

It's a million dollar dilemma which could become a two billion dollar headache for the economy. Australia's biggest beekeeping business at Blayney in the central west of NSW is struggling to fill three million dollars worth of orders for queen bees because there is not enough staff to meet demand.

This lack of skilled labour is not only frustrating for Blayney beekeeper, Warren Taylor, but also threatens the entire beekeeping industry, with dire consequences for Australian agriculture, which is reliant on bees for pollination.

"I was trained at Hawkesbury Agricultural College; I specialised in apiculture and went on to build this large company," Mr Taylor told the House of Representatives Agriculture Committee investigating Australia's rural skills, training and research needs. "Since the Gatton and Hawkesbury colleges have closed down their beekeeping courses,

nobody is coming out of institutions capable of assisting in the managerial type work of our business. I just hope that this committee can recognise a small but vital industry and do something to help reinstate at least one beekeeping course in Australia."

Managing director of Australian Queen Bee Exporters, Warren Taylor has joined other beekeepers to warn the committee that without improved education and training, research and development, commercial beekeeping in this country will continue to decline, putting at risk 60 per cent of crops dependent on bees for pollination.

These crops have been estimated by the Rural Industries Research and Development Corporation (RIRDC) to be worth almost two billion dollars, and 11,000 jobs. It is the pollination of crops that makes the humble honeybee one of the unsung heroes of Australian agriculture.

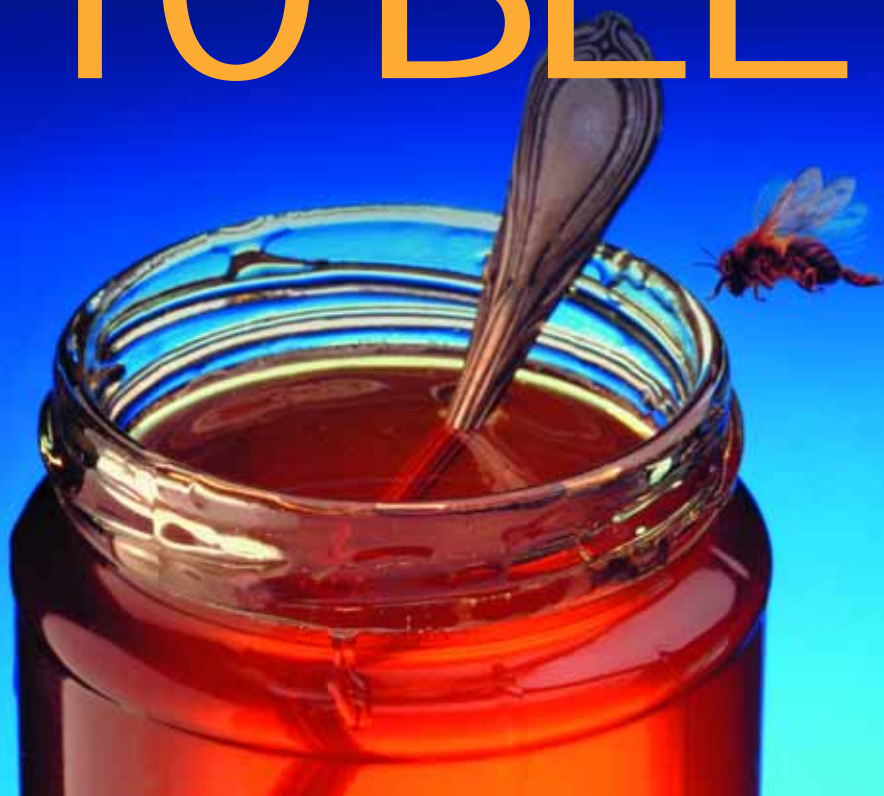
"If honeybee pollination were to suddenly stop (as might be the case with a disease outbreak), growers of honeybee dependent crops and pastures would suffer and the Australian consumer would find themselves without access to many of the major fruits, vegetables and some crops and pastures," industry experts wrote in a combined submission.

"A viable commercial honeybee industry is critical to ensure effective pollination of a large number of horticultural crops dependent on insect pollination to maximise production potential and business productivity," they said. "It is this enormous external impact through pollination needs that makes the small honeybee industry truly unique amongst Australia's rural industries."

Pollination happens in three ways: paid pollination services, free pollination services provided incidentally by honeybees from commercial and amateur hives; and

A looming crisis in beekeeping is bad news for millions of dollars of Australian agriculture

TO BEE OR



pollination provided by feral bee colonies. The industry is currently exploring ways to further promote paid pollination services, including opportunities to enhance productivity of crops such as cotton, where recent research showed pollination increased production by \$220 per acre.

But most urgently, beekeepers would like an increased allocation of government funding for research, because current industry/government, dollar for dollar funding based on honey production has been depleted by drought and bushfires and is inadequate given the increased demand for research.

