

**Submission
No 93**

INQUIRY INTO CROWN LAND IN NEW SOUTH WALES

Organisation: NSW Apiarists' Association

Date received: 21 July 2016



NSW APIARISTS' ASSOCIATION INC.

ABN: 89 417 216 326

21 July 2016

Submission to the Crown Lands inquiry

The New South Wales Apiarists' Association (NSWAA) is the state peak body for commercial beekeepers in NSW, and we welcome the opportunity to provide a submission with regards to Crown Lands.

NSW has the largest beekeeping industry of all Australian States and Territories, and it represents 45% of Australia's national honey production, with around 3,400 registered beekeepers managing some 214,000 registered hives.

The number of registered *commercial* beekeepers in NSW has decreased 30 per cent since 2006 to around 200; and these commercial beekeepers represent only 7 per cent of registered beekeepers in NSW. The number of registered hives for NSW commercial beekeepers has also decreased 30 per cent since 2006 to ~140,000. However, as the State's horticultural industries grow the demand for of commercially managed hives will also continue to grow, due to the essential pollination services provided by honey bees.

In spite of its crucial role in underpinning the agricultural sector, the beekeeping industry is facing serious threats – and the foremost of these is access to floral resources (that is, nectar and pollen) from mature native forests and trees.

In fact, two recent Federal Inquiries into the future of the Australian honey bee and pollination industries recognised that the industry relies heavily on native floral species.

NSWAA provides some background into the unique challenges faced by the commercial beekeeping industry and some comments to the Crown Lands inquiry. Please do not hesitate to contact us should you require any clarification or further information.

Yours sincerely,

Neil Bingley
President of the NSW Apiarists' Association

This submission addresses issues relating to 1a and 1b of the inquiry terms of reference.

Crown lands across NSW contribute immensely to the floral resource base utilised by the Apiary industry.

Although some parcels of crown reserves are small, they still provide access to otherwise inaccessible native vegetation which beekeepers rely on to maintain their hives for future honey production and pollination needs.

Any loss of these crown land resources will result in yet further reduction of native flora available to the Apiary industry.

Comments:

Beekeeping resources in NSW are fast declining and clearly finite – and if access to floral resources continues to decline the NSW apiculture industry will find it extremely difficult to maintain beehives at optimal strength for pollination services, and it is likely that the number of commercial beekeepers will continue to decline. The impact of this on the broader community will be extremely serious due to a reduced ability of farmers to provide the quality and quantity of food required to feed our growing population, and to build jobs and sustainable businesses in the agricultural sector for our state.

The nature of beekeeping is innately different from other agricultural industries:

- It is a relatively small industry, but much of the horticultural industry is dependent on honey bees for pollination
- Beekeepers can't rely on just one location for a viable business, so they need to move their hives around throughout the year (and often over great distances) to chase significant flowering events and/or to provide pollination services
- Preservation of, and access to, mature native bush land is of paramount importance for the industry and its output – around 70-80% of the state's honey crop is derived from eucalypts (or related species) nectar
- Beekeeping is by its nature sustainable, and it has a very low environmental impact

Background

Even though the true value of honey bees to NSW is attributed to pollination, the majority of beekeeping income is derived from honey production. NSW beekeepers obtain 70–80% of their honey crop from *Eucalyptus* or related species.

Around 70-80% of the commercial honey produced in NSW (and across Australia) is from *Eucalyptus*, *Angophora* and *Corymbia* tree species, although acacias, banksias and other species are also important.

However, while there are over 700 species of eucalypts (or closely related species), only around 200 are regarded as having significant value to the commercial beekeeping industry. Eucalypts dominate the NSW landscape and are the basis of the native timber forestry industry.

