

**ENVIRONMENT AND NATURAL RESOURCES COMMITTEE**  
**INQUIRY INTO THE IMPACT OF PUBLIC LAND MANAGEMENT PRACTICES**  
**ON BUSHFIRES IN VICTORIA**

Macedon—20 August 2007

Members

Mr J. Pandazopoulos  
Mr C. Ingram  
Ms D. Petrovich

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Witnesses

Mr G. Jamieson, apiarist; and  
Mr B. McDonald, apiarist.

**The CHAIR**—Welcome, Gavin Jamieson and Bob McDonald. Just formalities; all evidence taken at hearings is protected by parliamentary privilege as provided by the Constitution Act 1975 and, further, by the Parliamentary Committees Act 2003. Any comments you make outside the hearing may not be afforded such privilege. Thank you very much for joining us today. We ask you to present for five minutes or so, and if you can take some questions after that we would appreciate it.

**Mr JAMIESON**—Five minutes?

**The CHAIR**—Five minutes or so; 10 minutes you want?

**Mr JAMIESON**—Right.

**The CHAIR**—There is a half-hour bracket there for you.

**Mr JAMIESON**—My name is Gavin Jamieson. I am a beekeeper and have had an interest in fire for most of my adult life. The position of beekeeping in recent years, particularly since 2000, there has been a huge loss of beekeeping sites. They have been burnt in a range of caused fires; some pure reduction burning fires and some wildfires, mainly wildfires. The loss to beekeeping is considerable in that the recovery of the forests takes anything from five to 20 years and, therefore, the whole industry is lost, the potential to produce honey and the pollination services that the community expects from us. Negotiations with government, or attempted negotiations with government, to try and find alternative sites has been very frustrating and almost non-existent. Yet there are parts of Victoria that have not been burnt that do not have reference areas on them or wilderness areas on them that could be used by beekeeping industry people, individuals and collectively, and we cannot seem to get to square one.

The beekeepers have mixed views on fuel reduction burning, probably because where it occurs, how it occurs, how often it occurs and what the damage is when it does occur. Sometimes if it as per prescription there is no damage and there is quite reasonable acceptance, but when it gets outside the prescribed effects of the burn it is often perhaps as bad as some bushfires. The fire operations or draft plans that are sent to us by some regions have a format that is totally inconsistent across the state. Some districts will show us a plan but not leave the plan with us. Others say it is available at a counter for inspection with anything up to 100 pages that you have to try and take into account whilst standing at a public place. I would think that there is some advantage in having some consistency that contribution by people who have an intimate knowledge and, in some cases, have had intimate knowledge for 40, 50, 60 years of an area should be inputted to this process in a more user-friendly manner. Bob has far more experience than I in that. Bob has been beekeeping for how long?

**Mr McDONALD**—55 years, yes. You want me to come in now. My name is Bob McDonald. I live in Castlemaine. I run a family business with two sons and a wife in the business with us. We run approximately 2000 hives, which is a fairly big business, on Victorian standards at any rate. The main thing I would focus on, I am also the chairman of the beekeepers section of the Victorian Farmers Federation, and the major thing I want to focus on, as far as your terms of reference are concerned, is the economic effects to the beekeeping industry.

Before I get into that I will make one point. In the terms of reference, 8, you say the impact of traditional land users—and you went to everything else other than beekeeper. This is very common, that when it talks about other users of our public land, beekeeper seems to very seldom ever get a mention. I want to point that out, that government and other people think our industry very insignificant. We consider it is very significant. 85 per cent, 90 per cent of our honey is produced from native flora and most of that grows on public lands.

Since the extreme fires started with the Big Desert fire in 2002, we have had burnt out over 500 public land bee sites, which amounts to 15 to 20 per cent of the public land bee sites in Victoria. In our business ourselves we hold a bit over 100 public land bee sites. Although the fires have not affected us greatly as far as the range of country (indistinct) we have had 20 bee sites burnt out: 12 in the Big Desert fire back in December 2002 and five in the north-east fires this past year. Generally, as Gavin said earlier, we have tried to have ongoing discussions with government in relation to establishment of more bee sites or re-establishment of bee sites that disappeared off the map quite a few years ago, mostly in the transition from a lot of places from forest or Crown land to Parks Victoria. We have been battling for at least three years to try to get some ongoing

discussion about that. We have endless discussions that go nowhere.