"Given the major externalities associated with honeybees, it doesn't make sense to allow the research budget to be driven by a levy on honey production. It must be driven by the value of pollination, actual and potential," the industry group wrote.

The NSW Department of Primary Industries told the committee that research, education

and training for the beekeeping industry in Australia are at unacceptable low levels. "There has been a past, current and probable future history of lack of funds to support research, education and training at the required level due to the small size of the industry," DPI wrote in its submission.

Beekeepers argue the additional funding is vital to position the industry to cope with new pests and diseases, such as the varroa mite, which has already caused major losses to hive bees in the United States. Australia is the only country in the world without this major bee pest.

Agriculture industry representative, Horticulture Australia, warned that invasions of pests have seen world wide crashes in honeybee populations. This has led to significant deficits in pollination services to agriculture.

Australia's rapidly expanding almond industry is especially nervous about the looming threat posed

by the varroa mite. In January, the Almond Board of Australia joined Horticulture Australia, CSIRO, research and development corporations, and experts from New Zealand to develop a preparedness and response strategy.

"There is currently no national framework within which to deal with this threat and there is no cohesive preparedness strategy to help minimise the impact," Julie Haslett, executive officer of the Almond Board of Australia said.

"The almond industry is going through rapid expansion from a 15,000 tonne crop in 2004/5 to a 50,000 tonne crop in five years time. By 2010 the industry farm gate gross value of production is estimated to be \$350 million. At the retail level this would equate to a one billion dollar industry. We need a secure and reliable supply of honeybees to support this dramatic expansion. The threat to the almond industry from

which beekeepers say is riding not on the sheep's back, but on the honeybee's wing.

NOT TO BEE



Continued page 28 ►

It is the pollination of crops that makes the humble honeybee one of the unsung heroes of Australian agriculture.

these pests, particularly varroa mite, cannot be underestimated," she said.

Beekeeper Warren Taylor believes research holds the key, in particular the development of a line of bees which are tolerant to these pests. "Our industry needs a research centre to import and develop this resistance," he said. "Just a single research centre in Australia would suffice and this centre could fulfil the educational needs of our industry."

Another contributor to the inquiry is Dr Max Whitten, entomologist and geneticist, former chairman of the Honeybee Research and Development Council and retired Chief of CSIRO Entomology. He warned the committee the ageing beekeeping industry is in crisis because it's losing skills and failing to attract a new generation of beekeepers.

"A life of hard work and paltry income are not strong incentives to learn and practice the profession," he said. "The prospect of cheap imported honey is an added disincentive. The increasing risk of pests and a suite of diseases entering Australia will increase production costs and will threaten existing overseas markets that receive Australian honey, queen bees and package bees. Research and training will comprise important elements in retaining a viable beekeeping and pollination industry in Australia."

Another threat to the beekeeping industry in Australia is its access to managed forests and national parks. It's a vital component in honey production, yet one which is frowned upon by community and green groups because honeybees are not native to Australia.

The honeybee Industry Council told the committee a variety of studies have shown honeybees have no negative impact on native flora and fauna. At the same time, they are considering developing environmental strategies to convince governments



and the public that the industry is minimising any risks honeybees may pose to native plants and animals.

Beekeeping is a unique primary industry in many ways, with only 250 of Australia's 9,600 beekeepers operating more than 500 hives, including Warren Taylor's 8,000 hives at Blayney. The vast majority of beekeeping is done by small, family owned and operated businesses, deriving their main income from other sources, and handing down skills from generation to generation.

Beekeepers told the committee beekeeping is a way of life, and a typical beekeeper needs to be an expert in many fields. "They need to have a sound understanding of the behaviour of this social insect; they need to appreciate the idiosyncrasies of the different races of honeybee; they need the skills and knowledge of a veterinarian to identify and deal with pests and diseases; they need a sound understanding of the flora and the physiology of nectar production and pollination; they require a basic understanding of machinery and how to remedy malfunctions, often in remote locations," beekeepers told the committee.

"They need the mental resourcefulness of a shepherd since migratory/nomadic beekeeping

demands days of solitude. And they need sound management skills to run a small commercial enterprise and cope with complex bureaucratic issues such as GST," the industry group wrote.

While the industry has recently developed its own competency standards through the Rural Training Authority, training packages have not been developed and it's questionable as to whether there is the funding to do so.

Warren Taylor says it's in the national interest for the Australian government to step up and recognise the industry's vital contribution to agriculture, and provide suitable research and education facilities.

"Most other countries recognise the value of honeybees and support and encourage their beekeeping industry," he said. "Sadly, at the moment Australia seems unable to see the forest for the trees." ■

The House Agriculture Committee's investigation into rural skills training and research has received more than 100 submissions and held 11 public hearings. Submissions and transcripts of evidence are at www.aph.gov.au/house/committee/primind/ruralskills or for more information email aff.reps@aph.gov.au or phone (02) 6277 4500.