping our own backyard relatively clean, but it's going to be a rough time for a while within New Zealand as companies sort themselves out, there is no easy answer in a competitive environment.

BUZZING AT

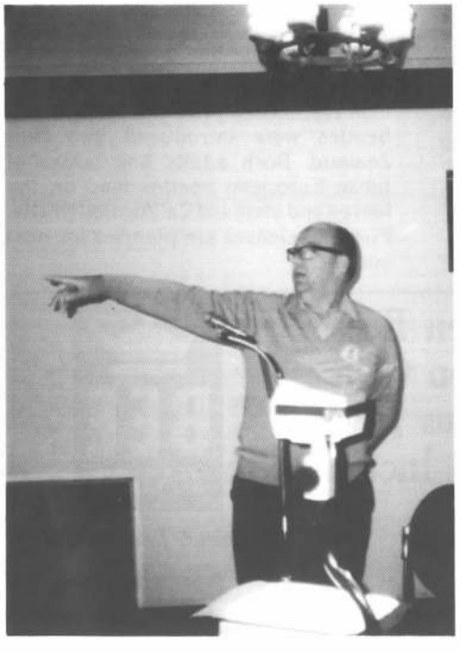
Above. Nice ear rings, Jennie. The Boss seems happy, too. How's the bus? Left: We won't say who this gentleman is because we got his name wrong once. Anyway, he's enjoying himself at the Conference dinner.

Left: Colleen Bray looks pensive. She also looks very nice for a 39-year-old. Above: No, Mervyn and Margaret, that bar will not fall over if you leave it.

CONFERENCE

Above: The latest shot for Henry watchers. Below: At Arataki ve haf vays to make der bees perform.

Above: Trevor Bryant and Mary-Anne Thomason give the camera a warm smile. Below: Lyn McKenzie with the quilt she made to raffle to finance the free trees given to everyone. Your Editor forgot his!



BIOLOGICAL CONTROL OF WEEDS

By P. Syrett, R.L. Hill, C.T. Jessep
DSIR Plant Protection, Christchurch

Introduction

Biological control is a strategy which aims to gradually reduce the abundance of selected weedy species over a long time-span, without disrupting other plants. Successful biological control should result in reduced use of broad-spectrum herbicides. Since 1981 DSIR Plant Protection has expanded its projects in this field. This article summarises current progress on research into biological control of several different weeds important in New Zealand.

Gorse

Gorse spider mite was released for the first time in March 1989. Since then it has been distributed to at least 300 different sites throughout New Zealand.

Mites have established at 87% of sites south of Turangi but at only 32% of sites north of there. The reasons for this difference are not known. Mites have begun to spread quickly and can now be found over 500m from the point of release at some sites. The large, white mite webs are very obvious from November to February and feeding damage is causing very obvious bronzing of gorse plants at many sites.

The impact of this feeding on the performance of gorse plants is not yet known. As predicted when the biological control programme began, any change in the density or vigour of gorse will be gradual.

Further strains of mites are being evaluated to see if the establishment rate in northern areas can be improved.

Two new agents for gorse control were released last year. The gorse thrips feed in a similar way to the gorse spider mite but is not colonial and is more evenly spread on plants. At high densities in the laboratory, thrips cause heavy mottling of foliage and shoots often brown off. The soft-shoot moth larva feeds on new gorse shoots during spring, each caterpillar consumes one to three shoots.

A seed-feeding moth which can destroy seed produced in the autumn is still under evaluation, as are two caterpillars which feed on mature foliage during winter. Other potential control agents under consideration are a disease and a weevil which forms galls on young stems.

Broom

The broom seed beetle has been released in the field, but so far we have no evidence of establishment. Further releases are planned for spring 1991. A second species has now been cleared for release — the broom *psyllid, Arytainilla spartiophila.* This sap-sucking insect is presently in quarantine at Lincoln and first releases are also planned for spring 1991. A weevil which mines the stems of broom is still undergoing host-testing, and an Import Impact Assessment will be completed once the last test results are available.

Old Man's Beard

The insects and diseases which attack this weed in New Zealand are being surveyed. This may indicate the best type of biological control agent to attack the weed. Surveys of the insects and diseases which attack the weed in its native range (Europe) are also underway. Any which appear promising will be rigorously tested to ensure that they are safe before consideration is given to releasing them in New Zealand.

Heather

An EIA on biological control of heather has been prepared, and comments on this reviewed by MAF policy. Testing of the heather beetle, *Lochmaea suturalis* has recently begun in the UK.

Hieracium

The only funding we have so far for this project is for a PhD student in Hungary to undertake a survey of insect species feeding on hieracium in eastern Europe. However, complementary work on pathogens is being pursued in collaboration with Grasslands Division of DSIR.

Nodding thistle

A receptacle weevil, the larvae of which feed within the flower-heads preventing the development of seeds, now occurs in nodding thistle infestations throughout New Zealand. In some areas the weevil destroys a high proportion of seed.

A crown weevil, active during the autumn, winter and spring periods, has now been established at 100 sites. Larvae of this weevil feed within the crown of developing rosette plants.

During the 1990-91 summer a seed-feeding gall fly, from Europe, was released amongst nodding thistle at several sites in both the North and South Islands. It is not yet known whether the fly has established.

Californian thistle

In December 1990 two leaf-feeding beetles were introduced into New Zealand. Both adults and larvae of these European beetles feed on the leaves and stems of Californian thistle. Further releases are planned for next summer.

WASP AND BEE RESEARCH AT DSIR, LINCOLN

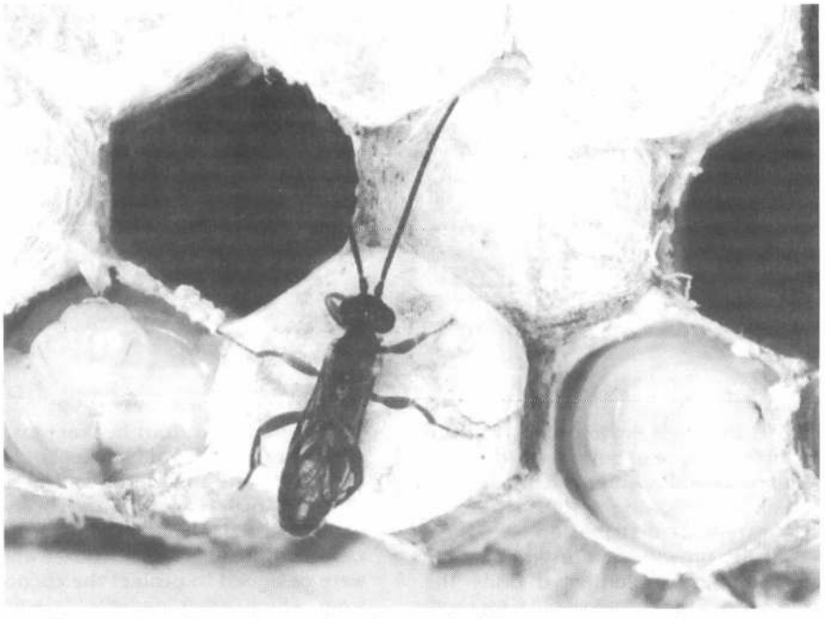
By Barry Donovan, Leader, Pollination Section, DSIR

Background

Two species of ground-nesting wasps, the German wasp and the Common wasp, have become widespread and frequently numerous since they were first identified in the country in 1945 and 1983 respectively. Next to honey bees, wasps are probably the insect most readily identified by beekeepers. In many ways wasps to beekeepers are almost the opposite of honey bees — where bees store honey and produce profits for beekeepers, wasps steal honey and kill bees and so reduce profits. Wasps can be so numerous that honey dew may be depleted on beech trees to the point that little remains for bees, and whole apiaries may be robbed out.

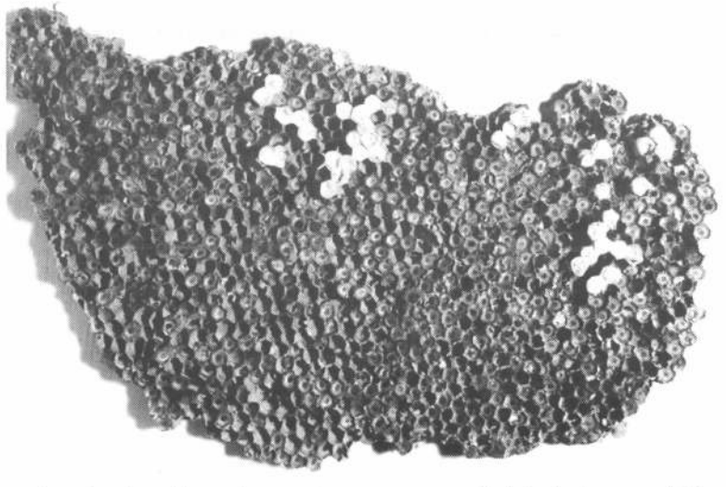
In an attempt to reduce wasp numbers, in 1979 we imported a parasitoid of wasps called *Sphecophaga vesparum* from the U.S.A. (a parasitoid kills the host it feeds on in much the same way as a predator while a parasite doesn't kill its host or at least doesn't kill it immediately).

In appearance the parasitoid looks like a midge, but unlike midges at least some individuals have an amazing ability to somehow enter wasp nests without being destroyed by the guard wasps before eggs have been laid. Unfortunately little was known of the life cycle of the parasitoid when we began this project, so for the first several years we had to concentrate on uncovering the details we needed to know before we could decide whether to attempt to establish this wasp enemy in the field. In 1980 a European strain of the parasitoid was imported because we thought that Europe was the likely origin of our German wasps, so parasitoids from there would be better adapted to attack German wasps than parasitoids from North America.



Above: An adult, short-winged parasitoid on a wasp comb.

Below: A piece of Common wasp comb from Europe with overwintering, resistant, yellow parasitoid cocoons in about 60 percent of open cells. For each parasitoid cocoon one developing wasp has been destroyed.



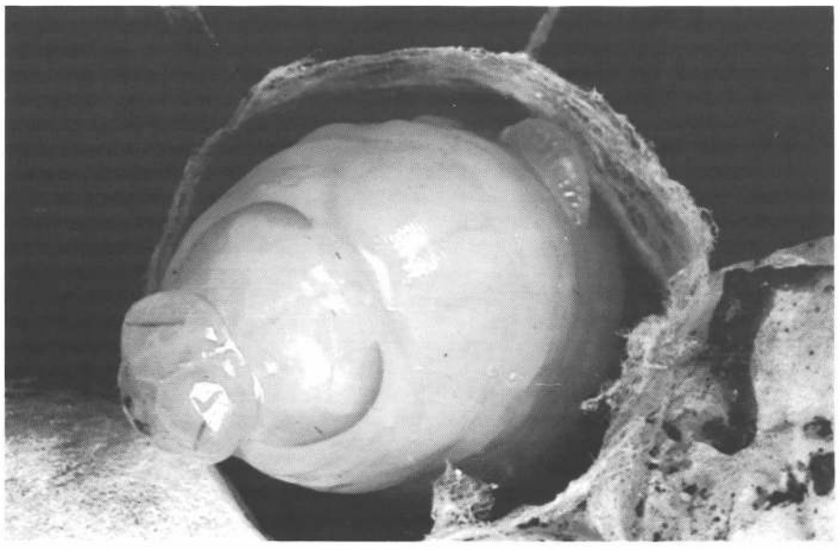
Propagation tests

During January 1984 the Common wasp appeared in Christchurch for the first time, and so from then on in the laboratory we were able to test the ability of the parasitoid to attack both species — which indeed it did. We also tested other species of possible hosts such as honey bees, bumble bees and leafcutting bees — and when all honey bees were removed from brood comb two drone pupae were attacked. However, when worker honey bees were present all parasitoids that were introduced to the brood comb were totally destroyed within a matter of minutes. Bumble bee and leafcutting bee brood was not attacked.