We feel that that is a point we really need to make. It is having an economic effect on our industry and is dramatic. As most of the country is burnt, a minimum of 10 years before it all can come back into production. Even in the Big Desert heathlands where the experts say five years, because of the drought—when I looked in some of the heathlands this last 12 months, four years after it burnt, and I say it is three years at least with normal rainfall before any of it can be in the state that we could produce honey off it again.

**Mr JAMIESON**—Perhaps to elaborate on part of that point, that is one of the documents entitled the Effects of fire on Victorian Bushland Environments. It mentions nothing about the economic or production effects by fire on beekeeping on public land. In the Code of Forest Practices, Fire Management on Public Land, it mentions nothing about it. I could have brought a whole lot more of these government documents but I thought I would only give you a sample of two practical examples where we get left out. That tends to put us in a negative frame of mind towards the agencies who put these out, which we probably should not express. These map books that have been in part produced by government have great swags of data that was on previous copies. I am not talking about the names and addresses of people; I am talking about the fact that houses exist, thousands of houses that have existed for up to 100 years that are no longer on this database. As a beekeeper I want to know where the house is that I do not want to put my bees too close to it. From a fire service point of view I find it extraordinary that this has been put out and others like it. The data is available but has not been captured by the department. It is departmental government data which is not coming out.

**The CHAIR**—I note in your submission that you highlight that in 06, 07 the Wombat Community Forest—the process for notifying DSE when bee sites are installed and removed, and you recommend that that should be extended to all districts. Can you elaborate a bit on that, and will that solve some of your issues where you may lose sites because of fires or—

**Mr JAMIESON**—I do not think it will have any bearing on it at all. Approximately 40 years ago a very respected forester and person, who was very knowledgeable about fires, happened to have his crew set fire to an area of Gippsland for a fuel reduction burn and, inadvertently, they had not checked whether there were bees on a licensed bee site. The hives got burnt, insurance companies and lawyers got involved, and from that day onwards ever licence that beekeepers get from each of the government agencies in Victoria require us to notify the department that we have bees on the site, but virtually no officers in the state will have, in the past, set up the conditions of a system whereby we can tell them. I have had an officer tell me, 'Tell somebody who cares that you have bees in the forest.'

A number of people have felt this is a good idea and it has now spread to the Brisbane Ranges parks area. The north-west Mallee out at Mildura districts, it was generally working there, but from a practical point of view any management practice that might be impacted by bees or that bees impact on whatever the management practice is, spraying or a public event or something like that, it is basic that the departments should have a process where they record where bees are. That is, when we take bees in at three o'clock this morning, we ring them this morning and tell them. If we take them out in two months time to go to another forest, we tell them. It seems to be extraordinarily difficult to have this happen, even though it is a requirement that we do it. There is no response that is adequate that allows it to happen.

**The CHAIR**—You are really arguing that there is no proper systems in place despite the requirement being around for four years.

**Mr JAMIESON**—There is no system at all. It was purely a trial in the Wombat. It has now spread to the Brisbane Ranges, probably because of Bruce Esland's discussions with a number of beekeepers who had bees in the Brisbane Ranges during the fire. Nobody knew that they were there and yet we pay a fee, we have to be licensed to put them there. That has been done, but we should not have to negotiate with every individual manager right across the state to have this happen.

**Mr INGRAM**—This is about managing public land for better ecological and fire safety outcomes of the inquiry. Clearly you are impacted if the forests are producing pollen blossoms for your bees. How do you see the relationship between healthy forests, and what fire regimes in different areas do you require for that, and your business? I am trying to get the relationship between how productive a forest is for the apiarists and

whether you believe that is a healthy forest ecosystem.

