# WESTERN AUSTRALIAN BEEKEEPERS' ASSOCIATION (Inc)

Chairman Wayne Ridley Secretary:

Secretary Peter Detchon

### SUBMISSION

to

## PARLIAMENT OF AUSTRALIA

STANDING COMMITTEE ON AGRICULTURE FISHERIES
AND FORESTRY

# INQUIRY INTO THE FUTURE DEVELOPMENT OF THE HONEYBEE INDUSTRY

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### EXECUTIVE SUMMARY

The Western Australian Beekeepers' Association contends that the Australian honeybee industry is a strategically essential industry.

WABA submits that the industry is in a perilous financial state for reasons beyond its control, and that any attempt to secure future development for the industry must address its immediate needs for financial support to continue operating. It has also presented arguments for how the government can assist the industry through provision of a subsidy to facilitate employment and sourcing of trained labour in the short term, and has proposed a cross-subsidising mechanism for sourcing the funds to provide this subsidy which it considers fair and appropriate.

It is concerned to see a much higher level of support and encouragement for the industry expressed through closer cooperation between Federal and State governments, particularly in the area of guaranteeing access to its floral resource base located on public lands.

Specific recommendations are also presented to deal with perceived problems in the areas of national Biosecurity for the honey bee industry, in dealing with the risk of pest incursions through our ports and illegal importations of queen bees through our airports, which may bring with them parasitic mites.

The Government is also urged to require Biosecurity Australia to complete its long-overdue honey bee semen IRA.

The recommendations of the parliamentary inquiry into Rural Skills and Training are endorsed, and in particular, recommendation 26 calling for the establishment of a honey bee cooperative research centre.

WABA also calls for the establishment of a high level institutional program for the breeding of disease-resistant and varroa-tolerant honey bee stock, in collaboration with the industry.

It also recommends government continue to support CSIRO's highly successful research studies on varroa mites.

In total, 13 recommendations are presented relevant to the review committee's terms of reference.

#### PREFACE

Whilst this inquiry is designed to address the issue of future development of the Australian honey bee industry, it is our contention that addressing the longer term horizon and ignoring the immediate situation will result in recommendations that will effectively be "rearranging the deckchairs on the Titanic". Consequently this submission places strong emphasis on recommendations intended to facilitate survival of what remains of this industry in the short-term, before addressing the terms of reference for future development for the longer term.

#### TERMS OF REFERENCE

#### 1(a). THE CURRENT SITUATION

In broad terms, this industry has major problems, which in large measure stem from its long standing poor profitability resulting from its inability to compete with low cost producers in the global and domestic markets, in a climate of free trade. Flowing on from this, is its inability to employ and source an adequate labour force in relation to its real needs. Another major constraint for the industry is its diminishing access to the floral resources on public lands, which has considerably undermined any confidence that the industry could maintain its current size into the future.

#### POOR PROFITABILITY OF THE INDUSTRY

Many of the industry's current difficulties relate to its very poor (and declining) profitability. In real terms this decline has been occurring since the 1970's, and has now reached a critical level for many industry participants. However there is a strong reluctance on the part of industry participants to admit how bad this problem really is. It is very evident that the packing sector is strongly opposed to any exploration of this subject. As a consequence the subject receives very little mention in industry generated dialogue or reports, because of the overlap that occurs, where individuals represent vested interests in both the packing and production sector. However it consistently appears in the documentation produced by independent reviewers.

The industry in each state is largely structured as a distribution of many small family enterprises not dissimilar to the small family farm model. There are NO large corporate production enterprises other than in the packing sector, and these both have evolved from honey producer cooperatives which were formed

to market their product to national and international markets, hence the overlap in representation. The packing sector is not considered to be the prime subject of this inquiry submission.

The industry currently derives most of its income from honey sales to packers, but because of the poor wholesale price returns, we are witnessing an increasing trend of producers packing their own product for sale on the local market. This fractionation, and sometimes undisciplined competition for market share, is resulting in price undercutting which is destabilising the domestic market, and can only result ultimately in further income erosion.

