



Buzzwords ...



Postage Paid
Tauranga, NZ
Permit 486

Return address:
Box 4048
Wellington

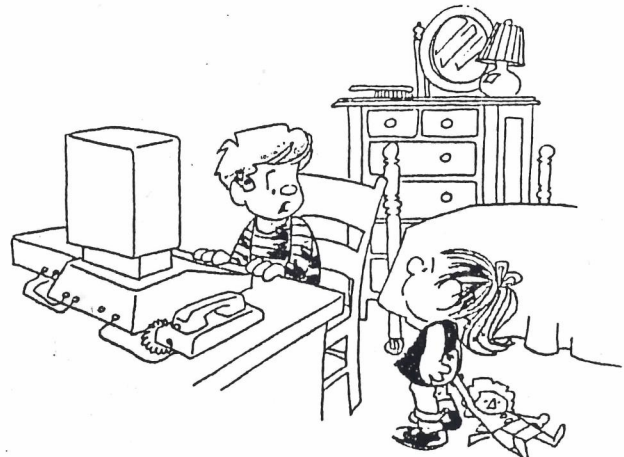
ISSN 0114 -0795

..... the newsletter for National Beekeepers' Association members

In this issue ...

- * Wasp disease research
- * 1989 National Executive elections
- * Export figures for 1988

Buzzwords No 7 April 1989



"Well, I just transferred Mom and Dad's entire life savings to our secret bank account in Switzerland. Now, how do we get there?"

SUCCESSFUL INDUSTRY PLANNING MEETING HELD

On March 14th to 16th the annual Industry Planning meeting was again held at Flock House, involving 17 members from a number of industry groups. Present were the Executive, the beekeeper Trustees, and representatives from various specialty groups including the Queen Producers Assn, Packers Assn, Comb Honey Assn, pollination groups, bee researchers and MAF Advisors. An apology was received from the Honey Producers Co-operative.

After reviewing the past five years of NBA activity under the industry planning system, it was agreed that good progress had been made in establishing a number of facilities for our industry. These included beekeeping and market research work, educational courses, improved agricultural quarantine liaison, and better public relations and communications

facilities, such as through the Industry Profile and this newsletter. It was also recognised that a good deal remains to be done to improve our industry's profitability and beekeeper confidence in the future.

In looking ahead to the next five years a number of goals and objectives were set as guidelines for the NBA in progressing towards this aim. Critical areas such as market stability, financial management, better use of Industry Trust Funds, funding for essential Government services, and improvements in NBA administration and activity were highlighted. Activities to meet these objectives were identified and clearly laid out to ensure the progress continues.

A copy of this year's Industry Plan will be forwarded to members shortly which will allow you all to see the directions in which is intended to move in the near future. The NBA Executive wish to sincerely thank those who gave of their valuable time to attend this important meeting. The decisions

reached at Flock House are undoubtedly strengthened in their effectiveness by all the expert input from the wider industry which was provided by those who attended.

Allen McCaw
NBA President

1989 EXECUTIVE ELECTIONS

The following dates for the 1989 Executive elections were decided at the March Executive meeting:

- * Nominations for Exec close at 5:00 pm May 26.
- * Voting papers and biographical details to be despatched by June 6.
- * Voting papers to be returned by 5:00 pm Friday 30 June.
- * Counting of votes takes place on Monday July 3.

The election this year is for one South Island and two North Island Executive members. Allen McCaw, Stan Young and Dudley Ward are the current Exec members who stand down by rotation. This is your opportunity to utilise the democratic process to have your say, so exercise your right to vote and perhaps consider accepting a nomination for Executive yourself this year. A nomination form is enclosed with this issue of *Buzzwords*.

AUCKLAND NOTES

The Annual General Meeting of the Auckland Branch is to be held on 13 April at 7:30 pm at St. Hilda's Hall, Youngs Road, Penrose.

On Saturday 10 June, the branch will be holding a combination Farewell to Denis Anderson and Field Day. It will be held at the DSIR, Mt Albert Road. On the programme will be:

- * Denis Anderson speaking on the premature aging of queens (Half Moon Disorder)
- * David Yanke on the importation of semen from Western Australia.
- * A panel discussion "Does Pollination Increase the Incidence of American Foulbrood and Should Drugs be Fed to Suppress It?"

WASP DISEASE RESEARCH

Insect diseases are unlikely to be important for controlling queen wasp numbers in New Zealand. That's the result of a study carried out by DSIR scientists P Wigley and S Dhana, with Beekeeping Industry Trust Fund assistance.

The objectives of the project were to search for pathogens of hibernating queen wasps to discover if diseases were important in regulating wasp numbers, and to find a disease which might be useful for biological control. Overseas research has shown that the mortality rate of queen wasps after they

emerge from their winter hibernation is very important in determining the number of nests that survive into the summer months. Virtually nothing is known about the diseases of social wasps and it was thought possible that pathogens may be responsible for some of this queen mortality. If wasp pathogens are important in killing queens in the spring then they should be present within queens during their period of winter hibernation. Pathogens capable of infecting queens could be very effective in a biological control programme, because of the vulnerability of this stage of the wasp life cycle.