**Mr McDONALD**—As far as eucalypt forests are concerned, I do not think we need fires at all, as far as the beekeeping industry is concerned. As far as the ground flora and shrubs in the forest and the coastal heathlands and the Big Desert heathlands, we need reasonably regular fires. Now, without pinning it down—and I relate back to the Big Desert because I know it very well, for many years. One of the major things we work in the Big Desert are *Banksia ornata*, Desert Banksia. It flowers during the winter. Of all the shrubs and heathlands that grow in there, *Banksia ornata* are but one of the few shrubs that only regenerates from seed. If there is a fire or anything like that, it regenerates from seed. Practically all the other shrubs—your tea-trees, your banksias, you name them all—they will mostly regenerate from the cob space from the old root structure.

Now, in 1982, in that extreme drought we had there, practically all the heathland, or 90 per cent of the heathland, was killed in that drought. There was a huge frost and a freeze and drought, especially on the big flats. The hills were a bit better. They survived. As they grew back, because there was not any fire—now, you need fire to generate banksia seed that is in the cobs, it needs heat for those seeds to be thrown out of the cogs with a chance for regeneration. Without that fire on the big flats practically all the banksia died and, generally, the regrowth came back from the shrubs and banksia was not replaced.

For many years we talked to DSE. We had meetings on regular basis about control burns through the desert, about ecological burns across that big flat to regenerate banksia. Generally speaking, the people on the ground, they agreed with us but they never—well, the impression I gained, they were never game to do it because of the environment lobby opposing it in large tracts of this heathland. Then we got the big fire in December 2002, it burnt 50 per cent of Big Desert, and most of the country wanted ecological burns across—was burnt in that fire. Then what happens after you get a big fire like that, the following winter or the following spring you will have your regrowth. We went into the desert looking for desert banksia seedlings and then went in there, and one of the DSE people in Mildura who has been there for many years, he said to me, 'I think it is too late. I think since the 82 drought the seeds are no longer viable. There is no seed there. I do not think your banksia is going to come back.' But it did 12 months later because of the droughts, the following spring, little seedlings all the way through it.

The seedling did survive but I am not sure whether that will attract—you were talking of what we feel about ecological burns. In heathlands, coastal forests where we rely a lot on the shrubberies and all this thing, ecological burns over a period of years, and it can go 20 or 30—this four or five years is not—20, 30, 40 years or something like that is necessary for proper regeneration.

**Mr INGRAM**—You prefer bits that were under, that you get the use of the term 'mosaic' in those areas so that you still have areas that are producing blossoms and flowers for your bees. To go back to your comments about eucalypt forests, do you want to expand on that? Whilst you have outlined it here, you probably have not outlined the real impact of the fire on your production and what is happening at the moment.

**Mr JAMIESON**—If a tree has a large healthy canopy, it is going to have a lot of reproduction, that is a lot of leaf, a lot of buds, hopefully a lot of flowers are produced for nectar and pollen that we need. If it does not have a good-sized healthy canopy, it is not going to be as productive. Where fuel reduction burning is too hot and the canopy is destroyed from the tree, the tree has to reform and that takes three to five years to occur, in most eucalypt species. In some it is a lot longer; some it might be closer to 15 years. But there are natural pests such as lerp that defoliate the tree. We are competing with other destroyers of the health of the canopy of the tree. In East Gippsland this year, for instance, the bloodwood was about to flower and a huge area was burnt. No map was provided to the Regional Association of Beekeepers for them to share with their members. Only their committee was shown a copy and the officer took the copy home. They could not share it with the beekeepers to forewarn them that fuel reduction burning was going to going on at a time when they were probably going to have bees there.

That is sad when you have been looking at the trees—like I did look at these trees out here while we were waiting with the other speakers and noticed that there is buds on those. Now, most people would not look at a tree out the window to see whether it has buds, but we are looking years ahead to see what the crop potential is going to be. Then to have it destroyed in whatever fire—and that is nothing; we are going to have more

wildfires potentially in the future than we have had in the past. It is a bigger threat with climate change, that we are going to have more of this conflict.