Mass rearing and field tests

During 1985 we finally mastered the art of mass rearing the parasitoid to the point where by July about 1500 overwintering cocoons had been produced from 13 consecutive generations. That year we distributed some of these cocoons in Canterbury and inoculated nests with adult and immature parasitoids. Most inoculated nests were attacked. In November 1986 one parasitoid cocoon was recovered from a German wasp nest which was about 4.8 km from the nearest release site of parasitoids the previous year. This recovery indicated that parasitoids had the abil-

Below: Parasitoid larva feeding.



ity in this new environment to overwinter and spread quite some distance and successfully enter and attack wasp nests the following spring.

Country-wide distribution

By this time the new "users'pay" policy was being implemented. Under the old science regime we would have probably spent several years testing the ability of the parasitoid to reduce wasp numbers by making large-scale releases at a small number of sites. If successful, only then would further releases have been made and these would probably have been of small numbers in areas where we thought they should have gone and where we thought that the chances of establishment would have been highest. Under the new regime though, we were obliged to ask for contributions from the public for help with our research. In return we promised to supply the contributors with as many parasitoids as we could raise, and the contributors would then be able to distribute the parasitoids where they thought they should go, ie where wasps were a problem to the contributors. So although "users-pay" meant that indeed users had to pay directly, it has also meant that contributors have had immediate access to the parasitoid so that they could determine the benefits or otherwise for themselves.

Annually the following numbers of overwintering cocoons have been distributed:

1987	31,000
1988	42,400
1989	35,000
1990	61,400

Of the total of 169,800, 13,700, or 8.1% have been produced with contributions received from beekeepers. In general most areas of New Zealand except Northland and a large central area of the North Island have received parasitoids. The parasitoid cocoons were distributed in wooden boxes which were designed to protect the cocoons from which adult parasitoids would emerge to seek out and attack wasp nests.

Attacks on wasps to winter 1990

During summer 1988 a team of researchers from DSIR Ecology Division (now Land Resources Division) found two Common wasp nests at Pelorus Bridge in Marlborough being attacked by the parasitoid. The parasitoids originated from release boxes placed in the area by us during the winter of 1987. One nest contained 471 parasitoid stages and the other 1034 parasitoid stages. This was exceptionally good news for only 266 parasitoid adults had emerged from the release boxes in the area, so not only had the parasitoids successfully found and entered wasp nests, but they had multiplied about 5.6 times. In the process at least 1491 developing wasps had been killed and the development of perhaps 2-3 times more prevented.

In each of the two following years 11 nests were found at Pelorus Bridge infested with the parasitoid, the most distant attacked nest was 7.1 km from the nearest original release site, a maximum of 1341 developing wasps had been killed in one nest, and the parasitoid was clearly established in the area. For 1990, by the end of summer it can be calculated that within the known infested area about 3800 nests should have been attacked, about 2.35 million wasps killed, and about 787,600 overwintering yellow cocoons produced in nests that would give rise to winged parasitoids over the next four years. However the number of wasps killed would have been only a very small percentage of the total number of wasps in the area.

At 38 other sites parasitoids were not recovered, but the number of nests inspected within the known yearly dispersal range of the parasitoid was fewer than 2%, and mostly far less. At four sites only one nest was inspected. (Moller et al.)

PROGRESS DURING 1990-91

Parasitoid mass-rearing

During the last 12 months about 250 wasp nests were collected from which about 4600 parasitoid cocoons were provided for nest inoculations, and another 14,500 are stored for later distribution.

Inoculations

This last summer we offered a nest inoculation service with the parasitoid. In contrast to the cocoon distribution method of release where parasitoids had to find and enter nests, inoculation meant that we inserted parasitoids already breeding in pieces of wasp comb directly into nests. From previous testing we knew that not only was there about a 70% chance of the host nest being attacked, but that winged parasitoids would leave the attacked nests to seek out other nests to be attacked.

Of 87 nests inoculated all but six were in the South Island, and of about 30 nests examined to date, just over half have been attacked.

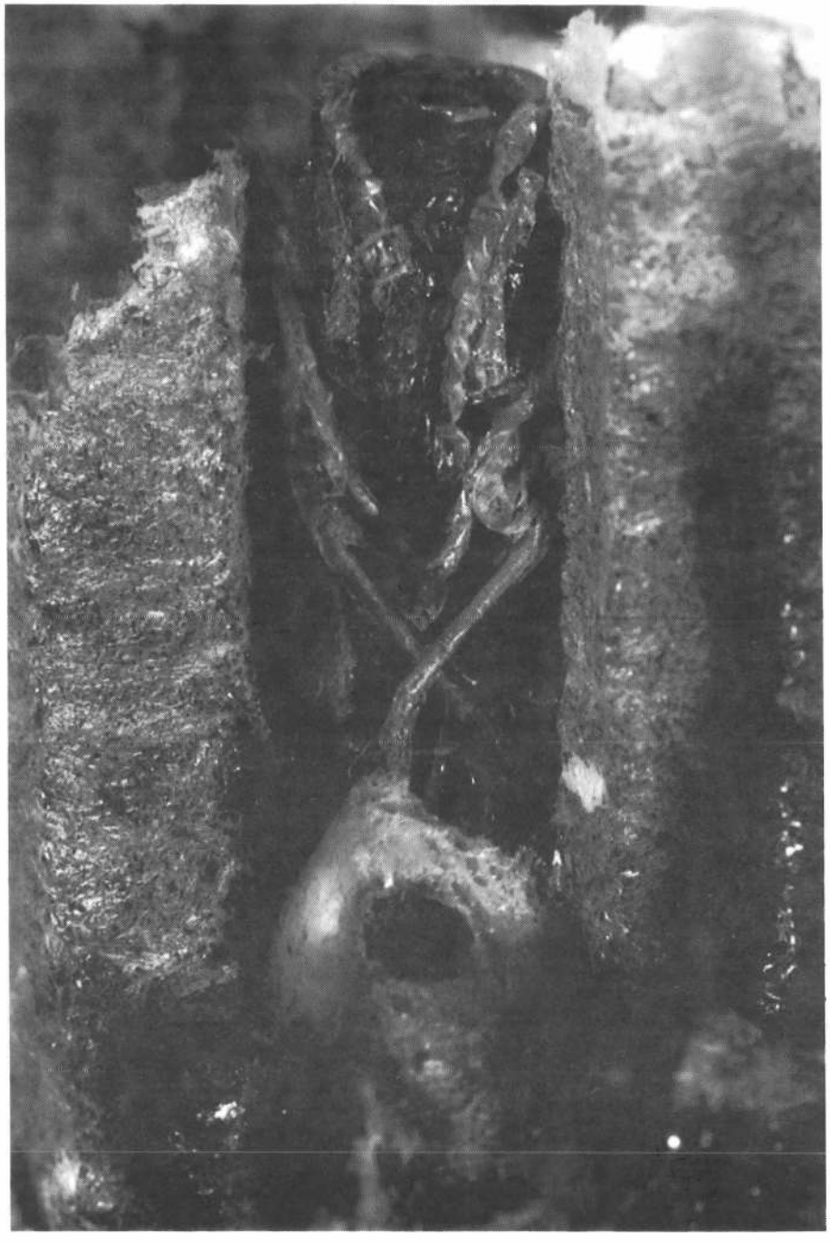
At Pelorus Bridge a further six Common wasps nests were found to be attacked by the parasitoids finding the nests themselves.

At Ashley Forest just north of Christchurch we discovered that the parasitoid had attacked one Common wasp nest. This finding is especially significant because no parasitoids were released there this year, so the attack must have originated from the offspring of parasitoids that were released the year before and that overwintered. Thus parasitoids are established at a second site, so establishment at Pelorus Bridge was not an isolated incident. There is also an unconfirmed report that overwintering cocoons were found in summer 1990 in a German wasp nest near Eketahuna.

Plans for 1991/92

The wasp nest inoculation service will be offered again and two sites will be examined for the presence of the parasitoid in wasp nests. We are also trying to re-import the North American strain of the parasitoid to compare its reproductive potential against our wasps with that of the strain from Europe.

A wasp pupa dead after being fed upon by a parasitoid larva. Note a white, flimsy 'summer' parasitoid cocoon in the base of the cell, with a hole through which an adult parasitoid has emerged.



POLLINATION RESEARCH

Leafcutting bees

Last summer 1,577,440 leafcutting bees were used to fully pollinate 31 ha of lucerne and to partially pollinate another 31.5 ha. In addition, we assessed pest bug numbers in lucerne seed crops and advised growers when to spray and what sprays they should use. Unfortunately, poor summer weather means that probably fewer than one million leafcutting bees will be recovered so the area of lucerne that we will be able to pollinate next summer will be reduced. An unknown number of leafcutting bees but probably fewer than half a million are privately owned.

Alkali bees

Almost all alkali bees are in the Dillons Point area which lies between Blenheim and the sea, where nests are constructed in naturally salty ground. Since 1985 when we resumed caring for the nest sites, the number of nests (and therefore the number of nesting female bees) has increased from 1,800 to 31,610 last summer. Two years ago an experimental commercial nest site was constructed on a lucerne growers property in the Wairau Valley inland from Blenheim. This winter several other lucerne seed growers will be asked for their interest in acquiring nest sites for alkali bees on their properties.

Bumble bees

Bumble bee research has concentrated mainly on the publication of research at two international conferences in India and The Netherlands. Several hundred queen bumble bees were also exported to Denmark to a research institute.

Honey bees

A paper on the efficacy of honey bees as pollinators of kiwifruit was presented at an international conference in The Netherlands. There is an intention to summarize and extend the paper for submission for publication in the New Zealand Beekeeper.

The future

The Government has announced sweeping changes to the organisational structure of New Zealand science. The effect of these changes on our research will begin to become apparent within the next few months but I hope to be able to report to you on this, at your conference next year.

NOSEMA SPORE GERMINATION RESEARCH

By Louise Malone and Helen Giacon

Inhibition of *Nosema apis* Spore Germination.

This project is aimed to test a range of chemicals for their ability to inibit the germination of Nosema spores. As germination is a crucial first step in the infection process, a chemical which could block this may have a suppressing effect on infections in bees.

