

The Committee Secretary  
Senate Standing Environment and Communications References Committee  
Parliament House  
CANBERRA 2600

Tuesday, 1 March 2016

Dear Sir,

**Inquiry into the risks and opportunities associated with the use of the bumblebee population in Tasmania for commercial purposes.**

Thankyou for the opportunity to make a submission to this inquiry. My submissions are contained under each of the specific issues mentioned in the notice papers for the inquiry.

(a) the existing distribution and population density of exotic bumblebees;

Submission: I understand that the bumblebee has established across Tasmania and its population has stabilised since it was first identified in the early 1990's. Further expert advice is that commercial exploitation is unlikely to have any impact on total bumblebee populations or distribution - they have already established themselves where they are climatically suited, and will not otherwise establish themselves outside those climatic boundaries even if introduced.

(b) productivity and economic benefits of the commercial use of bumblebees for agricultural producers;

Submission: The economic benefits of the specialised pollinator, the bumblebee, in protected cropping greenhouses and in field crop situations, are clearly understood around the world. A mature commercial breeding and hive distribution industry developed decades ago in Europe and is now present in Africa, Asia and the Americas specifically to enable improved pollination in both protected and field cropping situations across a comprehensive range of fruit and fruiting vegetable crops. I understand that in greenhouse tomatoes at least a 20% improvement in yields can be expected as compared to current hand pollination techniques.

(c) the potential environmental impacts associated with the commercial use of bumblebees, including whether their use is likely to:

- (i) impact the conservation status of a species or ecological community,
- (ii) impact biodiversity,
- (iii) cause unintended ecological impacts, and
- (iv) contribute to a wider distribution of bumblebees;

Submission: The bumblebee has established itself in Tasmania over the past 25 years and as yet there have been no identifiable environmental consequences attributable to this. This compares with the complete environmental re-engineering that european settlement has brought to the island. This includes all of the exotic plant species that comprise our gardens, and our food crops including the honey bee that populate the commercial hives that produce Tasmania's unique leatherwood honey.

(d) the implications for Australia's biosecurity regime of any approval to use bumblebees in Tasmania for commercial purposes;

Submission: How the bumblebee arrived in to Tasmania is unknown. The proposed legislation amends the status of the bumblebee so that it can be used beneficially, some twenty five years subsequent to it being identified and placed on the list of illegal species that make it an offence to exploit them commercially. In reality such a long delay after first being identified is hardly likely to contribute to the attraction of a similar approach being adopted for other plant or animal species.

(e) the potential economic outcomes;

Submission: Any advance of a single percentage point in yields is significant in horticulture. Double digit yield improvements are a horticultural producers dream outcome.

(f) the effectiveness of alternative pollination options; and

Submission: There is incontrovertible evidence that there are substantial yield improvements attributable to the use of bumblebees as pollinators compared to manual and all other known pollination techniques, including Australian native bee species.

(g) any other related matters.

Submission: It would be folly indeed, to constrain horticulture from utilising biologically sustainable bumblebee technology that provides significant economic benefits available nearly everywhere else on the planet. The bumblebee is long established on the island of Tasmania. No effort to eradicate the bumblebee is likely to be successful, and none has been made. It would be quite irrational to continue the current prohibition on the commercial exploitation of bumblebees in Tasmania.

Yours Faithfully