A grant of \$3,600 was awarded by the Industry Trust Fund as a contribution towards the cost of technical assistance required for this work. Dr Kay Clapperton, who had previously worked with Dr Henrik Moller, Ecology Division, DSIR, on the New Zealand wasp survey, was employed with these funds to process the queens for diagnostic tests.

Just over 1800 queens were obtained from local collections and from a national appeal carried out in conjunction with Dr Moller. Wasps were first sent to Dr Moller at Nelson and then up to a laboratory at DSIR, Mt Albert. The response to the appeal was gratifying but considerably beyond all expectations. All 1800 wasps have been catalogued, prepared individually for diagnostic tests and frozen.



"Oh, I don't know. I'd say it's quite a mild winter we've been having."

The results were interesting but disappointing. Only one insect pathogen was found: cricket paralysis virus in one queen from Takaka, Golden Bay. This is the first virus found in any social wasp queen.

It is clear that insect pathogens are unlikely to be important in the natural regulation of queen wasp numbers in New Zealand. It also follows that we would be lucky to find a New Zealand wasp pathogen capable of permanently reducing wasp numbers through natural spread and persistence.

Although these results are disappointing it does not mean that pathogens are not killing wasps, or that they will not be useful in other forms of wasp control. It does, though, mean that pathogens are unlikely to be responsible for the large fluctuations in wasp numbers that we see from one year to the next. In other work on diseases of brood and workers we have found nests with individuals infected with cricket paralysis virus, the fungus *Beauveria bassiana*, a Nosema disease, and most interestingly wasp workers containing Kashmir bee virus. This latter discovery may be of considerable significance in clarifying the ecology of KBV.

TELFORD BEEKEEPING COURSE

Just a reminder that there are still positions available on the one year certificate course in apiculture at Telford. The course is due to start at the end of May, 1989. For more information, contact The Registrar, Telford Farm Training Institute, Private Bag, Balclutha.

VARROA QUARANTINE

After years of delay, a national quarantine programme for the varroa mite is being implemented in the USA.

I remember an American once saying to me that "the USA isn't one country, but is made up of 50 different countries". Well, it seems that those 50 countries haven't until now been able to agree on universal quarantine rules for this serious beekeeping pest.

The current proposals are based on the assumptions that:

- * Varroa eradication isn't now feasible
- * No treatment is 100% effective
- * The mite's present distribution in the US isn't fully known.

The rules proposed for varroa quarantine are, in brief:

- * A state or portion of a state will be declared a quarantine area if mites are found or if no satisfactory survey has been carried out
- * Bees and hives can only be moved out of such an area with a certificate declaring that they have been inspected and found to be mite-free, or are treated with fluvalinate strips.

It appears that beekeepers have to pass pesticide exam and become registered applicators in order to use fluvalinate strips.

LATEST NEWS ON HALF-MOON

Queen bee producers may have to make significant changes to their management, if the latest results of half-moon disorder research prove correct.

Since 1986 the beekeeping industry trust funds have sponsored research into half-moon disorder (HMD), carried out by Dr Denis Anderson and others at DSIR Mt Albert.

HMD has been known for some years, and gets its name from the way larvae die at the coiled stage and dry into crescent or half-moon shaped brown scales positioned near the tip of cells. These symptoms are similar to larvae with European foulbrood (EFB) but efforts to find the organism that causes EFB have consistently failed.

Early tests showed that HMD was transmitted by queen bees. A frame of affected larvae given to a healthy hive would be

cleaned up, but colonies given queens from HMD colonies would develop the symptoms soon after requeening.

Denis Anderson has listed four characteristic symptoms of HMD:

- * Many brood cells contain more than one egg, often stuck together
- * Brood patterns become patchy
- * Most larvae die at the coiled stage, and the remains dry out to a crescent shape and lie around the cell wall
- * Drone pupae are often present in worker cells.

The effect of HMD is to weaken a colony by slowing its buildup, which in turn would lead to increased susceptibility to diseases. Queen supersedure is frequent and often unsuccessful.

In looking for a cause of HMD, Denis Anderson has carried out experiments which appear to show that this disorder is not caused by genetic problems, or by pathogenic micro-organisms. The symptoms of HMD in queens are similar to aging, so he carried out some trials to test whether HMD in queens is related to nutritional deficiencies.

Several researchers have found that worker bees age prematurely if deprived of protein for the first days of their lives, so an experiment was carried out to test whether HMD queens could be produced by varying the amount of protein they received for the first five days after emergence.

- * These trials showed that if virgin queens were attended for the first five days by undernourished young bees and by old bees, they eventually headed colonies with slower buildup.
- * Virgins attended for the first five days by bees not fed pollen produced multiple eggs.
- * Virgins attended for the first five days by old bees, whether they were fed pollen or not, were often superseded.
- * All the queens kept in cages with worker bees prior to introduction produced half-moon larvae, and had much more spotty brood patterns.