**Mr McDONALD**—The important thing in eucalypt forest is to understand the flowering habits of our eucalypts. They do not flower annually; they flower spasmodically and they always set bud on new growth. In other words, you have to get the new growth in the spring and then, as the warmer weather comes and there is a check in the growth, that is when, if the trees are going to set bud, they will set that bud over late November, December, January. That is a generalisation. There is a bit more variation in species than that. They will carry the buds from some trees, six or eight—not many. We only have summer-flowering ironbark, bloodwood and maybe grey box. They have very short—well, that is five or six months, but then up to 12 months in some cases. The yellow stringy-bark in Gippsland sets its buds two years hence and some of the Mallee species are two years and three years down the track, and that is a survival mechanism, really. There is no need to go on with that.

The important thing is, we use these bee sites very spasmodically. Some sites we might use annually, most of them two years, three or four years time, but in the box-ironbark forest you might have—well, most forest systems you have five or six different trees growing in a forage area of bee sites. You might use it over a period of four or five years three or four times but you are focusing on different flowering patterns. That explains to you how the system really works. This is why we migrate bees so much and this is why we quite often do not appear to be in a forest when the land manager is there. They do not even know when we are there or when we are going to be there.

**Mr JAMIESON**—In the case of the bloodwood, a short duration between the bud forming and the flower happening, it makes it difficult to input to a three-year rolling plan how relevant it is because it is yet to come. We learn to put up with not being necessarily considered in that. In one case four truckloads of bees had travelled approximately 700 kilometres to install bees—this is earlier this year—in Gippsland, only to find that the fire crews were arriving at the same time that the beekeepers were about to track back the 700 kilometres to their home base. There were rude words said by both parties because of the shock, 'What do we do next?' The schedule was for the fire to occur. It had to occur. The beekeeper does not have enough clearing around to make it safe. Attempts were made to come to a compromise. That is unfortunate that that should have to happen, again in a confrontational situation, when it should have been planned and communicated better.

In the 1930s every district forester had to know what in his district was going to flower in the next three months and he had to report to head office with it. That science, that skill is lost and, therefore, the manager does not know what is going to happen. He could know but he or she does not.

**Mr WALSH**—Gavin, you spoke about the problems in negotiations for all new bee sites when other sites have been lost because of the fires. What are the reasons that you have been given that you cannot get anywhere with those negotiations?

**Mr JAMIESON**—When you write a letter to the ministerial taskforce and you do not get a response—

**Mr WALSH**—This is the bushfire taskforce?

**Mr JAMIESON**—I cannot answer your question when we have not had a response, communications. It has been repeated.

**Mr McDONALD**—In the submission we put forward to Minister Thwaites after the Grampians fires, we were told that in 1993 there was bipartisan support between DSE, or whatever they were called in those years, and the beekeepers that the number of public land bee sites in Victoria remained static. Because that bipartisan agreement was made in 1993, nothing could change. I got two letters over time from, more or less, the government or bureaucrats representing the government saying exactly that, 'Because of that, there is no reason why the system should be reviewed.'

**Mr JAMIESON**—In a *Weekly Times* article earlier this year in an interview by a couple of different

beekeepers, including Bob, the government spokesman, whoever that is, said that there is no electronic database for bee sites. The way I book bee sites is going to a publicly available computer out at the DSE office and usually a staff member will help me drive it, but it is publicly available. There is an electronic database which shows where every bee site in the state.

**Mr WALSH**—It would not be that hard then to modify that to log where you are putting bees at any one time.

**Mr JAMIESON**—No, but, firstly, after the 2003 fires we were told that there were 700 vacant bee sites. Last year there were still, miraculously, exactly the same number of bee sites. I approached somebody in government and was told, 'No. The minister has said this is right. There are 700 bee sites that those that have been burnt out can get access to.' I said, 'Well, the industry body believes that is not a fact. I will go and ring every DSE office in the state that has dealings with bee sites.' The number was 268, of which two or three either side of 180 had been burnt out three years earlier. If you take 180 from 268, that was the number of vacant bee sites in the state.