Whilst production and sale of honey is what predominantly fuels the cash flow of the industry, there have been several well respected studies which have shown that the real economic benefit to the nation's economy is the value of the managed and incidental pollination service provided to the horticultural and agricultural industries by this industry. In monetary terms the \$ value of honey production is estimated at \$53 Million p.a. in 2000-2001 terms<sup>1</sup>, whilst pollination benefit is estimated to be \$1.8 Billion p.a. in 2003 terms<sup>2</sup>. This is a strategically important industry providing significant extra benefits to the nation for which the participants receive little financial reward and virtually no public recognition.

In simple terms, the price paid to producers for bulk honey is largely determined by the prices offered by the 2 largest dedicated honey packing houses in Australia, namely Capilano on the east coast and Wescobee on the west coast. It appears that neither of these companies have sufficient market strength to be able to withstand the downward pricing pressures of the major supermarket chains, who amongst other things, use the threat of replacing their products with imported product from low cost producers in Asia and South America to maintain price suppression pressure. Australian producers have no hope of competing with these largely subsistence and low cost producers. Because they are structurally locked into a "price taker" market model, they have, over time, been forced into accepting prices which are below their real cost of production. They literally have no choice, so most tighten their belts, and hope that "next season, things will improve".

The Mansfield Report<sup>3</sup> is a series of economic analyses of the industry in NSW at various points in time, and provides real insight into the true cost and returns that can be reasonably expected. It first demonstrated less than cost of production returns in 1982, and again in 1991. As can be predicted in such situations, those affected vote with their feet.

In 1982, there were 1,586 beekeepers and 55,307 hives registered in WA. In 2003, there were  $\,$  989 beekeepers and 44,854 hives registered in WA.

There have been further declines in both figures since 2003.

It was recognised that the industry was in trouble in the mid 1980's, and an Industries Assistance Commission inquiry into the Honey Industry was conducted and its report published in March 1985. Essentially no beneficial impact resulted from that inquiry.

The problem was again explored at a National Workshop on Economic Viability of the Australian Beekeeping Industry sponsored by HBRDC and the Australian Honey Board in May 1991, and the report published. This did result in increasing the focus on improved quality and product differentiation to better position Australian honey in the world market. That outcome is reflected in the global market's favourable perception of our product today. However any pricing gains as a result, have been more than offset by the rise in production costs in the Australian economy. In real terms, our "first world" costs place us at a very significant disadvantage when competing with "third world" products in the global market.

Rodrigues 2003<sup>4</sup>, reported that in 2000-2001, the average rate of return on a beekeeping business was minus 5%, and that only 10% of the larger businesses generated positive returns. From experience we would contend that this has been the situation for some considerable time, probably since the early 1980's.

Given the poor return on capital invested that can be attained from honey production, it explains why corporate activity such as takeover and aggregation of businesses to achieve economy of scale, as has occurred in the agricultural and horticultural production industries, has not occurred in this industry. Nor will it. Even at the small enterprise level there is now no significant recruitment of new participants.

In the period 2002-2004, due to the coincident occurrence of several abnormal market events\*, there was a sudden shortage of honey availability in the global market, and consequently large increases in honey price returns to Australian producers occurred. This did result in new industry recruits, but once those abnormal events were reversed, global supply was restored, and prices fell back again to levels below the real cost of production. As a result we are seeing a number of these new entrants to the industry now departing, or planning to exit at the first opportunity.

Whilst competition policy and free trade can work to the benefit of consumers by delivering lower prices for goods and services, the price to be paid is the demise of industries which cannot compete. Arguably this is all well and

<sup>\*</sup> Honey from China was denied access to the major markets due to antibiotic contamination.

There was an economic crisis in South America. Banks were forbidden to release funds. Beekeepers subsequently withheld their crops from supply to the major buyers, because they were unable to access payments for their preceding crops.

Varroa incursion into NZ reduced honey availability for export.

There was crop shortfall in eastern Australia due to drought.

Crop shortfalls occurred in Europe due to floods.

good where imports can replace those products, but this industry's problems are a clear example of how this market model conflicts with the public good, since the end result is the demise of a strategically important industry. We can import honey, but we can't import agricultural and horticultural pollination, and this industry's real contribution to the welfare of the nation is the pollination service provided to those essential industries as an incidental by product.