Incubating spores in a very weak solution of hydrogen peroxide will cause them to germinate, so to test for inhibition, we pre-treated spores with different chemicals, then incubated them with hydrogen peroxide, and checked them microscopically for germination. We tested 14 different chemicals, three of them disinfectants, at three different concentrations.

The results were:

Chemical	Concentration	% Germination
Water		70
Magnesium sulphate	0.1M	80
	0.01M	58
	0.001M	61
Calcium chloride	0.1M	84
	0.01M	80
Sodium chloride	0.1M	73
	0.01M	84
Calcium proprionate	0.1M	84
	0.01	71
Sodium bicarbonate	0.1M	69
	0.01M	66
	0.001M	63
Acetic acid	3%	56
	1%	68
	.05%	72
Potassium permanganate	0.1M	64
	0.01M	73
	0.001M	59
	0.0001M	60
Copper sulphate	0.01M	24
	0.001M	57
	0.0001M	63
Zinc sulphate	0.01M	50
	0.001M	66
	0.0001M	66
Zinc chloride	0.01M	66
	0.001M	70
	0.0001M	56
Potassium dichromate	0.001M	62
	0.0001M	59
Virucide	1%	3
	0.5%	7
	0.1%	79
Phenol	1%	18
	0.5%	84
Sodium hypochlorite	1%	6
	0.5%	4
	0.1%	64

Only the three disinfectants had any significant effect on germination rate.

The effects of feeding these disinfectants to healthy and nosema-dosed bees were investigated. Bees showed poor survival when fed with syrup to which phenol or sodium hypochlorite (bleach) had been added. Survival was good with the virucide, but there was no reduction in infection when this was fed to nosema-dosed bees. When spores were soaked for 30 min, in each disinfectant, and then their viability checked by feeding them to bees, only phenol and sodium hypochlorite had completely killed the spores. Phenol is so poisonous that the bees did not survive well even after receiving only a tiny amount of this chemical. Small amdounts of hypochlorite were tolerated, however, so this disinfectant may be of use for sterilising tools and equipment. Household bleach is 3% sodium hypochlorite, so soaking with a 1:6 dilution should be effective at killing nosema spores.

Semen-Borne Viruses.

Helen also conducted a small survey of semen for Black Queen Cell Virus, Kashmir Bee Virus, and Sac Brood Virus with following results:

Location	BQCV	KBV	SBV
Timaru	-	+	-
Blenheim	-	+	+
Turangi	-	+	-
Kaitaia	-	+	+

The presence of inapparent viruses such as **KBV** and **SBV** was not unexpected, as they have been detected before in bee semen.

Beekeepers Code of Ethics (1991) Provided by Gavin White. The Executive Would Like Comments

1. We as beekeepers should respect the prior territorial rights of existing apiaries unless the said apiary has been left vacant for a period of two consecutive seasons. But with the consent of the previous beekeeper, sites may be taken over sooner.
2. Any group of ten or more hives shall be deemed an apiary for the purpose of this code.
3. The territorial right of any apiary shall be a distance, in radius of 1.5 km in every direction from that apiary. No beehives of another beekeeper shall be located any closer than that, except when hives are on hire for pollination.
4. When hives are placed in urban areas or close to houses due consideration must be given to the general public.
5. We will ensure that every apiary is clearly marked with our official identification mark as issued by MAF.
6. We will ensure that all apiary returns and hive levies are returned by the due date. That in the case of finding American Brood Disease MAF is notified within 48 hours.
7. In the event of any territorial or other dispute where agreement cannot be reached, we will call on advice from a mutually acceptable mediator from within the industry.

Footnote: As timely communication with ones neighbouring beekeepers and any other party affected by our beekeeping activities is of the utmost importance, as it is the basic element to make this code of ethics work. For the good of all beekeepers we undertake to make the necessary approach when circumstances dictate. We also realise that understanding, goodwill and a certain degree of tolerance are essential requirements.

A YEN FOR QUALITY

By Akihiko Suzuki, President Beemate Corp.

All business is the same, you must analyse the country to which you wish to sell to determine what you can sell there and what you cannot! For example, there is no point in trying to sell electrical products to a country with no electricity, or winter jackets in the tropics. That is known as **before marketing!** You must therefore study Japan if you wish to sell there. In your case you must analyse honey consumption in Japan.

The Japanese consume roughly 400 grammes of honey a year, whereas New Zealand consumes about two kg a head which means the Japanese consumption is one fifth of that in New Zealand. In Japan the total consumption of sweet products is approximately four million tonnes, so honey consumption is some one percent of that figure. Therefore, there is a huge potential market, if only a small part of the population switched its consumption of sugar to honey.

The reason why the volume of honey centre is so low compared to New Zealand is because there is a difference in eating habits between the two countries. Since 1945 Japanese eating habits have altered considerably, mainly because of the influence of the United States. The Japanese diet has become westernised and they eat more bread rather than relying entirely on rice. This applies particularly to younger people. Trend has escalated with most, now most Japanese have bread at breakfast, a western or Japanese style lunch, and a traditional Japanese evening meal.

Outside of the United States, MacDonalds, Pizza Hut, and Kentucky Fried Chicken have their highest sales in Japan: a clear indication of how the Japanese lifestyle is changing.

Over the past two to three years there has been a large increase in imported honey, but this was a brief boom only. If we forget that boom, then the average consumption of honey in Japan would be 47,000 tonnes. Now how is this 47,000 tonnes consumed?

Very roughly we can classify honey into two categories: A table honey and industrial honey. Table honey consumption is 27,260 tonnes, or 58% of the total. Industry uses 19,740 tonnes, the remaining 42%.

Now how is honey eaten by the Japanese in the home?

* 70% use it with bread
* Less than 30% blend it with lemon or apple extract to make a drink
* A few use honey for skin care, but no details are available for that.

Of the industrial honey, 75% goes into can or plastic bottle beverages. It is mixed with lemon, soda, or fruit juices. These products had a brief boom for two or three years, which greatly contributed to honey imports. But this is typical. Most foods have booms which last from six months to two years. The remaining 25% mostly goes into confectionary and other products.

How is table honey distributed in Japan?

1) 50% goes through supermarkets

2) 20% is through direct sales by beekeepers, to mostly local customers.

3) 15% is sold through co-op stores, such as Farmers Co-Op, Government stores, etc.

4) 10% goes to department stores. These are luxury retail outlets specialising in designer products and top-quality food stuffs, which usually sell as gifts.

5) 4.98% is distributed through catalogue sales and pharmacy sales.

As a point of interest 60% of our company's business is through catalogue sales.

There is between 8,500 and 9,000 beekeepers in Japan at present although that number is declining. Only 59%, or some 5,000 beekeep commercially. The rest are hobbyists with a few hives only. In all 95% of Japanese apiaries are owned by commercial beekeepers. A further analysis of commercial beekeepers reveals that 84%, or 4,224, of beekeepers own less than 100 apiaries. Only 28 beekeepers have more than 500 apiaries. A comparison between those and the New Zealand figures could be interesting.

Apart from these beekeepers another 140,000 exist solely to pollinate fruit and vegetables. Pollination apiaries have recently been increasing rapidly. However, since 1980 the total number of apiaries has been decreasing. The reason for this that Japan is a small country.

We need more space for housing, therefore farm land has been reduced. As you are aware the biggest social problem in Japan is housing. You may be surprised to learn that a three m^2 section in Japan is valued at $NZ30-40,000. A crazy price. Land is becoming so expensive that the younger generation are unable to afford a house.

Although according to recent statistics, the Japanese per capita income now exceeds that of the United States. The quality of life in New Zealand far exceeds that of Japan. In Japan the cost of land is affecting the economic structure.

To return to honey in Japan the origin of honey is different geographically. Southern Japan is sub-tropical while northern Japan is temperate and so very similar to New Zealand, but we have no clover fields.

Spring arrives first in southern Japan. The beekeeper then follows the flowers to northern Japan. He is migratory for some six months. This is the Japanese style of beekeeping.

The main source of honey is from flowers, then comes mandarin citrus followed by milk vege and well down the list in seventh place is clover.

There are many varieties of flowers, however because of the reasons previously explained, flower sources have decreased and are predicted to decrease further, because of the limited farming land available.

In 1968 Japan had 750,000 hectares of fields for growing flowers to extract honey, but 21 years later, in 1989, that area had decreased to 320,000 hectares, or by more than 50%.

Every year the volume of honey into Japan increases. Most of it comes from China. Why is that so? It is because of two factors:

1) Chinese honey is cheap.

2) Chinese honey is mainly acacia honey, which is very clear and has a mild taste. Factors which the Japanese like.

You are wondering how to make a profit, and how to best approach the Japanese market, so let's look at some examples.

Recently the United States has complained that the Japanese market is too conservative. Yet many U.S. companies have been very successful in Japan. For example, MacDonalds, Coca Cola, and IBM. The reason is that they understand what the Japanese want. On the other hand the U.S. car does not sell well in Japan because the consumer does not want the product. The American automobile industry tried to force its own standards on Japan, standards the Japanese do not want. For example, Japan relies entirely on imported fuel so its people do not like what may be described as gas guzzlers. The U.S. automobile industry has not opened its eyes to today's world. It is still basking in the fading glory of being yesteryear's king of the automobile industry.

On the other hand, American-made Japanese cars, for example Honda, sell in Japan because the companies concerned are well aware of what the consumer wants.

There are three important basic factors in selling a product —

1) Right commodity
2) Right timing
3) Right price

Without these factors, it is difficult to sell a product. The U.S. automobile industry has missed No. 1. I shall now apply these three factors to New Zealand honey —

1. It appears there are no problems. You produce high-quality clover honey. However you must understand that acacia honey is mainstream in Japan. But there still is plenty of room for you.

2) There are also no apparent problems. New Zealand has opposing seasons to Japan, which may be a big advantage. For example, the New Zealand cherry season is December to January, Japan's off season, and this season is the biggest gift-giving time in Japan, so cherries from this area are a very precious gift. I therefore think the export of cherries from New Zealand to Japan will increase.

The remaining factor is price:

Set aside the Chinese product. If your product is competing with Argentina how much must the price be at your yard? It would need to be $1.68 per kilo instead of $2.20 per kilo.

You may treat this figure, as you like. Maybe some people feel that it is better to give up, while others determine to put in more effort, but don't be negative. More expensive honey from Hungary and Canada is still selling in Japan. I think you can easily double your figures if you make efforts to reduce your prices.

Finally I would like to introduce an optimistic factor. Forget about the booming figure for industrial-purpose honey. The figures for table honey consumption are still very low. Many people are beginning to realise sugars' adverse effects on the body, and are shifting from sugar to honey.

Many Japanese meals use sugar. Now suppose if only 1% of the sugar consumers shifted to honey, it would be a big business chance, but you must remember that the price factor is still very important.

Remember also that the mainstream honey in Japan is liquid, although many people see it as too sticky and messy. This is one of the reasons why there has been no significant increase in the consumption of honey. Sugar is seen as simple to use and clean.

