

"FOR THE ADVANCEMENT OF APICULTURE"

North-Eastern Apiarists' Association
(Victoria)

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Date 18.5.2003.

Submission No.412

Ms Sophie Panopoulos. M.P.
Federal Member for Indi.
117 Murphy Street
Wangaratta. Vic. 3677.

Dear Sophie.

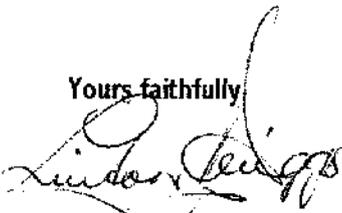
Thank you for attending and officiating at the North-Eastern Apiarists' Association of Victoria 49th Annual Conference on Friday 16th May '03 in Wangaratta.

Thank you also for the opportunity to lodge a submission to the House of Representatives Bushfire Review.

Your offer, conveyed to me through outgoing president Michael Leahy, to type and lodge the submission through your office was also much appreciated.

I understood that although the nominated closure date for the submission was the 9th May 2003, an extension of time may be obtained. Michael and the incoming president, Phillip McPherson, and the secretary, Elwyne Papworth, have authorised me to prepare the following submission, and lodge it with you.

Yours faithfully



Linton Briggs. AM.

Reg. No. A0031341A.



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Commonwealth of Australia House of Representatives Bushfire Review.

Submission.

1. Introduction.

- 1.1 Apiculture [beekeeping] is a primary industry with a national GVP of about \$90m at the farm gate. Significant honey price increases over the past 12 months or so have occurred due to a buoyant export market as well as the effects of drought on supply. During that period, incremental adjustment of the GVP has been necessary.
- 1.2 Victoria's share of the national GVP is about \$16m, mainly deriving from honey and bees wax production. Retail value of honey sold in Australia is about \$200m. Over the long term, North Eastern beekeepers contribute about 30% of the state's GVP for Apiary products.
- 1.3 From a wider community perspective, the greatest external benefit of the apiculture industry derives from the pollination [fertilisation] of agricultural and horticultural crops by honeybees through contract and incidental services. The benefit of honeybee pollination, represented by increased crop yields, has been measured by the University of New England, Armadale, to be up to \$1.2 b. per annum. [Gill, 1987], throughout Australia.
- 1.4 Eucalypt forest and woodland systems represent the most important melliferous [nectar and pollen producing] resource for beekeeping in Australia. In Victoria, about 85% of honey production derives from species of eucalypts.
- 1.5 Native forests and woodlands on public and freehold land therefore play a critical role in maintaining prosperous commercial honeybee populations, essential not only for efficient apiary production, but for the production of much of the human and animal foods that are successfully grown, harvested, sold, and consumed by Australians and overseas customers.



- 1.6 Beekeepers, through the nature of their profession, are highly skilled bushmen and women, finely tuned to the natural dynamics, including fire, which have shaped the diversity and distribution of Australia's native flora throughout the millennia.
- 1.7 Wildfire, depending on the timing, forest type, and region of the event, has the capacity to severely impact on the economy of the beekeeping industry.
- 1.8 In Victoria, beekeeping in public land forests including parks is authorised by various pieces of legislation, and administered through a system of annual licences and temporary permits. Policy guidelines for beekeeping, [21.5pl] developed by the state government and industry in consultation, govern day to day management.
- 1.9 Commercial beekeeping in Australia, including North Eastern Victoria, is mainly geared to the inherent, sporadic flowering characteristics of the vast range of eucalypt species that are regionally located throughout the continent. As a consequence, the industry is highly mobile, each operation migrating several times each season to different forest systems, in different regions, up to and sometimes more than 1000 kms apart. This mobility sometimes helps to mitigate adverse effects on industry participants arising from occasional regional depreciation of resources
- 1.10 During the summer of 2002-03, NEAAVinc members were affected by bushfires in the North East of the state, in Gippsland, and in the Big Desert fires of Western Victoria. This submission will focus on the fires of the North-East of Victoria foothill and mountain country, the impact of the fires on industry, possible future impacts, *AND HAZARD REDUCTIONS.*
- 1.11 The NEAAVinc, understands that the peak state beekeeping body, the Victorian Apiarists' Association Inc, has lodged a submission with the Review and the State Government that provide state wide perspectives of fire events and impacts across the state.
- 1.12 The NEAAVinc. submits some detailed information cannot be included in this submission because some data is not yet available, and requests the opportunity to lodge supplementary information with the Review, particularly so far as future impact is concerned.

