

## Senate Standing Committee on Rural Affairs and Transport

Science Underpinning the Inability to Eradicate the Asian Honeybee.

*[a] the science underpinning the technical assumption that Apis cerana, the Asian Honeybee, cannot be eradicated in Australia.*

I am not a scientist, but this assumption is incorrect, as previous incursions by other pests such as the Papaya Fruit Fly in the 1990s, were eradicated when sufficient funds and manpower were allocated to the task. Recent problems such as the horse flu epidemic were also controlled by the necessary application of funds and manpower.

*[b] the science underpinning the assumption that the Asian Honeybee will not spread throughout Australia.*

I am not a scientist, but I disagree with this assumption, as previous incursions of pests have spread far wider than anticipated by the scientific community. Two of these pests which come readily to mind are Cane Toads, and Rabbits.

Cane Toads, as you will be aware, have spread over most of Northern Australia, and are now likely to move into Western Australia. Their spread south is continuing, with detrimental effects on Beekeepers as well as native fauna.

Rabbits were introduced long ago, and have spread over nearly all of Australia. According to experts, rabbits would not survive in the tropics, but they are widespread inland from Cairns. In orchards around Mareeba, where I have many beehives, you are able to see them at night, and there are plenty of droppings to be seen during the day. Yet no one except farmers will acknowledge their presence.

The Apis cerana family has a natural range from the Equator to Siberia, with sub species in various habitats. The Java strain of Apis cerana has been found in Australia. It was found by myself in Cairns 4 years ago as a matter of fact. The Java strain currently has a restricted and isolated habitat on the island of Java. I have not heard of any trials to find if it will spread to other habitats with differing climatic conditions if allowed.

If the example of the European Honeybee, Apis mellifera, is used, the European Honeybee has adapted to a vast range of climatic conditions here in Australia, and thrived. Australian conditions are radically different from where Apis mellifera developed, but it has succeeded in colonizing or being maintained by beekeepers everywhere. Even in desert areas such as Mount Isa, Apis mellifera are able to be maintained. Unless proven otherwise, it must be assumed that Apis cerana would be able to do the same.

*[c] the science relating to the impacts of the spread of the Asian honey bee on biodiversity, pollination and the European honey bee.*

I am not a scientist, but I believe the impact of the Asian honey bee will be severe. Just as the Cane Toad has depleted native fauna by either eating chicks of ground nesting birds or by poisoning birds or animals which try to eat cane toads, then the Asian honey bee will impact on Australian fauna by depriving them of nesting sites. Asian honey bees typically use smaller holes as nesting sites, in direct competition with birds, reptiles, and small marsupials. The European honey bee requires a larger volume nesting site of at least 20 litres, and usually much more than this.

As the Asian honey bee has a tendency to swarm at the slightest disturbance, it is unsuitable for use in pollination. Beekeepers need bees with stable characteristics. Bees which are likely to completely vacate a hive because of something as simple as vibration caused by transportation or heavy machinery are not likely to pollinate crops adequately.

*[d] the cost benefit of eradication of the Asian honey bee.*

As a beekeeper, my opinion of the cost benefit of eradication is that by removing this pest from Australia, it will lessen the opportunity for Varroa mite and other pests and diseases to become established in Australia.

At the moment, Australia is free from Varroa mite, even though we are surrounded by it; in Indonesia, Papua New Guinea, Solomon Islands, New Zealand, and most of the rest of the world.

The Asian honey bee is the natural host of Varroa mite. An established population of Asian honey bee would enable Varroa mite to quickly spread over a large area if or when the mite arrived in Australia. It would then transfer to European honey bee populations, causing massive losses of beehives, honey production, and pollination of crops.

From comments by Asian honey bee eradication staff, up to 6 nests of asian bees have been found in letter boxes. This has caused some excitement, particularly to older people. Many others have been found in walls of houses or close proximity to areas where people congregate or work. Few people welcome bees at such close range.

Last week I was called to Cairns Airport as a swarm of Asian honey bees had taken up residence on an airbridge on the tarmac used for loading and unloading passengers. As it was impossible to eradicate this swarm quickly, the airbridge had to be closed for 3 hours until the swarm was killed. This caused some disruption as this airbridge should have been in continuous use. Alternative arrangements had to be made which included changes to ground staff, vehicles, catering supply, security checks for me and Department of Primary Industries staff who also attended, security officers overseeing myself and the others, as well as passengers and airline loading procedures.

With Asian honey bees in the Cairns region, a restricted area zone has been declared. This has caused some minor problems for local beekeepers, but mostly it has caused yet more paperwork. It seems that the official answer to any problem is to create more paperwork, rather than put people into the field to fix it.

The disruptions caused by this Asian honey bee are quite extensive. People on the ground can see the problems caused, and the need to continue eradication. The cost benefit of eradication is obvious to people affected, but these local issues are probably never considered by those thousands of kilometers away making the decisions purely on the dollar amounts involved.

Hoping my comments can be of assistance,

Yours sincerely,

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