If we could switch Japan to creamy honey, I believe we could solve this problem. My company is now promoting creamy honey in Japan, but we really need more 'team play' with the whole of the Japanese honey industry. Although every member of it realises the necessity of a campaign, they are not willing to share the costs. And creamy honey cannot be produced from acacia honey, as you know. We can only make it with quality clover honey.

The Japanese economic structure is developed and technological, but from a very long term view, we believe the industry's which are related with human health and environmental issues will survive and become the main industries of the future. In this context, you are producing in a pollution free country, therefore I see your future as bright. Start working towards that future today.

NBA TECHNICAL LIBRARY ANNUAL REPORT

John Heineman
Hon. Librarian

Just 12 months ago our 1990 PROJECT met with that marvelous response from Conference participants, a sum of $361 was subscribed enabling us to order Dr Eva Crane's latest and expensive book "BEES AND BEEKEEPING — science, practice and world resources". After a long delay the book did arrive and is now on display here in the library corner for your inspection.

We have inherited boxes full of some valuable books and other interesting material from Colin Rope and Trevor Bryant. Murray Reid keeps the library in mind when MAF has some worthwhile publications to pass on. Overseas magazines continue to arrive from the Exec. Secretary's office and from the Editor. These good gifts are acknowledged with thanks.

Once again we ran out of shelving space. A new cupboard made from used material has provided the answer. Everything is properly and systematically stored. No costs involved.

Packing material and especially padded envelopes are re-used as much as practicable so that overheads are kept down. If borrowers receive somewhat shabby looking parcels they should appreciate the fact that we do our best to keep costs as low as possible.

The library's finances are no cause for concern, at least not for the present, but there is certainly little to spare.

With all the additions which have come to hand since June 1987 a second supplement to the catalogue was warranted. This is now available at cost. When our catalogue supply runs out a revised issue needs to be compiled, the two supplements and any further additions should be included at that time.

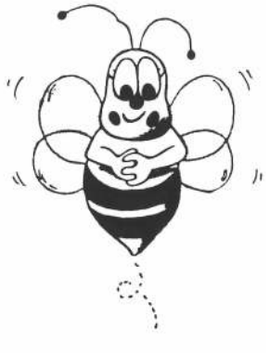
On the debit side I have to report that one borrower has let us down sadly! Several reminders and at last an endeavour to recover the books by asking for assistance from the president of the particular branch have met with no result. Luckily nothing of great value is involved this time.

Usage of the library's contents by borrowers has been much the same during 1990/91 as it has been over the past few years. A slight increase can be noted.

Received were a number of requests for videos showing general hive management and queen-rearing. Having also last year's relevant remit in mind extensive enquiries have been made overseas about availability of an instructive video on basic hive management suitable for New Zealand conditions. Correspondence received from Prof. Elbert Jaycox (USA) and from Andrew Matheson, IBRA Director, has not resulted in any positive recommendations so far.

Gavin McKenzie, Telford Polytechnic tutor (apiculture) also found that making such a video will meet problems. It will be pretty expensive, perhaps prohibitive seeing funds available. Professional quality, which is necessary, would be difficult to achieve using amateur equipment and expertise.

Something to fill this need and being within reach of our limited resources will surely appear in the foreseeable future.



GOALS FOR THE NEXT TEN YEARS

By Russell Berry

Goal 1. More Financial Gain To Beekeepers For Currently Unpaid Pollination By Bees

Canada is a country, like New Zealand, which relies greatly on the pollination of its agricultural crops, but unlike the NZ government, the Canadian government realises that the survival of its beekeeping industry, and the survival of its farming industry, relies on beekeepers being paid in part, for the free pollination service that their bees give to the country.

This is in no way a subsidy. It is just part payment for general pollination services that the beekeeper gives to the community for which there is no other practical way of being paid. Without these payments in recognition of pollination services Canadian beekeeping would be in a very serious position. Just as the New Zealand beekeeping industry could well be if the greater pollination benefits are not recognised and paid for by the NZ public.

Remember that NZ is fairly unique in its hill country clover-based pastures which produce beef, lamb, wool and dairy products so efficiently compared with the rest of the world.

Actively seek some payment for the pollination your bees give to the NZ economy. Our industry may well not survive without it. Do not be limited to past traditions in looking for ways to increase your income, by:

1. Consistently talking to people about pollination and the crops that really rely on bees and how it would affect farming if beekeeping failed. Get the people of New Zealand to ask government for part payment of this pollination service.

2. Suggest to the government how they can pay for certain things so that we can provide this pollination service.

Goal 2. Higher Prices for Honey and Other Bee Products

Honey prices. While New Zealand actively encourages free trade, we will always be subject to the influence of world honey prices, no matter how much wishful thinking by those in favour of advertising.

The beekeeping industry is too small to support a meaningful collective advertising programme. We have only 72 beekeepers with more than 1000 hives. However we can as individuals do much to promote our own products.

It would be better to produce unique products for which the demand is greater than the supply in New Zealand or overseas. In this category we can put some specialty types of honey and pollen, disease-free bees, queens, propolis, royal jelly, and other products which you, I, and some good old-fashioned Kiwi ingenuity will develop in the future.

Remember, we are competing against countries with very low wages which means we must be very efficient in the production of these products or have a very unique product!

We must also ensure the quality of our products and services meet the needs of customers better than those of our competitors.

Goal 3. Lowering The Cost Of Producing Honey Or Bee Products And Services

Looking at the main costs on the "Beekeeper Expenditure and Income 10-year Price Comparison" sheet (page 30).

I would suggest a good start for the 1990s would be:

1) Borrow money

2) Go out and buy a new diesel Japanese-made truck

3) Feed lots of sugar

4) But more than anything else, you should be trying to achieve twice as much production of goods and services with the same amount of hours of work, or the same amount of production with half the hours of work.

This is easily said but difficult to carry out. What are your suggestions?

Here are mine:

We start by asking ourselves whether it is necessary to do a particular job; are we doing it because we have been doing so for the past 20 years? Have conditions changed now?

Some beekeepers can produce the same amount of honey with half the work as others on similar areas and conditions. Find out how this is done. It may be because one is more efficient than another who loves fishing or skiing or who can't stand working extra time. The reasons are not important. What they do is!

Every operation is different, but here are some suggestions which may be of assistance:

Plan your bee farming programme for the year to include as many variables as possible.

Make sure it is flexible.

Don't think in averages. The season may be wet, dry, have good production prospects or poor. You may be fit or unfit.

Make sure you make the best use of what you have, whether it be trucks, beehives, shed and plant, or beekeeping areas.

Are the motor vehicles in the best possible order preferably with low decks, good mudgrip tyres under 300,000 km, and are Japanese diesel trucks.

Is all the beekeeping gear set out in a manner which makes for fast loading and unloading at the shed.

How are the sites located: this is very important. Far too many sites are in the wrong places because they have been there for the past 20 years. The criteria for site situations follow, in order of importance:

1. Not in positions which cause a nuisance.

2. Not where there is any possibility of flooding.

3. Easy access and good for working.

4. Good for bees and hopefully in a position where they will achieve our objectives.

Occasionally No. 3, 'easy access and good for working bees,' has to be sacrificed. Looking at what has happened to the value of your time over the past 10 years. Make sure No. 3 does not happen too often.

Sugar Feeding — If you can buy liquid and use tanks on your truck, leave your feeders in the hives. Feed warm, have a high speed delivery system to the truck tanks and feeders and you can save time compared with feeding frames of honey. Hard to believe? Well, I am sure it is so in our operation. At Waiotapu we have fed approximately 250 tonnes in each of the past two years.

Is the hive or yard of beehives the unit? Is it possible to get all your hives the same in a yard so that you can treat the yard as a unit, or do you have to treat the hive as a unit? The former is very time saving.

Spring Management. Feeders, two frames wide, kept on the outside of the second box tend to hold bees in the bottom box and saves the need for reversing boxes. Leave plenty of stores. That prevents starved hives and reduces beekeeper stress.

Paid Pollination. This is very impor-

tant and could be worth spending time on. Time we don't have today. Be organised. Have good communication. Keep as many options open as you can. Prepare for the worst and have contingency plans for emergencies such as the wife breaking her leg, bad weather with trucks bogged in paddocks, hives too weak, swarming, too full to lift, access closed suddenly to forestry sites because of dry conditions, no caged queens when you need them. Don't expect the impossible too often from your staff but do remember a well motivated staff will achieve the impossible at times.

Taking off Honey. Have you tried benzaldehyde, carrying all boxes end on, stacking all boxes on truck from the ground on pallets and unloading with a barrow or forklift?

Extracting. Would it pay to get your honey extracted by another beekeeper and spend the time producing more honey or going fishing?

Personal and Staff Motivation. Maybe this could be improved by your taking the two week's holiday you have put off for the past five years. Read some good management books. Attend some management or training courses yourself and send all staff to appropriate training courses when the opportunity arises. Improve motivation to achieve your goals by providing the right incentives.

Beekeeper Expenditure and Income 1981 and 1991 Price Comparison

1991 and 1991 prices based on information available, July 1991.

The Consumer Price Index, 25 Urban Areas all Groups, was used to show what the prices would have been if the 1981 prices had been adjusted by the change in the Consumer price Index to 1991. The change during this period was 1981 price x 2.59.

The price to the consumer is 2.59 higher in 1991 than it was in 1981.

	Cost 1981	Cost 1991	1981 Consumer Price Index Adjust. Figure
EXPENSES			
Wages	4.25	11.70	**11.00**
Sugar per tonne	785.00	861.00	**2033.00**
3 tonne truck	12,000.00	24,000.00	**31,080.00**
Motor exps			
Litres petrol, retail	.54	1.02	**1.40**
Litres diesel, wholesale	.426	.444	**1.10**
Tyres 700 x 16 8 ply	154.00	232.00	**398.00**
Hive levies (cents)	17.5	.55	**.45**
Power (cents)	8.6	13.3	**22.27**
Telephone per minute rental	66.00	69.00	**172.00**
Cost for Conference Seminar	15.00	40.00	**38.00**
Conference Social	18.00	56.00	**46.00**
(Hard to compare) Accommodation	38.00	75.00	**98.00** room
Rates, Honeyhouse and house	89.00	753.99	**230.00**
Rates, House and section	34.00	335.00	**88.06**
Queens	4.50	10.00	**11.65**
Foundation Conversions per Kg	.95	2.20	**2.46**
Packers' Assoc max fees	48.00	48.00	**124.00**
500 mils milk	.23	.62	**.60**
INCOME			
Honey Bulk	1.45	1.80	**3.75**
Honey packed	1.21	1.85	**3.13**
Wax	4.50	4.82	**11.66**
Pollination fees	48.00	95.00	**124.32**
Hive sales	70.00	55.00	**181.00**

Report by Ian Berry, NBA Rep. on Pesticide's Board

I understand that the Pesticides Board was recently advised that "Due to severe financial restraints the light at the end of the tunnel has been turned off." I am pleased to report however the Pesticides Board is still in existence and it appears likely to carry on for another 12 months or more. If the last sentence has a familiar ring about it you are right. It's an exact copy of what I said at last conference and probably the one before that. I understand that the recent passing of the Resource Management Bill does bring the end of the present Pesticides Board a step nearer.