We consider that financial assistance to the industry is urgently required, and that many industry reports and surveys have demonstrated the need for this, the federal government also needs to recognise the immediacy of this need. It is essential, because we need to, a) underpin the continued operation of current industry participants, and b) encourage the recruitment of new industry participants. Until federal government satisfies itself of the magnitude of the problem, nothing will happen.

#### Recommendation 1.

Federal Government commission an urgent analysis of the true economic status of the honey industry with a view to providing financial support.

#### ENTERPRISE LABOUR

The industry has major problems in this area. Due to the poor profitability, very few businesses have sufficient viability to be able to afford to employ an adequate labour force from outside their own immediate family members. Added to this, are the problems of obtaining any labour to work in the agricultural sector, due to the difficult nature of the work in often adverse weather conditions and isolated areas. Consequently little or no training of a work force is occurring, nor has it been for some considerable period of time. So the skill sets are not there in the labour market. Furthermore the inability to recruit or retain succeeding generations of family members, has left many family businesses with the situation of an aging owner who is also the sole provider of both managerial skills AND labour, a truly unsustainable situation which will need to change sooner rather than later. In 2000-2001, the average age of commercial beekeepers in Australia was 54 years<sup>4</sup>. The latest unemployment figures indicate that in Western Australia especially, there are essentially no unemployed labour resources. Whilst in political terms this is a tremendous compliment to our Federal Government's efforts to reduce the personal tragedy of unemployment, it must be recognised that a new problem has emerged, which is equally tragic, especially for many who have worked hard all their lives. ie The "working poor", self employed beekeepers, many of whom cannot afford to retire, and who effectively cannot sell their businesses because there are no buyers for businesses with such low levels of investment return. Given the age profile of this industry, unless a miracle turnaround in the

industry's fortunes occurs, THE INDUSTRY WILL SUFFER MAJOR <u>COLLAPSE</u> IN THE NEXT 10 YEARS.

Given the current financial benefits of employment within the mining and resource industries, in the short and medium term our labour problem is unlikely to be reversed by recruitment and training from within the existing Australian workforce, even though this needs to happen. Indeed most agricultural industries in Australia are faced with the same problem.

The recent parliamentary inquiry into Rural Skills and Training has made a series of recommendations<sup>5</sup> to address this problem, and provided they are adopted by Government, will reverse the trend in the longer term. However these do not address the issue of solving the problem which is with us here and now.

It appears that we have little option but to recruit the work force we require from overseas. There are many English speaking, agrarian workers trained in apiculture, available on the global labour market, even if there are few or none in Australia. It would appear, that the 457 visa class would enable Australian beekeeping businesses to access these, however apart from a few Philippino workers taken up by the package bee producers in NSW, it has not been widely used within our industry. The reason being that the real cost of employing labour is currently beyond the financial resources of most beekeepers.

The federal government could assist considerably, by provision of an employment subsidy to the apiculture industry, to enable individual businesses to utilise the existing 457 visa class to employ trained apiculture workers from overseas. Currently, a 457 visa employee is not eligible for the tax-free threshold, and must pay tax at the overseas worker rate of 49 cents in the dollar on every dollar earned. This impost is not a deterrent to 457 visa entrants, but given the financial situation of the industry, even the minimum wage rates are a disincentive to the industry to employ this labour. If a subsidy was paid to the employer equivalent to the tax liability of the employee, it would effectively halve the cost of employing the worker, without distorting the minimum wage rates in the community, and would have a net zero impact on income tax revenues. Furthermore, if the employment resulted in further experience, training and skills development for the employee, which that person could use to good advantage on return to the home country, then the "cost" to the government could actually qualify as foreign aid to a developing nation, if the employee was sourced from a suitably qualifying region.

#### Recommendation 2.

Federal Government establish an employment subsidy scheme for the apiculture industry which enables sourcing of trained workers from the global market, as well as from the local Australian labour market.

