

THE HONEY BEE INDUSTRY IN AUSTRALIA



Presentation

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Introduction of honey bees to Australia

- In 1810 Rev. Samuel Marsden brought two (2) hives from Rio de Janeiro and put them in the Governor's garden at Parramatta, Sydney, but they did not survive
- The first recorded surviving introduction was on 9 March, 1822 by Captain Wallis of the ship *Isabella* from Cork in Ireland
- These would have been the English black bee *Apis mellifera mellifera*

Races of bees kept in Australia

- The Italian bees were first introduced into Australia in the 1860's and 1870's
- The caucasian bee was introduced into Australia in the 1880's
- The carniolan bee was introduced into Australia in the 1880's
- Other races tried but not established were Cyprian, punic, Spanish, cartpathian, Russian



Latest statistics

State or Territory	No. of beekeepers	No. of hives
Queensland	3,098	100,939
New South Wales	3,461	214,296
Victoria	3,689	103,130
*Tasmania	182	16,361
South Australia	858	62,510
Western Australia	1,080	28,500
*Northern Territory	46	2,295
TOTALS	12,414	528,031

* Registration is not compulsory

There is no registration in the Australian Capital Territory

Value of honey production

- The average annual production of honey in Australia is between 25,000 and 30,000 tonnes.
- Currently farm gate prices are between \$3.70 and \$4 per kilo
- So this puts the honey value at between \$90million and \$100million using 25,000 tonnes
- This year production will only be in the vicinity of 13,000 -14,000 tonnes



Other apiary products

- Exports of live bees is estimated at around \$10million.
- This could be higher if the US market could be re-opened.
- Beeswax is a valuable by-product
- There is some pollen produced.
- There is no quantity of royal jelly, propolis or bee venom produced due to cheap import prices.



Beekeeping Associations

- The Australia Honey Bee Industry Council Inc. (AHBIC) is the peak body in Australia. Its members are:-
- Queensland Beekeepers Association
- New South Wales Apiarists Association
- Victorian Apiarists Association
- Tasmanian Beekeepers Association
- South Australian Apiarists Association
- Western Australian Farmers Federation – Beekeepers Section
- Honey Packers and Marketers Association of Australia
- National Council of Pollination Associations
- Associate members
- There are many amateur associations in Australia

Reliant industries

- The value of honey bee pollination to the agricultural and horticultural crops is estimated at between \$4 - \$6 billion annually
- The honey packing industry in Australia is an integral part of beekeeping
- The beekeeping equipment manufacturers



Opportunities

- Pollination
- Export honey
- Live bees



Pollination

- With Governments wanting to increase food production in Australia there is an opportunity for increased paid pollination
- If new growing areas are opened up then there will be a need for more beehives for pollination
- With the loss of feral hives to the small hive beetle there will be a bigger demand for paid pollination
- Expansion of areas planted to current crops such as almonds will mean more bee hives will be needed

Export of honey

- With the world wanting green products Australia is in the box seat to supply honey
- There are some barriers such as tariffs
- Free Trade Agreements may also present greater opportunities although this did not happen with the FTA with South Korea

Live bees

- The loss of bees in some countries presents opportunities for the export of live bees
- With spring in the northern hemisphere co-inciding with our autumn, this allows export opportunities
- Our quarantine breaches have stopped some exports
- Some overseas countries use non-tariff barriers to limit trade

Threats

- Varroa mite
- Tropilaelaps mite
- Tracheal mite
- Loss of access to public lands
- Myrtle rust
- Asian bees
- Mislabeled products
- Pesticides



Varroa mite

- Australia does not have the *Varroa destructor* mite
- If this mite came to Australia there would be an initial loss of hives
- The cost of pollination services would increase
- The need to treat hives would increase operational costs

Tropilaelaps mite

- *Tropilaelaps clareae* and *T. mercedesae* are not in Australia
- Currently it is confined to Asia
- The effect of this mite is said to be worse than varroa
- As for varroa, pollination and operational costs would rise

Tracheal mite

- *Acarapis woodi* is not currently in Australia
- Its effect would be the loss of hives and the need to treat the colonies
- Again operational and pollination costs would rise

Loss of access to public lands

- There are moves to have beekeepers barred from certain public lands and this is the biggest threat to the beekeeping industry in Australia
- Traditionally beekeepers have had access to these public lands for well over 100 years
- The reasons are mostly ideological
- Without access to these lands for honey production and the ability to build hives before and after pollination beekeeping will change dramatically
- This will mean the loss of hives for pollination services

Myrtle rust

- This is a recent addition to the Australian landscape
- It attacks plants in the Myrtaceae family
- This family is the main source of honey and pollen for honey bees
- If there are losses caused by this rust then the beekeeping industry will diminish in Australia

Asian bees

- With the finding of the Asian bee *Apis cerana* Java genotype in Cairns in 2007 it has presented new problems
- The decision to stop the eradication program was ill conceived in the eyes of the industry
- It will present a reservoir of bees in Australia for *Varroa jacobsoni* to breed in should it find its way to mainland Australia
- It is currently being used as an excuse by the USA to not allow live bees in from Australia
- When it spreads Australia wide, which will be slow, it has the potential to cause as much environmental damage as the cane toad
- In north Queensland Asian bees are called cane toads with wings

Mislabeled products

- In the last few years there have been two cases of products labeled honey being imported into Australia
- Testing by AHBIC from an overseas laboratory shows this to be not honey but corn syrup
- Attempts to have this product recalled from the market have been frustratingly slow
- This type of mislabeled product causes loss of income to the Australia industry and the public could reduce its consumption of real honey

Pesticides

- Pesticides kill bees
- However in crops that many beekeepers pollinate there is a good relationship with the grower
- There are unfortunately rogue operators
- Also adherence to label directions is an area that needs urgent attention
- There are many unanswered questions on the effects of various insecticides and fungicides on honey bees



Thank you