During the past year I attended on your behalf 4 out of the 5 Board meetings all of which were held in Wellington. I missed the one meeting because it clashed with the Rarotonga Conference.

Once again the Pesticides Board and the N.B.A. jointly funded a full page advertisement in the October issue of the Orchardist of New Zealand using the "Dead Bees don't Pollinate" theme and once again there were no reports of bee damage to the Pesticides Board. There were however two problems referred to me by Branch Secretaries and I would like to refer to these as examples of how branches can help by keeping a lookout for potential problems and forwarding the information to their representative.

The first matter came in a letter from Sandy Richardson, secretary of the West Coast Branch. Sandy sent me a copy of a catalogue put out by Matthews Nursery of Akaroa in which it was claimed flowers could be protected from bee damage by spraying them with carbaryl to repel the bees. I discussed the matter with David Lunn the Registrar of the Pesticides Board and he agreed the Board should write to Matthews Nursery. This was done and I would now like to read a copy of the Boards letter....I have also recently received advice from Tony Lorimer the secretary of the Waikato Branch of spray damage to bees in the south Auckland area where farmers have been spraying for clover fleas. My thanks to Tony and Sandy for bringing these matters to my attention.

Also once again I would like to place on record special thanks to the staff of the Pesticides Board and the members of the Board for their help and interest during the past year in preventing pesticide damage to bees.

HOW TO MINIMISE WINTER LOSES

By John Heineman

The following could be of value to those who don't regard themselves as beginners. After all, beekeeping essentials are the same for all no matter if one is a hobbyist with two hives in the garden or a commercial keeper with a 1,000 plus colonies scattered across the country.

WINTER LOSSES are unavoidable. No matter how hard one tries to do the right thing, something will go wrong from time to time. The only solution is to take out insurance against such a contingency. Now any insurance cover entails payment of a premium. You will have to do just that if you wish to stay on top of those losses. But this premium need not cost dollars, for it demands little material. It will, however, require some of your time. As a hobbyist you will find this an interesting project well worth pursuing during the coming season.

The time to take out this insurance is during the summer. It should be in the form of one or more nuclei which must be strong in bees, have a good vigorous queen, and be supplied with sufficient stores of honey and pollen to make it through the next winter.

What are the average winter losses? My old boss, who was a very good beekeeper by any standards, counted on 5% of the number of colonies in his outfit. In my own experience that is about correct. It allows for hives which have died out for a diversity of reasons however it hardly allows for colonies which may show signs of a failing queen or which can do with some drastic boosting between August and November. So it is better to aim for a somewhat higher figure. Those carried over nucs will never go to waste. They represent the very best insurance cover against winter losses.

Now is the time to make the preparations so that you have the right equipment at hand for housing those nucs.

The common four-frame nuc box is fine for making nucs, mating or introducing; but it is not so hot for wintering in most New Zealand districts. A single full-depth (04 3/4) is O.K. especially when placed on top of a full-sized colony.

A double unit, that is a super holding two nucs separated by a partition, does a very satisfactory job. it winters well on top of a large colony as it receives some extra warmth from the large cluster below and also has that neighbour next door.

Consequently it must be economical in the consumption of winter stores for less energy is needed to maintain the required temperature. Economical too in materials for if you adopt the following plan you will find that practically no extra equipment is needed and very little expense is involved. The super used for making the double unit can be used for two nucs, for a single queen colony or as part of a large colony, as brood box or as extracting super. Then with a minimum of fuss optimum use can be made of all the hive gear (see figure 1).

What is needed: (a.) a f/d super (or 3/4 d. but that leaves a somewhat smaller safety margin as to stores); (b.) a division (crown) board; (c.) a grooved bar such as the long length of a queen excluder rim (485mmx15x20mm) and (d.) a few lengths of thin flat slats three to four mm. thick cut from 20 mm timber, and some scraps of hardboard for the division board and partition.

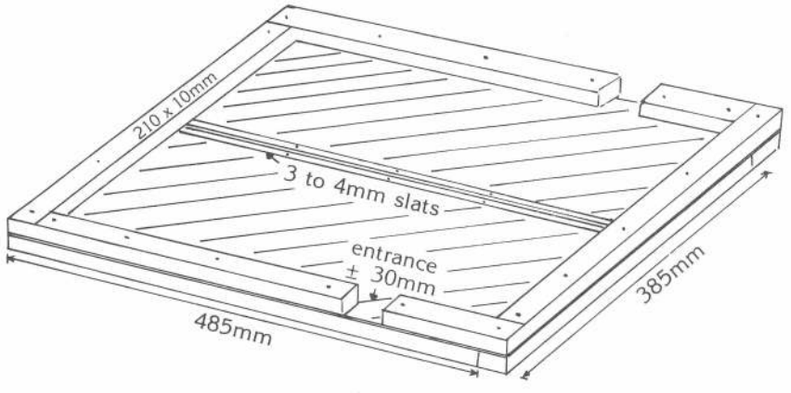


FIG. 1

Of course you can buy a crown board but a self made one serves equally well. The required hardboard is 505x405mm. (same as a super). For the rim use four pieces 485x20x10mm. and four pieces 385x20x10mm. Lay out the sticks and h.b. and nail through with frame- or light panel nails. Note that the top and bottom sticks forming the rim overlap at the corners. After assembly cut out the entrances. If those are made into the sides they will automatically face in different directions from the colony below which helps to avoid drifting. In lieu of hardboard a sheet of tin or flat g. iron can be used which of course conducts heat from below even better. Next determine the centre of the board at each end (202.5mm) and mark it with a pencil line. Along each side of this centre line tack, staple or glue a three or four mm. slat fitting neatly onto the rim, leaving enough space between the slats to form the groove for the bottom edge of the partition. Remember to support the hardboard when tacking on the slats. Mark the centres on the inside of front and back of the super and fasten slats parallel to this centre line. The slats should be cut to the right length, from the edge of the rebate to the bottom edge of the super. See fig. 2. The space between the thin slats on both the division boards and the super ends forming the groove for the partition to slide into does of course depend on the thickness of the hardboard available. Sliding in and out should be possible without undue friction.

Now the partition. The bar must fit between the top edges of the super, that means a length of 465mm. (inside super length) + 20mm. (allowing for width of rebates) = 485mm. Cut out the shoulders at the ends so that the bar will rest on the rebate flush with the super's top edge and against the strips forming the groove on the super's ends. Groove the bar so that the hardboard will fit tightly. The groove should be as deep as the underside of the shoulders. Now cut the piece of hardboard so that it will fit snugly inside the super and high enough to be placed inside the bar's groove and reach the division board between the slats. Allow for easy sliding. (463mmx240mm). Better use

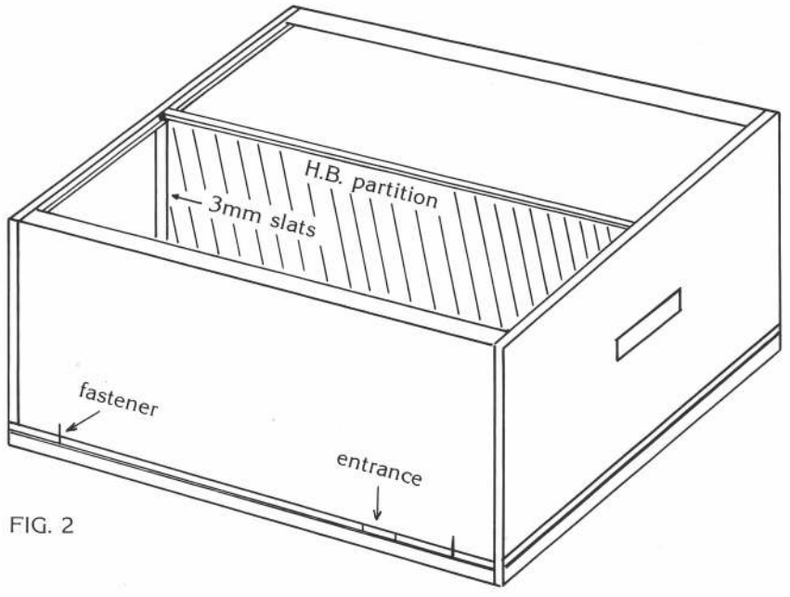


FIG. 2

your ruler for the given measurements are correct if your equipment is just spot on but even factory made supers often show slight variations. The hardboard should be secured in the groove by glue, tacks or light staples (fig 3). There remains a cover of some sort. It is simple to cut a mat from a sack and tack it on the bar so that it will cover both halves. Something of a better quality can be achieved by making two half-sized crown boards covering each half independently. The rims meeting in the centre should press on to the bar of the partition. **It is important that the two halves should not be able to communicate** so a fair degree of accuracy is called for when making this double unit. One may ask why not make grooves directly into the super's ends. By having the partition fit between the super's ends and not into them it can be slid out and simply moved to either side of the super and left there if one decides to use the super for a different purpose (large nuc, brood or extracting super) and by the same token the operation can be reversed (splitting a colony).

Note when using the word "shoulder" in connection with the partition bar the term "lug" is probably more appropriate.

The thin three mm. slats do not seem to interfere in any measure with bee movement or the moving of frames when the partition is placed to the super's side.

Securing the division board to the unit can be done by providing four staples made from fencing wire (bit lighter than no. 8). Length to be 40 to 50mm. with the prings 10mm. Drill 10mm. holes into the division board's rim near the ends and do the same into the sides of the super (see fig 2). The drill holes should be of such diameter that the prongs of the staples are held firmly but at the same time so that the staples can be pulled out without exerting a great deal of force.

Have fun making a versatile piece of equipment that will assist you with insurance against those winter losses.

WHAT DOES A DEAD COLONY MEAN TO YOU IN DOLLARS? It really is not funny when, after calculating the monetary consequences of losing a colony, you see the final figure. There are the avoidable and the unavoidable losses. The first category can usually be blamed on the beekeeper, poor autumn management, inadequate winter stores, or by being too late with supplementary feeding in spring. Little hurts my "beekeeper's feelings" more than finding a starved out hive.

The following figures are conservative and should probably be adjusted upwards.

A. Value of the wintered colony, queen and bees — $30. Value of winter stores which could have been extracted, hive was left light, say 10 kg. honey $1.50 (before extraction) — 15 45.

B. Replacement: 1kg package bees + queen + freight or nuclei — 35. Sugar for syrup feeding 10 kg. x $1.20 — 12 47.

As package bees or spring nucs are unlikely to be available before the second half of October such a colony will often not be strong enough to take full advantage of the main honey flow, so another loss.