## <u>DIMINISHING ACCESS TO THE FLORAL RESOURCE BASE ON PUBLIC</u> LANDS

- There are multiple reasons as to why this happens, including:-
- A political....perceived conflicts with Conservation Estate management and values
- B changed land use processes....beekeeping considered of lesser value, economically or in terms of public benefit, and therefore relegated to last place in terms of inclusion, despite historical use patterns.
- C vegetation losses due to impacts of fire, or drought, or other land management practices such as logging or mining. Some of these losses may be temporary, but in very few cases can be considered short term since they usually impact over a period of years.

These issues are almost exclusively under state government control, and in some states, eg Queensland, threaten the very survival of the industry there. In other states the industry is suffering "death by a thousand cuts".

Through its departments and agencies, (such as DAFF), the federal government could develop a much higher level of protection and support to the beekeeping industry, by actively promoting the strategic importance of having a viable beekeeping industry throughout Australia, and by liaising with state governments to reverse the trend of resource access losses. Incentives in the form of financial reimbursements to state Governments as a co-contribution towards the cost of maintaining these resources, provided industry access was maintained, could also be considered. This type of assistance (as rebates on royalties) could also be considered when negotiating export licences with mining and resource companies, so that they too were encouraged, or compelled, to preserve and facilitate beekeeper access on their tenements.

#### Recommendation 3.

Federal Government, as a matter of urgency, implement a policy of active support for the beekeeping industry in maintaining access to floral resources on public lands.

#### 1(b). FUTURE DEVELOPMENT PROSPECTS

The future prospects for this industry which are seen as offering the best opportunities for development, must be those which build on our unique

qualities and offer the best protection from current and predicted risks.

Economic sustainability is the goal.

In the document entitled "Future directions for the Australian honey bee industry", that was prepared by the Centre for International Economics, for DAFF in 2005<sup>6</sup>, these prospects were clearly and fully spelt out. Whilst this Association is critical of CIE for placing insufficient emphasis (in fact, none), on the impending catastrophe faced by the industry, and which we have tried in this submission to redress, we fully endorse that document. In its analysis of each of the industry's areas of operation, the report has offered "Key Conclusions", which are well presented and soundly based. These essentially provide a "road map" for the future. However it must be recognised, that many similar recommendations have been made in the past, some of which have been actioned and are in effect a "work in progress". Whilst these are what the industry needs to happen, their benefits have not, and will not, flow through to the industry for some considerable time. They are unlikely to turn this Titanic around before it hits the iceberg sometime in the next 10 years!

#### Industry future prospects in WA

In WA, the shining light, in terms of honey, is the rapidly growing acceptance in the market place of the special qualities of the varietal honey produced from Jarrah forests. Interestingly this is not restricted just to the antimicrobial activity of Jarrah honey, but is also reflected in similar qualities for Redgum honey from the Jarrah forest. The effect appears to be site-specific. Whilst there is much still to be elucidated, the reassuring thing is the consumer acceptance of the special qualities, and their willingness to pay significant premiums for this product. Unfortunately we are experiencing some backlash from this, in that the demand for other types of quality varietal honey is waning. If it isn't Jarrah, they don't want it! Some market research and clever product positioning is obviously required if we are to sell our other, less-medicinal varieties at the premiums we require to improve viability. So in terms of honey, these represent both current and future challenges.

WA is also blessed with the forest floral resources capable of producing good crops of nutritious pollen. However, for some unexplained reason, market demand for bulk product has declined substantially in the past 2 years, so prices and consequently production has also declined. Most pollen producers continue to hold high hopes for the future prospects. It is evident that for both varietal honey and pollen, judicious investment in market research, marketing, consumer education and quality control, would pay good dividends. These may even be attainable in the relatively short term. We would contend that this effort needs

to be directed particularly to the smaller producer packers, since it is they who are currently targeting and servicing these small "niche" markets.

#### Recommendation 4.

Federal Government encourage the small producer-packer sector by expanding Farm Bis support into the area of market research as well as training.