2. Term of Reference No 1.

- 2.1** The NEAAVinc. submits it supports the objective of the Select Committee to identify measures that can be implemented by governments to minimise the incidence and impacts of wildfire. It is appropriate that such a review critically examines all aspects of bushfire management including prevention, but it must avoid unnecessary and unproductive finger pointing, casting blame on agencies and people as a community panacea for the aftermath of fire events during 2002-03. The most important outcome of the Review will be to confidently define the measures that need to be taken to achieve the objectives of the term of reference.
- 2.2** The NEAAVinc, submits that the Review must always be cognizant that summer lightning storms and dry seasons producing fire events are natural dynamics of the Australian environment. They have been for millennia, will always be so, and when these dynamics coincide, there is forged the potential for significant wild fire events to occur. The coincidental addition of dynamics such as high wind velocity and high temperatures produces events of such magnitude that human resources and agencies become overwhelmed, and widespread destruction must inevitably occur from time to time.
- 2.3** The NEAAVinc submits also this is a message all municipal authorities and private citizens administering or occupying property adjacent to bushland or other stands of vegetation need to understand and do something about, so far as taking more responsibility for the protection of life and property from the effects of wildfire. The NEAAVinc notes the above falls within the ambit of the Review for consideration and recommendation.

3 Term Reference No 2[a].

- 3.1** The extent of the North Eastern Victorian foothill and mountain fire event of January–March 2003 is well documented. Sufficient for the purpose of this submission is the recording of fire damaged public land, forest, and some freehold property extending from the Mount Buffalo region to the south of Wangaratta eastwards to the NSW and Victorian border. The burnt area has been estimated to be about 1,100,000 hectares.

- 3.2 Relatively few industry participants suffered significant and immediate economic losses through damage and destruction caused within apiaries that were sited on public and freehold land in the region. The Association is still engaged in compiling this sort of information, and as foreshadowed in the introduction at 1.12, will provide further detail when the data becomes available. Such information will include estimates of economic damage to the native melliferous flora of the region in terms of it being capable at some time in the future of being able to return to its former potential to produce honey crops, as well as the loss of next season's honey crops from species, at the time of the fire, already budded and programmed to flower in 2003-04.
- 3.3 The sporadic flowering characteristics of most eucalypt species was mentioned earlier in this submission. It usually involves the setting of bud on new growth most often a season before flowering. There is no regular cycle of flowering, sometimes many years elapse between flowerings, although each species usually flowers at a particular time of year.
- 3.4 Season 2002-03 was a season when little production potential was evident in North Eastern Victorian forests, because very few eucalypt species were budded to flower during the season. As a consequence, by early summer most commercial operators had migrated their apiaries to better prospects elsewhere in the state or interstate. Thus by the vagaries of nature a major catastrophe for many industry participants was averted. Most pain is still to come, through damage to the melliferous resource that will depreciate production in the years ahead.

4 Terms of Reference 2[b] and 2[c].

- 4.1 Bushfires including wildfires, are natural phenomena that become inevitable when all the dynamic forces of summer come together to produce conditions conducive to their destructive release of energy. Their menace to life and property should always be a focus of understanding and organised preventative attention by all communities and individuals at risk, as they are by the public agencies charged with responsibilities for prevention and suppression.
- 4.2 On most occasions of fire outbreaks, modern equipment including the use of aircraft, assisted by reasonable temperatures and wind velocities, enable fire fighters to fairly rapidly contain outbreaks, certainly much more efficiently than even a few decades ago.

- 4.3 There is no question that there is a direct relationship between fuel loads on the forest floor and the severity of respective fires. Reduced fuel loads are of great assistance to the containment of outbreaks under moderate wind and temperature conditions. Even so, as was the case in the 2003 North-East fires, country that had been subjected to fuel reduction through previous autumn controlled burns, performed and coordinated by the previous Department of Natural Resources and Environment, burnt fiercely under moderately high wind velocities. In the Ovens Valley, and most probably elsewhere, country which had been slowly burned a few days or evenings before, burnt again fiercely as wildfire in the crowns and on the floor as wind velocity and temperatures increased.
- 4.4 The NEAAVinc submits it is appropriate to reflect on the genesis of the North-Eastern 2003 fire in order to try and engender some insight into how or even if the fire could have been contained in the early stages, and whether the events of wildfire that later erupted and caused so much damage over such a large area thus may have been avoided. We should remind ourselves and be thankful that for the most of the two months or so period the fire burned, the weather was remarkably benevolent, except on the relatively few occasions when fire storms erupted in response to sporadic increases in wind velocity, and raced through heavy fuel loaded forest, spotting out of control in some cases kilometres ahead of the fire fronts. The damage to life and property could have been much more immediate and greater in extent.
- 4.5 The NEAAVinc submits that the dry lightning storm that lit more than fifty spot fires in the forests on that fateful late January morning came out of an unusual meteorological event. Early morning, a weak and cool south westerly change are usually conditions that do not produce electrical atmospheric activity.
- 4.6 Every bushman in North Eastern Victoria knew that while ever weather conditions remained stable, there remained a window of opportunity to suppress the fires, and which would remain open until the first substantial increase in wind velocity. Any fires still burning in heavily fuel loaded forest with restricted access, or burning near such country would quickly escalate out of control, and remain a problem throughout the region until substantial rainfall occurred.