C. Compared to the crop gathered by a normal wintered colony the surplus available for extracting is down by 15 kg. x $1.50 — 22.50 Total $114.50

These figures are of course disputable and can no doubt vary. AT times a spring nuc may produce as much as a wintered colony. However this little sum gives a fair indication of the penalty one may have to pay. It does not include the cost of extra work and running around to be faced by those who have more than just a few hives in the garden. Nor have I taken into account the damage often done to the combs in a dead hive.

There is no doubt in my mind that having those spare wheels in the form of autumn nucs up your sleeve will always pay, given they are managed well. Sure they don't come for nothing (what does?). Queens, winter stores, extra spring tucker all cost money. If well taken care of they will develop into strong colonies in good time with the potential of securing a crop of honey equal to the crop gathered by a normally wintered full size colony.

HOW MANY DOLLARS ARE INVOLVED IN ESTABLISHING AND WINTERING THAT AUTUMN NUC?

Bees taken from a large colony with surplus bees in autumn	$NIL
Queen purchased	12.00
Two combs honey say 4 kg x 1.50	6.00
Extra sugar 4 kg x 1.20	4.80
Supplementary spring feeding 8kg x 1.20	9.60
Total	32.40

Some pollen supplement could be needed if spring conditions are unfavourable, on the other hand the feed bill may be less if early nectar sources are available.

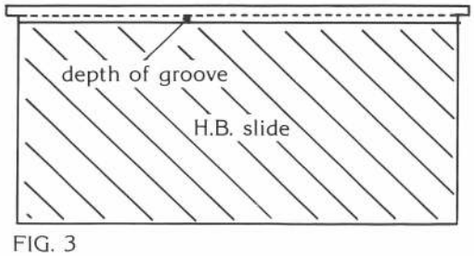


FIG. 3

Otago

It is July 8 today and winter will be over by the time you read these notes. In the meantime winter is upon us with a vengeance. After weeks of dull wet weather we have hard frosts, lying all day in shady places and, in Central, skating and skiing. But it has been said that after a good old-fashioned winter a good summer will follow. So people, there is HOPE.

The Otago Branch went all parochial at the A & P Winter Show over Queen's Birthday weekend. We hired a booth, jacked up a large wall map, counter and shelving and set up shop. The map showed the locations of our main honey producers, the shelves were stocked with named products: clover, kamahi, rata, nodding thistle, vipers bluglos, erica (spanish heath), manuka, comb honey and small cakes of beeswax. On the counter a row of sample pots, plenty of handouts including recipes and stickers for kiddie's hands. An observation hive illuminated by a magic lamp (including a magnifying glass) functioned as a very popular draw card.

The booth was continuously attended by participating beekeepers during the three show days. The till received well over $1,100 for honey sold. The Branch keeps a percentage of this to cover overheads in addition to a small sum allocated from branch funds for this activity.

It has been a very good exercise in pushing our province's honey, PR, co-operation between beekeepers, and caring for mutual interests.

Conference remits were considered last Friday afternoon and it was pretty hard going.

John Heineman

Westland

The following rhyme sums up pretty much the reason for the Westland Branch adopting a 'survival mode'...IF THAT IS POSSIBLE! Only the few die-hards turn up at meetings now; the rest looking for other means to generate income.

The WESTLAND HONEYBEE'S LAMENT

I'm a slave of a Westland beekeeper.
Of the trees I'm a nectar-reaper.
Most nectars I gather and make into honey
Unfortunately don't fetch us much money.

The Rata tree flower is a beauty — the best!
But, doesn't bloom every year...in between takes a rest.
And sometimes, of course, it flowers in vain
For honeybees simply can't work in the rain.

I work every day when in Westland it's sunny —
No one can accuse me of not making HONEY!
I wish I could say the same thing for my boss.
When all's said and done, he suffers a loss.

If Kiwis could see 'what I make is a treat'
The beekeeper then could expenses meet.
But **humans** reject 'It's better to eat HONEY' — because it is NATURE'S OWN SWEET'.

I guess I should know...I live on the STUFF.
With pollen and water, for me it's enough.
If only NZ had the sense to see...
'Why import sugar when I make HON-EY?'

Yes, I make a product which could 'many employ'.
I keep them busy — make a man from a boy.
I fill the boxes which they take away,
Leaving more empty boxes to be filled the next day.

But, in six weeks I die — I am too soon old,
Or don't live thro' winter — it's too damp and cold.
So, every beekeeper would have to agree
In beekeeping there's really nothing for me.

But, for making the HONEY I'll never repent.
'Not being appreciated' is my only lament.

— 'Sweetie Bee' —
Sandy Richardson

Hawkes Bay

A quiet time for beekeepers. June meeting was hands on when the branch met at the local Polytech. A willing team hammered, stapled, and wired as boxes and frames were prepared for the spring build-up at the branch apiary. Who worries if some of the hand-holds were routed into the bottom of the ends instead of the top? Members will be able to experience the difference between handling full-depth and three-quarter boxes with some comb sections included.

Remits were given a working over at the July meeting so that our delegate, John Dobson, can tell the Executive how we would run the Association. Members also had strong feelings about the Beekeeping Industry Trust. Some good public relations are required to convence us that the trust is serving the best long-term interests of beekeepers.

Dates to note:

Aug. 13 Branch meeting. Reports from Conference.

Aug. 17 Field day at branch apiary.

Sept. 10 Branch meeting. Bee genetics and queens.

Sept. 21 Spring inspection of branch apiary.

Visitors whether beekeepers or others interested are always welcome.

Ron Morison

Northland

The season is over, and hives are wintered down with plenty of stores, through sugar feeding will still be required in some pastural areas. Bottlebrush and wattle have yielded late this autumn helping the stores situation. Even though it has been colder, brood rearing is underway in the warmer areas. No doubt some hives will be supered again by August.

Producers report they have managed to move reasonable quantities of darker honey, though prices could be higher.

Queen and package production this autumn were up on last year. The production group hit a new production high with seven pallets of 400 two-kilogramme packages produced in 13 days. Over eight tonnes of bees were shipped to Canada in one month from the north.

Pollination prospects are decreasing with vines being pulled out and orchards ot cropping for a season. The pollination bubble has burst so I suppose the usual beekeeper logic will surface and price cutting will prevail.

Our commercial beekeepers' confidence in our industry is low but secure with diversification being pursued in both products and marketing.

Malcolm Haines

South Canterbury

The coldest winter for 10 years has hit us in South Canterbury, with heavy snowfalls in the high country. This has produced a run of severe frosts, so beekeepers are venturing outdoors about as often as their bees at present.

The "remit meeting" was held recently. Discussion was stimulated by the letter from the Northland Association suggesting that because of increasing

costs, we look at possible ways of restructuring the duties of the NBA and MAF thus saving beekeeping money. The increasing levys are also concerning this branch.

The South Canterbury Bee Club has now elected officers, and anyone wishing to become a member can contact Secretary Nigel King at P.O. Box 592, Timaru. A good practical programme has been established for the coming season.

Well, I'm off to get another armful of firewood.

Peter Smyth

Auckland

Feeding has begun as some hives are very light on stores. The majority of hives in the area seem healthy enough with only the odd dead one.

We've had many sunny days, although the wind has been cold. Despite some heavy, spring rain, most sites are still accessible.

The kiwifruit orchard situation is confusing with some orchards being pulled out, some being leased to larger producers, and some just hanging in there. I hope this doesn't have too much of an adverse effect on local beekeepers.

I hear some scientists are saying farmers are not putting enough lime, or phosphate for that matter, on their paddocks in an attempt to save money. The soil is therefore likely to become more acidic and less suitable for clover, thus making farmers more reliant on urea fertiliser for nitrogen. Phosphate levels are apparently not too bad.

What with gorse mites, ling heather parasites, and hedging removed, beekeepers need to take every opportunity to publicise their cause and educate the public on the importance of our industry. Best of luck for the spring. I hope it's as good as the last couple.

p.s. Dave Young who used to write this column has recently remarried and doesn't seem to have time to do so anymore!

Nigel Birse

Nelson

Winter has arrived. Past records have been equalled and it has probably kept the bees from eating into the winter stores too much and too early.

Our area is experiencing a drought which could be serious. The tree fern is struggling to produce a few flowers where normally by this time it has a nice show of blossom. From reports it seems a few beekeepers harvested some honey last season but, according to the buyers, it was not a popular thing to do. Honey must be one of the most wonderful natural products. As well as being delightful to deat, it is good food, yet when you try to sell it no one wants to pay anything like its value. Still, we push on for more honey next year.

Winter, I feel, is the let-up from routine work, but for some reason the shortest day brings the urge to get the feeders going to hurry up drone production. August might be better than it was last year. We might manage to mate a few early queens. And so it goes on. You know how it is.

Ron Stratford

Marlborough

A very successful week has just ended. Conference went off without a hitch.

The organisers appreciated that 70% of those who registered for Conference did so before they arrived. Thank you. In all a good turn-out, with about 100 people registering for both seminar and conference.

The result of marketing speaker Bill Floyd's talk was that some private people are to provide money for Bill to develop strategy guidelines for the Marketing Committee. Bill made the points that: You as an industry are to blame if you split yourself up and shoot yourselves in the foot with poor industrial strategy. Yes, there is life after toast. The average consumer believes that honey is just honey.

The opening address from Doug Kidd was interesting, although I believe some of his interpretations are a little different to ours. We will not forget the statement: 'Bees do fly'. I hope Doug Kidd does not. i wonder if he is charged for the pollination in his garden?

The remits took a bit of discussing, but eventually the Executive got some guidelines from the floor.

Now back to the real world of winter maintenance in preparation for the onslaught of spring and yet another honey flow in summer.

James Jenkins

Southern North Island

Our remit meeting provided some interesting discussion, and although we were not privy to all sides of the story, the remits generated some interesting debate.

Everybody is interested to hear the Minister's decision regarding the funding of the inspection service. We are getting closer to spring which leaves little time for organising a ballot and setting up a system to collect funds. Here's hoping we get a favourable discussion.

Usually during the winter beekeepers are resting and planning for the coming year. However quite a few were constricted by budget and have only just finished removing and extracting their crop themselves instead of employing labour. Some start their work again now, so won't be getting much of a break.

Post Conference meeting will be at Wanganui (mid-August). The morning will be devoted to the remit debriefing and general business, while the afternoon will feature discussions on how to improve our beekeeping practices and profitability. We will also be looking at Quality Assurance and perhaps short-term employment and how these relate to the new Employment Contracts bill.

We are planning our spring field-day for early October at a venue (yet to be confirmed) near Palmerston North we hope. Topics are not yet finalised. However we hope to discuss queen rearing and introduction, nosema control methods, increasing the value of honey, clover, guest speaker, etc.

Perhaps we should be concentrating on planning for an "El Nino" season. Weather forecasters indicate this summer will be wet in the west and dry in the east. Look at your 82-83 records and plan for a similar season.

Observations from the Conference.

Blenheim turned on beautiful weather (compared to Wellington) except for one day, (it was their first rain for a month). The Conference venue and the organising were top notch which is a reflection of the people resource in the area. Although the room was a little stuffy at times, (the air conditioning was left off so we could hear better). Publicity around the city was evident and people smiled as they passed you in the street when they recognised you as a beekeeper.