WA has been slow to enter the export package bees market, having achieved only its 1<sup>st</sup> trial shipment to Canada this season. There is not a great deal of enthusiasm amongst WA beekeepers for this market sector, despite obvious current and future prospects of high market demand. Reasons for this are 1) high risk due to loss of bees dying in transit, and 2) problems of accessing suitable wide-bodied aircraft flights between Perth and the USA, without transit stops in Asia or Europe. Qantas Domestic is unwilling to carry live bee freight between domestic airports. Transit via Sydney or Melbourne to the USA introduces another risk in that an interstate health certificate is also required and if this is refused even though an AQIS export permit is issued, the shipment is not permitted to transit through Sydney or Melbourne international airports. The presence of American Foulbrood disease within a 5km radius of the source apiary, precludes the issue of an interstate health certificate, but is of no concern to USA authorities and would not prevent the shipment from entry into the USA.

For WA beekeepers to be able to access the USA market given current airline arrangements, either a special airport transit arrangement (Transit Certification, or Interstate Health Certificate Exemption for Transit Purposes) needs to be negotiated with the states of NSW and VIC, and legislated, or transit arrangements through Auckland International airport need to be negotiated with NZ authorities. In view of the time frame, the latter course may prove the simplest.

#### Recommendation 5.

DAFF be authorised to negotiate special transit arrangements for WA package bee shipments to the USA via both Sydney and Auckland airports. These need to be in place by October 2007.

#### 2. HONEYBEE INDUSTRY ROLE IN AGRICULTURE AND FORESTRY.

Although not openly acknowledged by most in the agricultural and horticultural sectors, the honeybee industry is an integral part of wider agriculture and horticulture, by virtue of the managed and incidental pollination service it provides to flowering crops such as fruits, vegetables, oilseeds and

improved pastures. In some cases, progressive growers are prepared to pay for bees to be placed in the crop rather than rely on luck to ensure adequate pollination for maximum yields. It is widely predicted that in the advent of widespread varroa establishment as an exotic pest in Australian honey bees, managed bee populations can survive, but the feral bee population will disappear, and <u>all</u> growers will be seriously affected, unless they contract beekeepers to place managed pollination hives in the crop.

In the wider perspective, the honeybee industry has effectively been cross-subsidising agriculture and horticulture for a long time, although doubtless those industries would not wish to admit this. Given the serious threat to their industries that a declining honeybee industry or a varroa incursion represents, it is time for these industries to return the favour.

#### The cross-subsidisation needs to be reversed.

If the honeybee industry is to receive the financial assistance it needs, we contend that it should come from product levies on those products which benefit from bee pollination.

In essence this cost would flow back ultimately to the consumers, which is quite appropriate. The honey bee industry is quite small, and the volume of bee pollinated produce is large, especially when broad acre oilseed crops are included. Consequently the extent of levies required would be relatively small and should cause no real hardships as a result. Since much of this produce is exported, a large part of the subsidy revenue would in effect be derived from consumers offshore. We contend that this is a mechanism which could, and should, be used to restore viability to the honeybee industry.

#### Recommendation 6.

Federal Government explores opportunities to cross-subsidise the honeybee industry to ensure its survival and future development, by way of levies on bee pollinated agricultural and horticultural produce.

As regards forestry, whilst managed pollination using honey bees, is practised as a beneficial process in forests in other parts of the world their role as beneficial pollinators in the Australian context is not so clear. Indeed the extreme conservation movement will often argue that honeybees are detrimental to the Australian forest ecosystems by virtue of competition for food resources with other pollinating native insects, animals and birds, as well as displacing them from their habitats by swarming into nesting hollows and cavities. Research evaluating these claims has been progressing, but much still remains to be done. Unfortunately many land and forest management decisions have used the precautionary principle to exclude beekeepers from floral resources on public land because of this. It would be appropriate to review all of

these decisions in the light of research results now available<sup>7</sup>, since some exclusions may no longer be justified.

#### Recommendation 7.

Federal Government instruct DAFF to establish a Federal/State Consultative Review Committee to examine all existing, and future proposed, honeybee industry exclusions from floral resources on public lands.

