GRETCHEN WHEEN

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Submission No:	
Date Received:	25-5-07
Secretary:,	<u>G</u> L

23 May 2007

The Secretary Standing Committee of Agriculture, Fisheries and Forestry PO Box 6021 Parliament House CANBERRA ACT 2600

Dear Sir/Madam,

Beekeeping is a greatly under resourced industry, largely due to the lack of understanding as to its value to the National Good.

Beekeeping is basic to most of the agricultural and horticultural industries and is essential to some, for instance almonds and clover. There is a need for a strengthening of areas such as education and research access to resources. This would make beekeeping more viable in its own right, let alone increase the yields of other industries, e.g. cotton.

Stock acquisition and maintenance through bee breeding within Australia or from imports needs fostering so as to support the bee population throughout a diverse country and as has been recently evidenced overseas. A lot of Australian bees have been going to the US and Canadian markets.

The area of bee breeding is where my involvement has been greatest, hence my remarks.

Education and feet-on-the-ground causes the most concern – there needs to be a much greater understanding and input into bee breeding from researchers, beekeeping personnel and the farming community at large. The present handful of competent people scattered throughout the country cannot sustain what is becoming not just a hobby/personal interest type occupation of disparate beekeepers, but a necessary modern highly technical occupation.

A sufficient basic workforce is needed, centred in one place led by world class operators so that a body of knowledge can build. Without this the beekeeping industry will die and with it much of the agricultural and horticultural industries.

As there are few in the field of bee breeding that have sufficient training and experience in the skills of insemination, queen and drone rearing and care, maintenance of breeding lines and populations, collection and analysis of data, a first class enterprise cannot at present be achieved.

Resources should be directed with this in mind. The recent workshop in Canberra involving most of the stakeholders has begun the process.

To achieve a realistic solution to the above, an institution or entity needs to be established where education, research and practical applications of a tertiary/specialist nature can build.

In the past, the spasmodic efforts of beekeepers has been the undoing of ventures – resulting in the loss of valuable stock. The exceptions being two schemes, one in West Australia and one at Hawkesbury Agricultural College (now UWS) in NSW. Both worked well until Commonwealth funding was withdrawn – the prospects were deemed no longer only research but should be developed commercially. Left to private efforts the results have been mixed.

If bee breeding is strengthened through a world class entity there is good potential both within Australia and overseas for both products and services. Importantly, facilitated through a best practice national program, the systematic genetic improvement of honey bees, not only for apiary productivity will accrue, but the development of honey bees with elevated biological resistance to diseases and pests, including Varroa, will benefit food production from these crops in horticulture and agriculture that require insect pollination to fertilize crops and maximise yields. In a few short words, the nation and its people will benefit.

An example of wider under-resourcing (not in the bee breeding field) is evidenced by the recent beetle incursion into Australia. The reaction was insufficient, resulting in no proper identification, a slow response, lack of funds for research when proposals put up, lack of professional scientific reaction generally. What can be done in this regard is shown by the first rate paper by Baldwyn Torto and others (doi:10.1073/pnas.0702813104). This project was supported and executed in a way Australia can only dream of, but the results are there for every one to see with an increase in understanding – very positive.

Sincerely,

Gretchen Wheen

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encl: PNAS article

ADDITIONAL INFOIRMATION HELD BY THE COMMITTEE

ATTACHMENT TO SUBMISSION NO. 17

ATTACHMENT:

Torto, B., et al, 'Multitrophic interaction facilitates parasitic-host relationship between an invasive beetle and the honey bee' in *Proceedings of the National Academy of Sciences of the United State of America*, vol. 104, no. 20, May 15, 2007, pp. 8374-8.