Beekeepers overall came to the conference pessimistic and hurting financially, (especially in the South). This point was ably demonstrated by the first seminar presentation, 'Beekeeping in the Nineties', or where have we come in the last 10 years. We were also given points to address and hopefully save time and money. A special thought must also be given to our sponsors. They must also be feeling the pinch yet they continue to support our industry.

Perhaps the highlight and the most enthusiasm came from the Marketing address by Bill Floyd, entitled "Honey Sweeter than Wine". This set the tone for the Conference and put in motion the first steps to promoting our product in a cost-effective manner.

(concluded page 38)

SCENTING SUGAR SYRUP FOR POLLINATION

By Les Gera

Even white sugar syrup has a faint scent of its own, and the bees have learned quickly to identify it and within minutes of syrup being fed, they fly out to find the source.

When the syrup is transferred to the comb cells, after being digested by the bees, the scent remains, be it from a natural nectar or artificial one. That is nature's way of ensuring that the bees stay on a source of nectar until it ceases, and so pollinate the species concerned.

It is now accepted that regular syrup feeding of bees is a most important part of pollination, MAF experiments have suggested that. I contend that pollination could be enhanced by including flower scent.

The ideal would be to encourage the orchardist to help himself by feeding the bees while they are in his orchard. He has ready access to fresh flowers daily, and could mix the flowers into the syrup provided by the beekeeper. The financial aspect could be a matter for negotiation, but I think it would be worthwhile for both parties.

If the orchardist is afraid of being stung when he removes a hive lid to pour the syrup into the beefeeder container, there is now an 'Ezifeed' ultraviolet proof plastic cap and base on the market. The 'Ezifeed' is easily attached to the inner cover (or hive mat) or to a galvanized iron migratory hive lid. To fit the 'Ezifeed' cut a 25mm hole and secure its plastic baseplate by pop riveting or screwing to the component, immediately above the beefeeder inside, which is usually on the outside of the brood chamber. The softer plastic 'Ezifeed' cap provides a waterproof seal, 60mm in diameter. It is snap-on, almost the same as a Tupperware cereal container. At a cost of $2.00 plus GST the cap and base is cheap if you consider the time saved and the advantage gained.

If the 'Ezifeed' unit is fitted to pollination hive lids, it will be simple for the orchardist to remove the cap, insert a funnel, and pour in a measured amount of syrup. The orchardist who frequently has little experience in handling bees, would not run the risk of being stung.

Most beekeepers strap their hives before transporting to pollination sites. If the 'Ezifeed' unit is fitted there is no need to remove the straps to feed the hives.

If we can improve pollination for orchardists, especially kiwifruit growers, it must be an advantage to both them and beekeepers. One way of doing this, as well as saving beekeepers time and the cost of sugar syrup, would be to adopt the syrup scented by flowers method.

This method, to my, or MAF's knowledge, has not as yet been tried for fruit trees or vines anywhere. My experience of 35 years commercial beekeeping and the study of bee behaviour, tells me that this method must improve pollination of kiwifruit in particular, because bees rely on scent to attract them to a nectar source. It has been said that a bee's sense of smell in some 150 times stronger than a human's. Therefore it makes sense to include a bucket of kiwifruit flowers to each 44 gal (200 litre) drum of syrup, mix it thoroughly, allow the result to soak for eight hours or so, then strain.

White sugar syrup has very little scent so the scent from the flowers would permeate the mixture easily. The scented syrup is then fed to the bees at about 500mls every second or third day, particularly on fine days, early in the morning or evening, to create an artificial nectar flow for kiwifruit.

The bees would associate the scented syrup with the flowers, and so visit more flowers than usual, to seek the source of the scented sweetness. Beekeepers must have noticed that on the first visit to feed sugar syrup to hives after the winter, some syrup is always spilt on the deck of the truck. After feeding say 30 hives with syrup which could take say, 90 minutes, hardly a bee is interested in sucking up the spilt syrup.

This is because the bees have not learned to associate the syrup with the truck deck first time round. But next time a beekeeper visits that site, say two weeks later, it is a different story.

Within minutes of feeding the first few hives, the bees are out and on the truck deck, sucking up every spot of that life-giving syrup and searching for more.

QUALITY QUEEN BEES

By Gary Jeffery

Over recent years there has been a number of articles dealing with producing "quality queen bees" but the emphasis seems to be on size with little consideration given to other aspects.

For some reason we seem always to think that big is better, however the late Laurie Griffin, earlier apiary instructor for Canterbury, used to always say look for a queen with a large thorax for quality. I have followed his advice and found that it is a much better criterion which varies very little while a good queen can vary in length from 3.5 worker cells up to 5 cells, depending on her laying rate at that time. The weight also varies to the same extent. (As my bees aren't metric with five cells per inch you can change the above to 0.7 inches to 1.2 inches). Outside this range queens seem to perform poorer.

I would like now to concentrate on some other aspects which appear to be overlooked. I list them for convenience.

First, temper. There is the need to ensure that what we breed is docile to handle under most conditions. I am certain we are often refused good apiary sites because we cannot stock our hives with quiet enough bees. Often I have had hives alongside driveways and close to houses without any complaints when in the MAF I experienced other apiaires that would attack when approached within 50 metres. In one such case the bees had been selected for production alone without any other thought.

Second, production. There are a lot of factors here. I have preferred to incorporate darker bees into our strain as I feel that they live longer. These bees take less brood to feed for the same crop return and also can handle the sudden changes in weather we often experience in New Zealand.

Third, wintering. We need bees that start to pack the brood nest as seen as the autumn approaches while also maintaining a full brood nest in the spring and summer. Again the darker strains tend to do this, making wintering much easier. There is nothing worse than having bees that continue breeding into the autumn, so that by spring you have a hive bubbling with bees but no stores.

Fourth, moving. Pollination means moving hives so it is necessary to rear bees that remain inside while being moved. The gene controlling this seems to be a dominant gene. If a breeder does not come out when moved then usually her offspring behave similarly. When choosing a breeder we place it on the deck of the truck and drive around a bit. Very few bees should come out of the entrance. If the hive is opened the bees will be seen packed in under the lid. To date we still haven't been able to breed bees that do not come out of the entrance at night so we are still working on this problem.

Fifth, disease. Sac brood and paralysis can easily be bred out of your bees by refusing to use any breeder that shows these diseases in daughter hives. I have found that with paralysis in particular you must be ruthless about eliminating those breeders with this tendancy. The odd cell of sac brood is less harmful but should still be watched for. We still haven't eliminated chalk brood which seems worse in weak colonies and dark or black bees but, I believe, culling the worst strains is the only long term solution.

Observations indicate that some strains hatch workers in less than the standard 21 days. Work along this avenue would seem to be the approach to possible Varoa introduction. The Asian bees with an 18-day cycle seem less affected than the European bee so this seems a possible control. Oh for the days when we had an Apiculturist able to look at such ideas.

Sixth, brood pattern. This contributes to production, so should perhaps have been included in the second point. However the brood pattern itself needs looking at closely. I have found that it is necessary to continually introduce new strains to the original to ensure we get uniform full combs of brood. It is necessary to avoid inbreeding to achieve your aims, because bees seem to deteriorate quickly in every way if too inbred. After all the final aim is to be able to gather a good crop from quiet bees with the least cost.

I hope these ideas may give a little balance to the articles on "quality queen bees" without detracting from the good work being done on size.

BEACON QUEEN BEES

From Colin McLean

Wot! Another Queen Breeder! Considering all that has been postulated in the columns of this magazine in relation to queen breeders, and queen bees, it is with some hesitation that I venture into selling queen bees on the open market.

You should be forgiven for thinking here's just another guy who thinks he can get quick money by painting a pretty picture, but life (or business) isn't like that. Queen production is intensive and demanding work. When things go wrong which they invariably do, then it takes commitment and effort to get them right.

After five years of producing queens (in nucs) I've only just reached a standard where I feel confident in selling queen bees on a commercial level. That is, after producing about 800 queens a year over the past two years.

My business, in Hawkes Bay, comprises 400 hives and about 600 nucs. My income comes from pollination work, pollen trapping, honey production and queen bees. Most of my operation is intensive and aimed toward high productivity. As a small beekeeper this is the only way I can stay commercially viable.

Up until last spring I worked for a large beekeeping business. This gave me a good commercial grounding and together with my own beekeeping created a sound base. My queens are selected for productivity, disease resistance and to a lesser degree temperament, I look for a queen which produces a good honey crop and adequate stores.

HONEY, NATURE'S OWN SWEET

By Sue Jenkins

The successful 1991 National Beekeepers Conference is now behind us. Those who attended the Conference banquet will remember those five delicious courses, all containing honey and Malborough produce.

Michael, the chef, had not cooked with honey before, (promotion number one). I provided a few recipes, some ideas and suggested some of the local Marlborough produce I would like to see used. This was the menu that he came up with.

NATIONAL BEEKEEPERS ASSOCIATION
1991 CONFERENCE DINNER

APPETISER
SQUASH & HONEY SUPREME
Fresh homemade squash and honey soup with a hint of ginger and sour cream

ENTREE
PELORUS MUSSELS
Fresh mussels from the Pelorus Sounds, served in the half shell with a lemon honey and dill sauce

MAIN SELECTION FROM THE BUFFET
WAIHOPI SADDLE
Farm reared saddle of Venison, oven roasted and served with a port and honey glaze
WILD KENEPURU PORK
Succulent wild pork served with rich cherry sauce
REGAL SALMON
Fresh whole Marlborough Salmon poached in chardonnay wine and served with lemon slices

VEGETABLE SELECTION
Saute potatoes, cauliflower & cheese sauce, Honey Glazed Carrots, Roast Kumara, Courgettes with Tomato, Onion and basil

DESSERT
HONEY FRUIT BASKET
A selection of fresh fruit served in a brandy basket with a honey glaze and liqueur cream

CHEESEBOARD
A selection of fine Marlborough cheese's served with crackers

TEA or COFFEE
Freshly brewed tea and coffee

Some of the comments that echoed around the room:

"Never thought of honey as a sweetener in soup"

"Isn't it a delicious soup"

"Honey is only a spread for toast" (promotion number two)

We as honey producers, should be using honey as an ingredient in our food preparation, so that when we pass the recipe or concept to our guests, friends, they also use honey in some of their food preparation.

We are aware of the many honey flavours. Therefore using any one of these flavours of honey is like using a spice and sweetening in one ingredient. Using a light flavoured honey, may be too bland and sweet tasting in a recipe, where as a stronger flavoured honey may be sharp and distinctive, and enhance the other ingredients.

So as food preparers, we need to carefully select our honey flavour for our recipes. (promotion number 3) Try different flavours of honey in your own recipes. You may be surprised!

Michael the chef at the Blenheim Country Lodge, where the conference and the conference banquet were held, has provided me with the recipes he used to make those delicious dishes we had that evening.

