

SUBMISSION  
TO

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INQUIRY INTO  
THE FUTURE DEVELOPMENT OF  
THE AUSTRALIAN HONEY BEE INDUSTRY

D. G. KEITH, A.M.

*Personal Industry Experience :*

- *Commenced Commercial Beekeeping in 1955*
- *Managed family beekeeping business from 1965 to present.*
- *President Queensland Beekeepers Association for 3 years*
- *National President Federal Council of Australian Apiarists Association for 3 years*
- *Co-ordinator Australian Honey Bee Improvement Programme for 5 years*
- *16 years as member of the Board of Capilano Honey Ltd. 5 years as Chairman. Retired 2005.*

*Preamble :*

This Inquiry follows a 2005 Review of the Honey Bee Industry conducted by the Centre for International Economics (CIE) and the Australian Honey Bee Industry Council (AHBIC) under the DAFF Industry Partnership Programme and the industry specific recommendations of the 2006 Australian Parliament's Inquiry into Rural Skills Training and Research.

Following the Report of the Inquiry into Rural Skills Training and research, a Honey Bee Industry Linkages Workshop, held in April 2007, drew together a wide range of stakeholders who recognised, and underlined, by their awareness and commitment to the issues, threats to Australian Agriculture of a downturn in the viability of the Honey Bee Industry.

The recommendations of the Industry Linkages Workshop together with the AHBIC Report "The Future Development of the Australian Honey bee Industry" compiled by the CIE provide significant evidence for this Inquiry.

This submission will endeavour to not duplicate this wealth of industry evidence already prepared for the Inquiry.

I will endeavour to identify other ongoing practical hurdles that need to be overcome to reach a sustainable future for the Honey Bee Industry, and the much larger Agricultural Industries who cannot prosper without the key component of crop pollination.

### *Current and Future Prospects :*

- *The effects of global warming :*

Global warming received minimal attention during the CIE Review of the industry, as it was not as widely accepted as an issue at that time.

The current state of the debate indicates a massive impact on Agriculture because of global warming and the effect on beekeeping is yet to receive much attention to my knowledge.

Beekeepers have noted significant seasonal changes since 1990, marked by less rainfall and longer dry periods. In as much as this is caused by global warming and not by previously accepted weather cycles, it will force changes to the Australian bee industry.

The eucalyptus species as a group are the major resource base for the Australian industry and are represented by many hundreds of species, generally occupying very specific ecological niches. The relatively sudden climate changes that have become apparent since 1990 have impacted on many species, adversely effecting flowering cycles, and in the current drought, causing many tree deaths.

Some species that previously provided significant production and formed an important part of the resource base for many businesses now cannot be relied on.

The mainstream industry has learned to cope up until now through improved mechanisation and accessing flora over much longer distances. The large part-time, less mobile sector of the industry has had to endure difficult conditions over this period.

For the honey production sector of the industry there may be a prospect for some transfer of resources to those parts of the nation receiving increased rainfall through climate change. If this opportunity, yet to be researched, exists, there will be large bee husbandry challenges to be overcome. Economic management of commercial apiaries has not occurred to any significant extent in northern Australia to date.

A likely change to Australian Agriculture through the projected reduction of water available for irrigation will be a transfer of water use from lower value crops to the more intensive horticultural crops. This likely change will continue the accelerating requirement for paid pollination services.

Global warming appears to be having a significant detrimental effect on the current, largely honey production based, industry.

That the transfer of benefit that flows from honey production to Agriculture and the wider community through incidental pollination

and the availability of bees for paid pollination is threatened by reduced viability of this sector requires serious consideration.

The Australian honey industry has proven resilient while competing on a world stage with countries more favoured climatically and with far lower production costs. A number of factors have contributed to this resilience including highly productive native floral resources, well directed research over the past three decades, and the total and innovative focus on honey marketing by Capilano Honey Ltd. whose contracted shareholders include the majority of Australia's mainstream beekeepers. Capilano Honey Ltd. provides stability to the whole Australian honey industry.

The anticipated giant leap in honey bee pollination requirements while honey production viability comes under pressure indicate a need for cross stakeholder planning, underpinned by significant Government support, in view of the community benefits derived.

Australian Agriculture, including the honey bee industry, seems destined to have to manage massive changes due to climate change. Australian Governments should be at the forefront of endeavours to reduce and reverse global warming.

- ***The impact of land management :***

The Australian Honey Bee Industry is highly migratory in response to the vast range of floral resources utilised and the extreme variability of climate.

Our floral resources, mainly eucalyptus species, respond to climatic events with budding of healthy forests and woodlands after rain at the appropriate time. The extreme variability of rainfall events, particularly in Queensland, my home state, means general budding of many important species can be many years apart regionally.

As a result, beekeepers need access to a wide range of floral resources in a range of localities to ensure the continuity of forage that is essential for the industry to remain viable. The exclusion of managed honey bees from some areas of resource will seriously effect industry viability as all areas currently accessed provide the production resource in their flowering season when there is often nowhere else available. Some important species may flower well, usually every 2 – 3years, while some important species have a flowering history regionally of up to 7 years.