#### 3. BIOSECURITY

As was highlighted above, the honeybee industry is currently "withering on the vine" due to its poor profitability. A number of major biosecurity threats facing the industry have the potential to rapidly accelerate this process if they come to pass. These are seen to be:-

- 1. Incursion and establishment of major pests and diseases not currently present in Australia, such as:-
  - Varroa mites, (*Varroa destructor*, and the associated Parasitic Mite Syndrome.)
  - Tracheal mites (Acarapis woodii, Acarine disease).
  - Tropilaelaps mites (Tropilaelaps clareae).
  - The protozoans *Malpighamoeba mellificae*, which causes Amoebic disease, and *Nosema cerana*, which is an intestinal parasite. Both can cause severe hive losses.
- 2. Africanised genes, which could lead to major management problems and social consequences for the general population.
- 3. The advent of Colony Collapse Disorder, the aetiology of which is yet to be established.

These risks are all considered extremely serious and would have major impacts if they were to slip through the net. To date they have been, and continue to be, denied entry into Australia by virtue of a high level of Biosecurity control exercised by AQIS, Biosecurity Australia, and the various state biosecurity agencies. However, whilst success with these risks to date has been achieved, other biosecurity risks have slipped through the net in recent years, including 2 which directly affect this industry, Small Hive Beetle and Chalkbrood. This highlights the ever present nature of the risks, and the fact that we cannot afford to let up on our vigilance, a major part of which are the Port Surveillance and Sentinel Hives programs. Concerns have been expressed within our industry that these programs are under-funded and under-resourced. Certainly the recent discovery of 4 Apis cerana nests in the port of Cairns, calls into question the efficiency of such programs. It appears that these nests may have been there for some substantial time (4 years), and a recent press release

from QDPI indicates suspicion that there are more nests as yet undiscovered. Apis cerana is a prime target of the Port Surveillance program since it is a known carrier of varroa mites. Whilst the evidence to date indicates that no varroa mites were present on these bees, presence of Asian bees in such numbers is a serious quarantine breach and indicative of a problem which needs to be rectified urgently.

#### Recommendation 8.

Federal Government instruct AQIS to immediately commence an evaluation of the Port Surveillance and Sentinel Hives programs, and their adequacy to protect the industry from incursions of biosecurity risks.

Another serious risk to the industry is the possibility of deliberate unauthorised importation by a beekeeper, of live bees or queen bees, through our major airports. Many consider this to be the most likely route through which Varroa mites will enter this country. Such an importation did occur in the recent past, when a prominent Australian queen bee producer, deliberately imported through Sydney airport, 12 queens concealed in modified ball pens. A stupid and highly irresponsible action! The quarantine breach was detected, and the beekeeper was prosecuted and convicted. However the penalty imposed was no more effective than a "slap on the wrist". Given the serious consequences which can flow from such imports, it is obvious that a much more serious penalty disincentive is required.

#### Recommendation 9.

Federal Government increase substantially the penalties associated with deliberate illegal importation of live honeybees, to include imprisonment, as a substantive disincentive to such illegal imports.

Another issue this organisation would like to raise is the inordinate amount of time taken by Biosecurity Australia to process the import risk assessment for import of honey bee semen. This process has been ongoing for approximately 6 years, when it was originally anticipated to take 10 months. This is of particular concern to WA, since unlike the industry on the eastern seaboard, beekeepers here are not able to access imported genetic material through the Wallgrove Quarantine facility in NSW, because of State Govt. restrictions on interstate transfer of live bees, queen cells and grafted eggs. Semen import is the only method whereby WA can safely import new genetic stock. An IRA has been completed in WA for semen import from NSW, and a quarantine apiary site has been approved within the HMAS Stirling Naval Base on Garden Island that conforms to the requirements of the AUSVETPLAN.

DAFWA have established a protocol to monitor any imports through a 12 month quarantine process which limits any risk to the industry. So we are now in an ideal position to receive and safely process imported semen shipments through a quarantine procedure in WA. There is an outstanding application for semen import from NZ to WA that was lodged with Biosecurity Australia in July 2005.

However, this agency has indicated that there are higher priorities for its limited resources, than the completion of this IRA. Given this explanation, unless something is radically changed, the IRA will never be completed! In our view this simply is NOT GOOD ENOUGH.

#### Recommendation 10.

Minister for Agriculture, Fisheries and Forestry, instruct Biosecurity Australia to complete the IRA for honeybee semen forthwith, and provide whatever resources are required to ensure this.