- 4.7 Mobilisation of Department of Sustainability and the Environment [DSE] personnel and resources and their effectiveness on site at this early stage of the fire was severely compromised by-
- [a] the large number of fire events requiring attention throughout North-Eastern foothill and mountain country.
 - [b] the simultaneous eruption of fires in Gippsland that competed for the allocation of resources
 - [c] the difficulty of vehicular access to some of the more remote spot fires.
- 4.8 The above is not a criticism of DSE response, but statements indicating that due to circumstances beyond the control of the Department, resources became over-stretched at a critical time of the fires' management.
- 4.9 In the end, despite the efforts of DSE, the CFA, other agencies and volunteers that led to the suppression of most of the spot fires, the window of opportunity closed. The hard to get at fires escalated, driven by sporadic bursts of increasing wind velocity. The fires soon amalgamated to form the huge event it later became.
- 4.10 The media carried reports during and after the fire about a lack of cooperation and coordination between the agencies in managing the fires at the fire fronts. Given the magnitude of the lightning event which started the spot fires, and their remoteness in some cases from access, the NEAAVinc submits that without an inordinate amount of good fortune, the containment of all the fires was going to be hard to achieve, no matter how efficient and well coordinated suppression forces were marshalled.
- 4.11 Criticism has also been directed at public land management practices including Parks for the inadequacy of strategic fuel reduction in the past, and that resulting fuel loads had been a major contributing factor to the escalation of fires.
- 4.12 At this point, the NEAAVinc submits it is useful to reflect on the landscape which greeted the first European settlers of North Eastern Victoria. The writer's grand-father, the first European child born in 1864 from the top end of the Kiewa Valley, described the forests of that region as park like, carrying a much lower density of eucalypt stems, and without the dense scrubby under-story so familiar throughout North Eastern Victorian forests that today represent a very different and more highly combustible forest floor than that which existed pre-settlement.

- 4.13 The NEAAVinc submits that the pre-settlement landscape and ecological environment was shaped mainly through fires caused by lightning in particular, but by other agencies as well, being able to burn uncontrolled every year, and in dry seasons, for months on end over vast areas. It is worth noting that our recent experiences demonstrate that forest country burnt the previous year will burn again the following year, albeit at a lower intensity in the absence of high wind velocity. Thus, the forest floor, pre settlement, was frequently subject to fuel reduction by natural forces, over the whole forest estate.
- 4.14 The NEAAVinc submits that Victorian and interstate beekeepers are major commercial users of the state's public land forest estate. The Association submits that in North Eastern Victoria, the Association liaises closely with public land managers in the development and implementation of fuel reduction programs to temporarily avoid fuel reduction burns in areas of forest where eucalypts are budded in some seasons and have the potential to later produce a crop of honey. Liaison occurs because even relatively cool burns have the effect sometimes of destroying the budding on eucalypts, and therefore destroying crop potential.
- 4.15 The NEAAVinc submits the destruction of budding, inflorescence, and immature fruit of eucalypts and other plants through frequent burning [ie, destruction of reproductive processes in given seasons] resulting in a reduction of forests seed banks, most likely would have been a factor in the condition of forests pre-settlement, along with the removal of fuel ^{AND SEEDLING PLANTS} from the forest floor.
- 4.16 The NEAAVinc submits there is a view in some quarters that fire which naturally occurs in conserved forests [Parks etc.] should be allowed to burn unchecked so this dynamic ecological force can do its work, and somehow over time, the parks will revert to their condition pre European settlement. The NEAAVinc submits, the trouble with this view is that in the real world of today, fires starting outside park boundaries must be challenged by suppression in order to protect life and property, and conserved forests no longer burn as frequently as they used to. The NEAAVinc submits that this has resulted in a build up of fuel over vast areas of conserved and reserved forest that never would have occurred during pre European settlement. *IN SOME AREAS OF THE NORTH EAST FOREST ESTATE, FUEL HAD BEEN ACCUMULATING ON THE FOREST FLOOR SINCE THE FIRES OF 1939, A PERIOD OF 64 YEARS.*