However, most eucalypts (and related trees) do not flower (and therefore produce pollen and nectar) annually; and some have a 2-3 year flowering cycle, and others much longer – with flowering occurring only once every 10-12 years

These flowering events are further affected by extreme weather conditions (heat waves, floods, drought, etc.) as well as bush fires (controlled and uncontrolled), which also impact on all of the other floral species utilised by honey bees

Beekeepers cannot rely on land they own for their crop production (and therefore income) – rather, they are migratory by necessity and need access to native flowering plants on both publicly and privately managed land.

In addition, the uncertainty around flowering events means that commercial beekeepers need access to multiple sites at any point in time, as many will not be yielding the required nectar and pollen due to the flowering patterns of our native vegetation.

Access to resources is crucial for beekeepers

For beekeepers, the issue of access to resources is twofold. Firstly, eucalypts and other native flowering species are being removed through a number of mechanisms, including urbanisation, forestry pine plantations, dieback, firewood harvesting, land clearing, changing land-use priorities and changing fire regimes.

In addition, various public land managers have limited beekeeper access to native vegetation areas.

Recommendations

That beekeepers continue to be allowed access to crown lands as currently occurs and serious consideration be given to some areas being gazetted as Beekeeping reserves as has occurred in other states.

Conclusion

The food security of NSW depends on there being a viable Beekeeping industry.

If NSW is to maintain a sustainable beekeeping industry, which is crucial for underpinning much of the agricultural sector, with all of the related direct and downstream employment and business opportunities this provides – the crucial challenge that commercial beekeeping faces must be addressed.

The key most significant threat to this industry in NSW is secure access to floral resources. These nectar and floral resources are fast declining and clearly finite.

Beekeepers rely heavily on public and privately managed land for nectar flows, but there is constant pressure to exclude them from various public lands, and the impacts of land clearing, climate change, droughts, floods, bushfires, dieback, etc. all mean resources are reduced even where beekeepers are allowed access. Some of these issues are beyond control, however, management decisions are not.

Appendix 1 – The importance of managed honey bees to agriculture

Many horticultural crops and agricultural pasture species including apples, pears, stone fruit, cherries, avocados, melons, berries, and lucerne for seed and clovers are significantly reliant on the actions of honey bees. Further examples are provided in Table 1.

Table 1: The dependence of selected crops on honey bee pollination (as percentage of yield)

Crop	Dependence %	Crop	Dependence %
<i>Tree crops</i>		<i>Vine crops</i>	
Almond	100	Blueberry	100
Apple	100	Cucumber	100
Apricot	70	Kiwi	80
Avocado	100	Pumpkin	100
Cherries	90	Rockmelon	100
Citrus ^a	30-80	Squash	10
Grapefruit	80	Watermelon	70
Lemon & Lime	20		
Macadamia	90	<i>Seed production</i>	
Mandarin	30	Beans	10
Mango	90	Broccoli	100
Nectarine	60	Brussels sprout	100
Orange	30	Cabbage	100
Papaya	20	Canola	100
Peach	60	Carrot	100
Pear ^a	50 – 100	Cauliflower	100
Plum & Prune	70	Celery	100
		Clover	100
<i>Ground crops</i>		Lucerne	100
Peanut	10	Mustard	100
		Onions	100
<i>Broad acre crops</i>			
Canola	15		
Cotton	10		
Soy	10		
Sunflower ^a	30-100		

^a Depends on variety

From Monck, M., Gordon, J., & Hanslow, K. (2008). *Analysis of the market for pollination services in Australia*. Rural Industries Research and Development Corporation.

REFERENCES

Somerville, D (1999). *Floral Resource Database for the NSW Apiary Industry*. Rural Industries Research and Development Corporation. Publication No: 991174.

Somerville, D (2007). National best Management Practice for Beekeeping in the Australian Environment. www.honeybee.org.au

Somerville, D (2015). *NSW Apiculture Industry Overview 2015*. NSW Department of Primary Industries.

Monck, M., Gordon, J., & Hanslow, K. (2008). *Analysis of the market for pollination services in Australia*. Rural Industries Research and Development Corporation.