**Mr WALSH**—Instead of your being told 700.

**Mr JAMIESON**—Officially the industry body was told, after the 2003 and 2006 fires, that there were 700 available for those that had been burnt out, but when those went to offices to say, 'Well, where are these sites,' because with the offer—and we paid for them. They are not giveaways. We had to pay for them. That is the way we want it. We do not want a giveaway. We do not want charity. We just want a fair go. Now, I do not know where we go from there when there will be fires again. What is the procedure next time? There should be some agreed position of how we resolve this and not be bickering after fires.

**Mr WALSH**—How would you see that agreed position being developed?

**Mr JAMIESON**—A direction from an appropriate ministers, because there is not just one minister involved. There is the conservation ministry, there is the ag ministry and then there is the land minister and ministers as the real estate agent for the state. There are three parties involved and that probably makes it a challenge, but if there was a memorandum of understanding between the industry body, that there was a working party and perhaps the VFF could be involved in it as well—because the VFF very much, with horticulture, has to have bees for their existence, and without a viable beekeeping industry, that is a threat. The Commonwealth government are in the midst of an inquiry into the ramifications to horticulture of that at the moment.

**Mr McDONALD**—I can quote national parks or regional parks—and all national parks or regional parks, when they allow bee sites—there is a set number of bee sites in it. I can quote several of these parks that there is a set number of bee sites in it. In one case there is eight bee sites in it, or supposed to be, according to their records. There is five been allotted. You approach the local ranger to allot the other three and he flatly refuses because he reckons five is enough and—this is verbal—'We are eventually going to fade all these sites out so we are not going to allot any more.' I can quote several parks where that policy has been—when beekeepers have tried to get some of these supposedly vacant sites, that is the answer they got.

**Mr JAMIESON**—This forum in 1975 on the Grampians talked about 250 sites. I can hand this up for perusal if necessary.

**The CHAIR**—Just if you would mention the title of it and the year and who the author is, for the record.

**Mr JAMIESON**—It is a forum, Multi-use management of public lands: relationship to flora, fauna and landscape; Case study: the Grampians State Forest, September and October 1975. There were a range of speakers, including Dr Moulds, who was the chairman of the Forestry Commission, and Mr Don Langridge from the Department of Agriculture. There were a whole range of people who spoke over the two weekends but in that case there were over 250 beekeeping sites on Crown land and on forest within the area that we now know to be the Grampians. We have gone from 250 to 100. Of the hundred the majority have been burnt out, but those parts of the Grampians that have not been burnt in the Mount Lubra fire cannot be accessed and the

department will not discuss shifting the site from here, until it recovers, to another area. That has been done in the Big Desert. It has been done in the Little Desert in the past, with understanding, but it seems not to be possible to do that so far.

Now, in the case of the Grampians there is a species called *Leptospermum scoparium*, or manuka tea-tree, which the Sydney university research team and the New Zealanders are marketing as a medically active honey and which the medical science profession want for antibiotic-resistant bugs including golden staph. It is not just beekeepers earning an income; there is a wider community benefit. Many of those areas of the Grampians are now proposed to be burnt that have not been burnt that contain this special species.

**Ms PETROVICH**—How sure is the long-term sustainability of beekeeping after fires if alternate sites are not made available to beekeepers?

**Mr McDONALD**—We seem to be able to adapt, and that is our problem. Look at what happened in Gippsland this year. There is 172 bee sites burnt out in the fires in Gippsland. When the fires first developed—that is the fire north of Glenmaggie, up in there—a lot of beekeepers were on bee sites working yellow box honey. It was flowering and it was the best flower it had been for years and they were producing honey and they had to shift all their beehives away in the front of that fire. One beekeeper even picked bees up and shifted them on to safer country. They were still in yellow box. Then that deliberately lit fire that was lit a few days after has come through and burnt all the 90-odd hives that he left there. Other beekeepers shifted bees out full of honey, and because they were full of honey, they could not put all the beehives on the truck and had to leave 20 or 30 because of the overweight problem and had those 20 or 30 burnt.