5 Terms of Reference [d], [e], and [f].

- 5.1 The NEAAVinc submits it is not feasible for agencies to attempt systematic and frequent fuel reduction across the whole forest estate of North-Eastern Victoria, including the parks. The window of opportunity when managed burns can be safely implemented each autumn is often very small, and in any case, there would simply never be enough community resources available to implement such a large and continuing program.
- 5.2 The NEAAVinc submits the Association is supportive of DSE strategic planning for, and implementation of, fuel reduction programs in North Eastern Victoria in its public endeavour to help protect life and property from the effects of bushfires. Consultation with industry in advance of programs has been historically excellent. The Association submits it has been close enough to the exercise to appreciate the difficulties and balances that have to be taken into account by Departmental personnel during planning and implementation.
- 5.3 The NEAAVinc submits, this Review has the mandate to concentrate on what more can be done to protect life and property, and how to do it as well as possible, bearing in mind that no matter how well prepared the future community may be, bushfires including wildfire will, every summer, continue to menace life and property.
- 5.4 The NEAAVinc submits that where conserved or reserved forest boundaries are in close proximity to settlements, there needs to be more adequate buffers created within the forest estate. This could be achieved for example, through the implementation of annual or possibly biennial fuel reduction burns between earthen [graded] control lines maintained roughly say ½ kilometre apart. As well as reducing hazards for residents, the practice over the long term would have the effect of gradually reverting the ^{local} forest landscape to its pre European settlement condition. Under climatic conditions of high temperatures and wind velocities, crown fires would still occur, but overall, the hazard would be significantly reduced. Such programs, if initiated in North East Victoria or elsewhere for that matter, could serve as long term research studies that should have the capacity to deliver important data, useful to future generations of Australians.

- 5.5 The NEAAVinc submits, that all municipal authorities should be required to take responsibility for assessing respective risks, and through planning mechanisms, set about the task of regulating provisions designed to protect life and property, whether for urban dwellers or persons residing throughout the countryside, and in particular those residing or planning to do so in close proximity to the bush. Co-ordination of consultation between municipal authorities is something the Review might consider.
- 5.6 As discussed earlier, spot fires in North Eastern Victoria were burning for a week in remote areas, unable to be suppressed. As a result, they eventually got out of control, amalgamated, and burnt continuously until autumn rains assisted their extinguishment, in the meantime causing enormous and costly damage and disruption.
- 5.7 The NEAAVinc submits attempts to extinguish or contain such fires would be greatly assisted if strategically located grids of access tracks could be constructed or reopened, even if it meant doing so in areas that have become parks. The Association submits it clearly understands the principles of nature conservation, and that roads or tracks and their impacts conflict with certain objectives of nature conservation. However, the Association further submits that immediate access to remote regions in fire emergencies would deliver overall community benefit if it meant nipping potential wildfire events in the bud, in doing so avoiding the sort of trauma experienced recently in North East Victoria.
- 5.8 The Association further submits that better access may not always facilitate being able to get to the seat of the fire quickly, but it would allow containment measures such as evening back burning from the tracks' perimeter to be performed under benevolent weather conditions. Clearly, a grid system of tracks would serve little purpose under wildfire conditions, but the idea would be to try and prevent that happening. *A GRID SYSTEM OF TRACKS MAY ALSO FACILITATE REGULAR MANAGED FUEL REDUCTION BURNS IN REMOTE AREAS.*

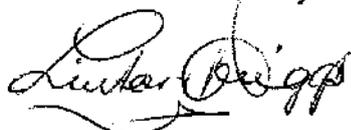
6 Conclusion

- 6.1 The Association thanks Ms Sophie Panopoulos, Federal Member for Indi, for the opportunity to lodge this submission with the Review. Additional commentary on the balance of the terms of reference are not offered, being beyond the expertise of the Association. The Association will look forward to the outcome of the Review. As the submission may have conveyed, its mainstream members spend most of their working lives in native forests and woodlands.

The success of respective commercial enterprises is finely tuned to most of the natural systems and dynamics that impact on forest ecology, including fire.

Appendix 1, consists of a series of photographs taken in the aftermath of the 2003 North Eastern Victorian fires, graphically illustrating damage caused by the fire to one of the Association's member's apiaries. The Association requests permission to lodge supplementary information before the Review, recording the extent of detriment suffered by industry. A copy of this submission has been forwarded to the industry peak body in this state, the Victorian Apiarists' Association Inc.

Yours faithfully

A handwritten signature in cursive script, appearing to read "Linton Briggs".

Linton Briggs. A.M.
Executive councillor.

Reg. No. A0031341A.