Now the conclusions of these trials are quite startling. They show that the symptoms of half-moon disorder are actually the symptoms of premature aging of queen bees, caused by a nutritional deficiency during early developmental stages. At the moment only one developmental stage has been examined (the effect of protein deficiency in the first five days of adult queen life), but it other stages may be important too.

This finding has important implications for queen producers throughout the world. It is likely that there will be a compounding effect if queens are undernourished at all stages of their development. Future work will be directed at examining the importance of nutrition to other stages of queen development, especially to the larval stages, after mating, and in queens held in small shipping cages and in banks.

This work has also shown that queens reared by older bees, whether or not they are fed protein, are often superseded shortly after introduction. This also has important implications for queen producers.

NZ HONEY CO-OP AND WILSON NEILL HORORATA HONEY MERGE

A special newsletter on 1 March 1989 announced that the interests of Wilson Neill Hororata Honey Exports and the New Zealand Honey Producers Co-operative Ltd will merge. They see this as a positive move for the industry as a whole particularly in light of "last year's disappointing industry performance". Existing staff of Wilson Neill Hororata Honey will remain as employees of the Co-operative.

EXPORT FIGURES FOR 1988

	Quantity (tonnes)	Average fob value (\$NZ/kg)	Principal destinations
Bulk Honey	1,074	\$1.77	FRG, Japan, UK, Netherlands
Retail Pack	583	\$3.28	Australia, Switzerland
Comb honey	260	\$6.52	UK, Japan, Saudi Arabia
Honeydew	128	\$2.53	FRG, UK
Beeswax	122	\$4.47	FRG, UK, Netherlands

MORE ON 1080 PROGRAMMES

The future of weed and pest control under reformed local government will be vested in regional government, according to the "Draft Reorganisation Schemes", recently published by the local Government Commission. Under these schemes regional government is vested with the powers, functions and duties of weed and pest boards. However the schemes do not make provision for a national co-ordinating or performance auditing body to oversee the execution of this role. Currently Federated Farmers and the Agricultural Pest Destruction Council are formulating a proposal to put to the government for the establishment of a national body.

Meanwhile the NBA Executive and MAF Apicultural Advisors are awaiting notification from the Agricultural Pest Destruction Council of the control programmes they are presently planning for the whole country. APDC Senior Officer Peter Nelson of Wellington informed the NBA President last week that details of these were not yet finalised, but that very extensive possum eradication programmes were contemplated, mostly using 1080 jam baits.

Ruakura Bee Researcher Dr Mark Goodwin is continuing to investigate the inclusion of a bee repellent additive to these baits and initial work has shown some promise. However, more study is needed, and in the meantime, the eradication programmes are continuing. Beekeepers are advised to contact their local Pest Destruction officials to check on intentions in their own areas as soon as possible. MAF may also be of assistance in determining whether any of your beekeeping areas are being targeted for this wide-spread poisoning programme.

JAPAN HONEY STATISTICS

China and Argentina are the chief players in Japan's honey trade, with New Zealand the eighth - biggest exporter to that country.

In the first 11 months of 1988, Japan imported 34,550 tonnes of honey, with 269 tonnes or 0.8% coming from New Zealand.

Though New Zealand is very much a small player in the market, the average value of our product at 358 yen/kg is much higher than the overall value of imports of 121 Y/kg. This pushes us up to sixth in the value of our exports to Japan.

SEALS LEVY

Come back seals levy, all is forgiven! The French are funding varroa mite research with a tax scheme that sounds awfully familiar to Kiwis.

Since 1987 all honey marketed in France, whether local or imported, has been taxed to raise money for varroa research and honey promotion. Retail packs get taxed about 8 cents/kg and industrial honey at nearly cents. This should raise \$NZ 1.6 - 1.9 million annually.

Now the authorities are wanting evidence that the tax has been paid and are demanding you guessed it, a tax stamp on the outside of containers from 250g - 5kg in size. Importers are protesting against the move.

Readers who can't understand this item and don't know what a 'seals levy' is can congratulate themselves on not yet being over the hill.

BUMBLE BEE EXPORT

New Zealand's bumble bee industry is now exporting to the U.K., in a sort of coals - to - Newcastle story. A few months ago a British T.V. documentary needed live bumble bees on stage, but in the middle of winter that would have been pretty hard. So 10 bees from Enzed bumbled their way northward on Air New Zealand. It was a kamikaze mission because quarantine rules required their destruction after the job was over.

BUZZWORDS IS ...

Published by the National Beekeepers' Association of New Zealand, PO Box 4048, Wellington.

Production by Andrew Matheson (MAF, Tauranga) and Nick Wallingford.

Articles and feedback to *Buzzwords*, c/- MAF, Private Bag, Tauranga. Phone (075) 82 069. Fax (075) 88 429. Deadline for copy is the 20th of each month.

The views expressed in *Buzzwords* are not necessarily those of the National Beekeepers' Association nor of the Ministry of Agriculture and Fisheries.