#### 4.TRADE ISSUES

The difficulties WA beekeepers experience in transhipping package bees to the USA was discussed above and a recommendation (5) was proposed. It should be noted that recent successful negotiations between DAFF and the NZ agency MAFF to facilitate export of honey from WA to NZ should have considerably smoothed the way for negotiations to tranship package bees from WA through NZ to the USA. Now should be a very opportune time to open those negotiations.

#### 5. THE IMPACT OF LAND MANAGEMENT AND BUSHFIRES.

In WA the industry maintains a very good relationship with the state Department of Environment and Conservation, (DEC), who are responsible for management of our state forests and the conservation estate. Generally very few problems arise that can't be resolved to our mutual satisfaction. Perhaps the one area causing most angst relates to fire events; both controlled hazard reduction burns and wildfires. Given the rainfall reductions WA has experienced in the past decade, this situation is more likely to worsen than improve. DEC has a very good system of prior written notice to beekeepers about planned hazard reduction burns affecting apiary sites, which enables forward planning for sites that will be available during particular honey flows, (although it is not a rare event for this system to break down!). Depending on the vegetation type, some flexibility in timing of the burn can usually be negotiated. However as our landscape becomes drier with time, recovery of some burnt areas is taking longer. This same drying phenomenon places even greater emphasis on the importance of hazard reduction burns to the wider community, and to a degree

restricts the ability of the agency to be flexible towards beekeepers' desires for these burns to not proceed at the scheduled time. This will remain an issue for negotiation between the industry and DEC

In recent months beekeepers have reported an alarming degree of vegetation collapse on the northern sandplains, an area of significant importance to the industry. This is presumed to be drought-related, but that is yet to be confirmed. Beekeepers estimate that honey production from this area will be impacted for years even if we receive "normal" rains this winter. There appears little that can be done to improve this situation at present, but the potential for yet another damaging impact on beekeepers' resource utilisation and its flow on financial impact should be recognised as yet another issue warranting consideration, when reviewing the need for financial support to the industry in WA.

#### 6. THE RESEARCH AND DEVELOPMENT NEEDS OF THE INDUSTRY

The industry faces a major problem in being able to adequately fund its R&D. The current mechanism whereby a small levy placed on sale of its products (honey and queen bees), is then matched \$ for \$ by the federal government, results in a sum of money that in today's research environment amounts to little more than petty cash. Added to which, any downturn in production, (such as that resulting from the current drought), results in a corresponding downturn in research funds availability, making it very difficult to maintain continuity of funding to larger or longer term projects. As the industry winds down under the weight its financial insufficiency, so will its research funds. A future as a researcher in honey bees is currently as bleak as a future in beekeeping. At the time when we most need research and development to lead the way forward, we find ourselves least able to afford it.

The industry urgently needs to find a way out of this situation.

One mechanism was suggested previously (Recommendation 6) by way of additional levies on sale of other bee pollinated products. Short of slugging the poor tax payer or buying lottery tickets, we are unable to suggest any other mechanism that would be considered fair and reasonable.

Setting aside the question of funding, the subjects needing research are best described in broad terms.

- 1) Varroa-proofing our bees, (and protecting them from all the other "nasties" out there).
- 2) Making our products the most "must have" commodities to consumers.
- 3) Ensuring that we understand the inter-relationships between our bees and the environments in which we operate, so that we can avoid conflicts.

4) Maximising the benefits which flow to the community by virtue of the presence of our bees.

These topics cover a very wide range of disciplines and will require high levels of interaction between them. The skills exist within our institutions already....we just need to harness them.

Recommendation 26 of the recent Rural Skills and Training inquiry referred to the establishment of a Cooperative Research Centre for Beekeeping and Pollination.

We overwhelmingly endorse this proposal as the ideal mechanism to achieve the above objectives.

#### Recommendation 11.

Federal Government move urgently to adopt and implement Recommendation 26 of the "Skills: Rural Australia's Need" report.