SQUASH AND HONEY SUPREME

1 large onion, finely chopped
3 stalks celery, finely chopped
25g butter
3 cloves garlic, crushed
salt
3 tsp chicken stock powder
6 cups water
800g prepared pumpkin
freshly ground pepper
freshly ground nutmeg
fresh ginger to taste
100g MANUKA HONEY
25g butter
2 tbsp flour
1½ cups milk or more
½ cup sour cream

Cook chopped onion and celery in butter in a large stock pot over low heat for 5 minutes. Stir often. Do not brown. Add garlic, salt, chicken stock powder and water. Add diced pumpkin pieces. Bring to the boil, simmer for about an hour. Stir often towards the end of cooking, by which time pumpkin should almost be a puree.

Add pepper, nutmeg, grated fresh ginger to taste and MANUKA HONEY. Either whisk or use a food processor to puree.

Make a white sauce with butter, flour and milk. Simmer for 2-3 minutes once thickened.

Whisk some pumpkin puree into the white sauce, then return all sauce to the stockpot and stir well. When very hot add sour cream. Do not boil. If soup is too thick add more milk. (serves 8)

PELROUS MUSSELS

Fresh mussels in the shell, steamed, then pour over the Lemon honey and dill sauce. Serve with a spoonful of rice.
Sauce:
1 cup orange juice
½ cup lemon juice
2 lemons diced
100g VIPERS BUGLOSS HONEY
½ tsp chopped fresh dill
1 nip brandy

Simmer orange, lemon juice and diced lemon. Add honey, dill and brandy. Thicken with a little cornflour mixed to a paste with a little cold water.

PORT AND HONEY GLAZE FOR VENISON

⅓ cup port
500g Manuka Honey
freshly ground black pepper
1 clove garlic crushed
2 tbsp soy sauce
2 cups water
cornflour

Combine the above ingredients except cornflour in a saucepan, bring to the boil, simmer a few minutes. Thicken with a little cornflour mixed to a paste with a little cold water.

Serve the glaze with oven roasted venison.

MANUKA HONEY SNAP BASKET

Melt together in saucepan;
40g butter

40g sugar
40g MANUKA HONEY
Add; 40g sifted flour

Cool mixture until able to handle. Shape mixture on well greased trays forming circles 12-15cm, depending on size of moulds. Bake in a preheated oven 180-190°C for 3-4 minutes. Cool until they can be handled and shape over a mould.

HONEY FRUIT BASKET

Fill a MANUKA HONEY SNAP BASKET with a selection of fresh fruits, mixed with a honey glaze, serve with liqueur cream.

HONEY GLAZE; Simmer together 1 cup water and ½ cup CLOVER HONEY with a squeeze of lemon juice until honey is dissolved. Cool before using.

Why did I write promotion number one, two etc? We as honey producers can promote our own quality product. Ourselves firstly, must believe in our own product and use it in our own food preparation. Not just for toast!

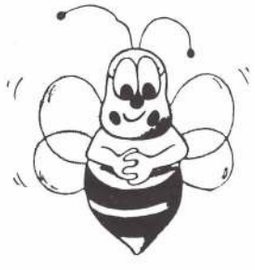
AND FROM ANN PHARAZYN

HONEY CAKE

175gms. s.r. flour
135 gms. butter
100 gms. soft brown sugar
150 gms. clear honey
1 tbspn. water
2 eggs

1) Sift flour on to plate and set aside.
2) Measure butter, sugar, honey and water into large pan.
3) Place over low heat and stir until butter has melted.
4) Draw off heat and cool until pan is hand warm.
5) Beat in eggs one at a time and stir in sifted flour.
6) Blend all ingredients and pour into greased and lined oblong baking tin — about 28 cm 18cm.
7) Place in centre of moderate oven (355) and bake for 30 to 35 minutes until firm to touch.
8) Loosen sides and turn out of tin.
9) Leave to cool before cutting into squares.

This cake freezes well.



LIBRARY NOTES

From John Heineman

BEES and BEEKEEPING, SCIENCE, PRACTICE and WORLD RESOURCES by Dr Eva Crane, OBE, DSc, formerly Director International Bee Research Association. 1990, 614 pp., UK. This book ordered as a result of the generosity of most of the participants at the Rarotonga Conference (Project 1990) and as a memento of that special occasion, has at long last arrived. The decision to purchase this very expensive volume has been correct. It was on Andrew Matheson's advice which says a lot.

Dr Crane has dedicated the book to the next generation of beekeepers, scientists, and students throughout the world. It will indeed serve beekeepers well during the 90s and beyond the year 2000. The amount of information it contains on the aspects of beekeeping and related subjects is absolutely enormous. It has many b/w photos, diagrams, maps, and tables. No doubt it is the most extensive reference book this library now has on. May it find much use and be of benefit to NZ Beekeepers.

A word of warning. As the weight of the book is nearly 2 kg, postage will be heavy, how heavy depends on your postal zone. The Library is in zone 6. However I am sure you will find that the money is well spent if you decide to borrow this book.

From Murray Reid, MAF Hamilton, we received two copies of DIAGNOSIS OF HONEY BEE DISEASES by H. Shimanuki and D.A. Knox, a USDA publication, 1991, 53pp., U.S.A. A handy booklet describing the difficult bee diseases, disorders, pests and diagnostic methods. Thank you, Murray.

FROM THE COLONIES (conc.)

A close second was the dinner evening. The food presented represented the products of the Gourmet Province; mussels, wild pork, venison, salmon, garlic, local wines, cherries, and many more, all beautifully presented and cooked with honey.

The shield competition was the highlight of the evening. Those who read and remembered what was in the last "Beekeeper" had a head start with the questions. Perhaps the most hilarity was caused by those trying to light a smoker with a stick and a piece of wood. Judging from the results, there isn't much hope for our industry if we ever have to resort to lighting our smokers using aboriginal methods.

The industry plan is showing results. Without the input into research where would we be? Dedicated scientists and advisory officers (and Reg) are still producing results which are of real use to the industry and they, like us, are not sure where next year's funds are coming from.

More time was given to speciality group meetings which were open and informative. All during the Conference, individuals were exchanging ideas and experiences, sometimes into the wee small hours. I was impressed to see the use of modern technology such as barcoding to track products and hand-held computers to input field data directly into a PC. Peter Bray is also developing a record programme which would be of advantage to larger beekeepers and is generaously offering the programme at a very modest price.

Everybody came away from the conference with something tangible which will develop and remind one of pleasant memories. I get the impression the industry is now starting to pull together and although the future is uncertain, there is a hint of a glow in the distance.

Frank Lindsay

HONEY INDUSTRY TRUST

Honey Industry Trust applications close twice a year, on February 15 and August 15.

Application forms are available from the NBA, Box 4048, Wellington.

Applications will be considered within six weeks of receipt of recommendations from the NBA Executive.

Classified Advertisements

Available only to registered beekeepers selling used hives, used plant, and other apiary equipment, and those seeking work in the industry. $17.50 for 20 words (inclusive of GST) payable in advance. No discounts apply. No production charges. Maximum size: 1/6 page. No box number available.

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Employment required by fit 19 yr male recently completed a 6 mth Beekeeping course. Contact Darren Marshall, 2/13 Nelson St, Christchurch 1. Ph: 03-3480-910.

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OTHER PUBLICATIONS

BEE CRAFT

The official monthly journal of the British Beekeepers' Association, covering all aspects of beekeeping in the UK. Annual subscription including postage $33 surface mail $53 air mail to Mrs S. White, 15 West Way Copthorne Bank, Crawley, West Sussex RH10 3QS. Our editor has advised that he has not received a copy of your journal for the last six months. Please could you arrange to resume delivery to him. His name and address are as follows:— Mr R. Young, 23 Beaconsfield Rd, Vincent Park, Sittingbourne, Kent ME10 3BD.

INTERNATIONAL BEE RESEARCH ASSOCIATION (IBRA)

What do you know about the INTERNATIONAL BEE RESEARCH ASSOCIATION? The many books and other publications available from IBRA will deepen your understanding of bees and beekeeping. An IBRA membership subscription — including BEE WORLD, a truly international beekeeping magazine published quarterly in the English language — will broaden your beekeeping horizons. Details and a wide selection of books and publications from New Zealand IBRA representatives, Cliff Van Eaton, MAF, Private Bag, Tauranga or Peter Brunt, Nelson Polytechnic, Private Bag, Nelson.

OTHER PUBLICATIONS

THE SPEEDY BEE

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THE APIARIST

A New Zealand Beekeeping Journal. Published every two months. Contains informative and interesting articles on beekeeping in New Zealand and overseas. Subscriptions: Free to all registered beekeepers in New Zealand with six hives or more. $5.00 per annum, if less than six hives. Write to: The Editor, "The Apiarist", P.O. Box 34, Orari, N.Z.

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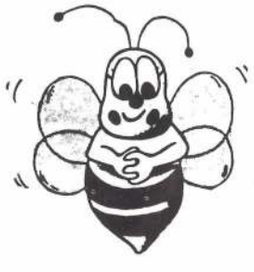

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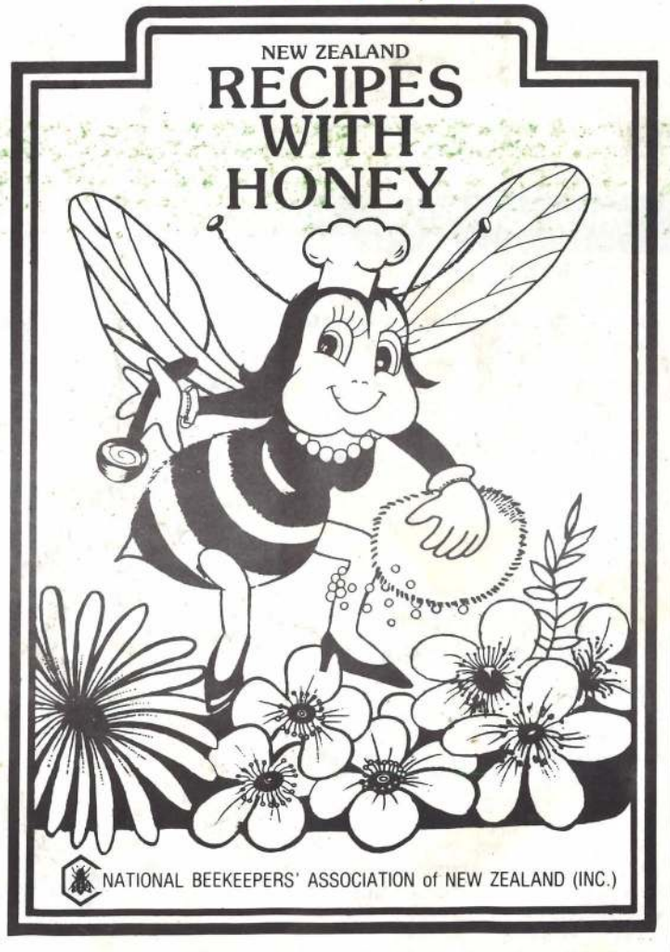

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