There are strong political pressures to conserve Australia's remaining native forests. Many conservationists see a conflict between the conservation of the forests and their continued use by managed honey bees. This position is not underpinned by current scientific knowledge, but by the "Precautionary Principle". The fundamentalist application

of the Precautionary Principle in Queensland will destroy the honey bee industry in this State.

In spite of a hard won agreement with the Goss Labour Government that provided for continued use of forests for managed beekeeping in future land acquisitions for conservation purposes, this agreement was set aside by the Beattie Government.

The Honey Bee Industry participated in the Comprehensive Regional Assessment (CRA) for a South-East Queensland Regional Forest Agreement (RFA). The CRA produced detailed data on the industry value of the forests, including their contribution to ensuring availability of bees for pollination.

The Queensland Government then withdrew from the nationally agreed RFA process, and the South-East Queensland Forest Agreement was made between the timber industry and conservationists. All other stakeholders were excluded and the valuable CRA data ignored.

As a result, managed beekeeping has a sunset date of December 2024 in South-East Queensland forests, already threatening investment in the industry so critical to the viability of so much of Queensland's agriculture. In spite of the industry's ability to demonstrate a lack of alternative resources, the current Queensland Government is persisting with a plan that will devastate agriculture in Queensland.

The attendance at the Linkages Workshop of representatives of industries, whose value of production and political influence if drawn together, would have a greatly increased influence on Governments, is encouraging.

It is critical for all concerned that the proposal to form a National Alliance for management of honey bee / pollination issues comes to fruition.

- ***Research and Development needs of the Industry :***

The Honey Bee Industry in Australia has had a constant focus on minimising the use of chemicals to manage diseases and pests. This provides the industry with genuine, clean, green credentials for promoting its products. There will be an ongoing need for *development of non-chemical controls for diseases and pests* if this clean, green status is to be maintained.

*Climate Change* is probably already reducing bee forage resources, effecting honey production and availability of suitable strength colonies for pollination, and research will be critical to meet these challenges.

As the Australian industry moves its focus more towards meeting pollination requirements, significant *additional funding for Research*

*and Development* will be needed above that provided by sales of honey and queen bees.

While there are probably vast floral resources in those areas of Australia where rainfall is increasing, commercial utilisation will only occur when research can overcome the *management challenges* that have so far not been met in these areas.

***Existing Industry and Government work that has been undertaken for the Honey Bee Industry :***

The Industry has sound organisational structures that have dealt with issues and challenges over a great many years. The Industry currently achieves representation to Government through AHBIC and State Associations.

The Industry has :

- a Committee of RIRDC
- Quality Assurance Programmes
- a National Food Standard monitoring Committee
- is developing a National Code of Practice as a building block for EMS.
- *AQIS, Departments of Primary Industries, and Industry action has been successful in keeping **Varroa Mite** out to date and needs **constant review**.*

Government support for the Industry through Primary Industry Departments and education facilities and programmes and statistical data gathering has declined.

The “user pays” principle is inappropriate for an industry that has a GVP of \$ 65 million, but provides an economic benefit in excess of \$ 2 billion.

The demise of apiculture courses throughout the nation due largely to the small number of specialist employment opportunities has left a hole in the transfer of knowledge to people who will be needed to continue to manage the industry, pollination and the research required for success.

*Resolution of this great need would be an important outcome for this Inquiry.*

***Summary :***

***Global Warming :*** The reductions in available moisture in Australia’s traditional beekeeping areas caused by the lower rainfall and higher temperature effects of global warming appears to be reducing floral resources.

Research is needed into the effects of global warming on Australian melliferous flora and the honey bee industry.

A strategy to utilise flora in areas of Australia more favoured climatically by global warming could underpin industry viability. Currently there is almost no commercial

beekeeping in Northern Australia, probably due to unique management challenges. For this strategy to evolve, two steps need to occur :

1. Evaluation of the melliferous potential of Northern Australia flora.
2. Research into successful management practices to cope with the difficulties presented by the dramatic wet and dry seasonal variations.

The massive effect of global warming on Australian Agriculture and the Australian environment should be reflected by Australian Governments being at the forefront of action to reduce and reverse global warming.

***Land Management Decisions*** : Industry sustainability, and its flow on to Agriculture, is threatened by loss of resources in conserved lands.

Decisions are being made based on the philosophical expectations of the politically strong conservation movement, rather than on scientific knowledge and economic reality.

Unity of all honey bee / crop pollination stakeholders could ensure a more balanced approach to decision making processes.

***Industry and Government work undertaken for the Honey Bee Industry*** : The Industry has reasonably well developed organisational structures.

There is a clear need for union of all honey bee / crop pollination stakeholders to ensure provision of all their current and future needs.

Recognition of the community benefit that derives from a viable honey bee industry could be reflected in increased support by Government for Research and Development, Education and Training.

D. G. Keith, AM  
23 May, 2007