# 7. EXISTING INDUSTRY AND GOVERNMENT WORK THAT HAS BEEN UNDERTAKEN FOR THE HONEYBEE INDUSTRY.

The most obvious example of work that has been undertaken by the industry for the benefit of the wider industry, is the breeding work currently underway on both sides of the continent. One group in WA maintains an isolated, open mating station approach, and focuses mainly on selection for high levels of honey production combined with gentleness for ease of management. Another, smaller group, utilises instrumental insemination as the means for obtaining control over mating, and is more particularly focussed on selection to develop high levels of hygienic behaviour within the stock, in order to improve levels of disease resistance. This group is particularly anxious to be able to import semen from breeding programs in the international arena where selection for disease resistance is much more highly developed. Hence the WA concern about the situation with completion of the honey bee semen IRA by Biosecurity Australia. We are aware of a similar situation on the eastern seaboard, where both of those programs are based on instrumental insemination to achieve mating control.

Whilst on the face of it, this may appear a healthy indicator of industry self-help, in reality it is a second best approach. Bee breeding is a highly skilled undertaking, requiring the management of large numbers of hives, in addition to well developed technical skills and laboratory resources. An

undertaking of this nature is best handled by an academic institution in collaboration with the industry. The industry would be far better served by a well resourced institutional approach to bee breeding, which has the capability to research, as well as select for, and reproduce, breeding stock which is resistant to the major diseases and pests currently threatening our industry.

One example of high priority need in this area, is the development of varroa resistance or tolerance within our honey bee populations. Work has been underway to develop stock of this type in other parts of the world, including USA and NZ, and there is an urgent need to commence this type of breeding program here, in order to varroa-proof our bees as a means to avoid the bee-population collapses that have occurred subsequent to varroa incursions in those countries.

#### Recommendation 12.

Federal Government move to establish a high level institutional program for the breeding of disease-resistant and varroa-tolerant honey bee stock, in cooperation with the honey bee industry.

An example of the government work that has been undertaken for the honey bee industry, is the research work undertaken by CSIRO Division of Entomology in regards to the varroa mite. This has been of outstanding quality and has deservedly earned international recognition because of its global significance.

#### Recommendation 13.

Federal Government continue to allocate funding and resources to CSIRO's varroa research activities as a matter of high priority.

#### LIST OF RECOMMENDATIONS

#### Recommendation 1.

Federal Government commission an urgent analysis of the true economic status of the honey industry with a view to providing financial support.

#### Recommendation 2.

Federal Government establish an employment subsidy scheme for the apiculture industry which enables sourcing of trained workers from the global market, as well as from the local Australian labour market.

#### Recommendation 3.

Federal Government, as a matter of urgency, implement a policy of active support for the beekeeping industry in maintaining access to floral resources on public lands.

#### Recommendation 4

Federal Government encourage the small producer-packer sector by expanding Farm Bis support into the area of market research as well as training.

#### Recommendation 5.

DAFF be authorised to negotiate special transit arrangements for WA package bee shipments to the USA via both Sydney and Auckland airports. These need to be in place by October 2007.

#### Recommendation 6.

Federal Government explore opportunities to cross-subsidise the honeybee industry to ensure its survival and future development, by way of levies on bee pollinated agricultural and horticultural produce.

#### Recommendation 7.

Federal Government instruct DAFF to establish a Federal/State Consultative Review Committee to examine all existing, and future proposed, honeybee industry exclusions from floral resources on public lands.

#### Recommendation 8.

Federal Government instruct AQIS to immediately commence an evaluation of the Port Surveillance and Sentinel Hives programs, and their adequacy to protect the industry from incursions of biosecurity risks.

#### Recommendation 9.

Federal Government increase substantially the penalties associated with deliberate illegal importation of live honeybees, to include imprisonment, as a substantive disincentive to such illegal imports.

#### Recommendation 10.

Minister for Agriculture, Fisheries and Forestry, instruct Biosecurity Australia to complete the IRA for honeybee semen forthwith, and provide whatever resources are required to ensure this.

#### Recommendation 11.

Federal Government move urgently to adopt and implement Recommendation 26 of the "Skills: Rural Australia's Need" report.

#### Recommendation 12.

Federal Government move to establish a high level institutional program for the breeding of disease resistant and varroa tolerant honey bee stock, in cooperation with the honeybee industry.

#### Recommendation 13.

Federal Government continue to allocate funding and resources to CSIRO's varroa research activities as a matter of high priority.

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