A major factor, although there were not many beehives burnt, their summer crop, which was yellow box, was completely lost. Then as the fire went—and their prospects for autumn was messmate and some brown stringy-bark north of Bruthen and in that country back near Swifts Creek and in there. The wildfire that came through there burnt most of that out. A lot of beekeepers, all they did was shift their bees out onto the Clover Flats around Maffra and in there and just got enough sustenance there to sustain the bees through the summer and autumn, and in a lot of cases had to feed them to get through the winter. A few of the beekeepers in the eastern states were lucky; they got some round-leaf box and some mahogany—we were talking about it a bit earlier—used with a little bit of honey in the autumn and a few things like that. But a percentage of the beekeepers did not produce any substantial crop for the year, and there is an economic cost.

As far as our desert banksia, although it has not been very good for the last few years because of the drought, it flowers annually and we have only—we had 12 sites burnt. We had 18 altogether and we have only six left. Now that we have decent rains there is a good chance the banksia could be available next autumn. We still only have enough bee sites for about a third of our beehives. It is going to have an effect if the banksia over in the deserts, autumn comes next winter, to us. It is having a definite effect on the income. As far as the Grampians fire, the beekeepers are used to using that tea-tree which flowers annually. They never produced any this year and it is usually sold at a premium price, and it will be a few years before it is produced. We usually have four or five gos at getting a crop a year. We usually shift bees about six times during the year onto prospects. Generally we try and get enough to get by on. At the present moment, because of the drought in New South Wales and Queensland, there is a true shortage of honey and the prices are going up a bit. That compensates a little bit and generally we manage.

I get a little bit cynical sometimes too. Because of the fact that we can shift bees and we shift bees very readily—supposedly, I never heard it, but after the fires in the north-east there was some discussion with DSE people about helping farmers and generally speaking, and someone asked the question, 'What about the beekeepers? What are you going to do help them? They have lost their bee sites,' and the answer was, 'There is no problem with them. They can pick their bees up and shift them. They can even go interstate if they want to.' Now, I was told later that that comment was taken out of context with other discussion, but then another person, a DPI person in Melbourne, had heard it. He said it was not out of context; it was said as bluntly as that, that there was no need to help the beekeepers.

**Ms PETROVICH**—As an add-on to that, what role do bees play in the sustainability of the forest and its biodiversity?

**Mr JAMIESON**—There is one species that grows in the western district basalt plains, within the endangered community of basalt grasslands, kangaroo grasslands, that research, unpublished unfortunately at this stage, has supported the fact that this endangered species only exists because of feral—unfortunately feral—bee pollination. In some cases European honey bees are very essential for ecological benefits to occur. There are some people who believe that there should be no European honey bees in the native system in Australia. Well, about 62 per cent of all our food crops require bee pollination. If we are looking at our plant foods, we need them for survival. There are not very many alternatives, unless we are going to import all our food, which is—there would be nothing wrong with that, would there?

**Mr WALSH**—Yes, there would.

**Ms PETROVICH**—Yes, there would. Thank you very much.

**The CHAIR**—You are leading the witness.

**Mr McDONALD**—I firmly believe that when European man came into Australia—it all depends where you sit—we destroyed a lot of our forests. I do not really think we went as badly as that but I do feel that—this is going back in the early 1800s—some of the native pollinators have disappeared over time. The European honeybee has replaced them. When you look at seed set in all the native flora and rival seed set, I think the European honeybee helps biodiversity to a very great extent. Although over time there has been quite a lot of research done to find a negative impact with the European honeybee on the natural ecosystem, no-one has ever proven that there is a negative impact. In a lot of cases it has been definitely proven there is a positive impact.

**Mr JAMIESON**—There should be another example of that. It is hard to get seed to set and yet there has been trial work to try and improve the seed set of Mountain Ash and post-logging.

**Mr McDONALD**—I firmly believe the European honeybee, although it is an introduced species, has a benign effect on the native and actual ecosystem and in a lot of cases has a beneficial effect which has never been met or measured.

**Mr JAMIESON**—The CSIRO some years at Armidale—quite some years ago, 25 years ago—observed that in north-eastern New South Wales, Armidale, the New England district, that dieback of eucalypts in forests and farms and on roadsides was occurring. The beekeeping industry had observed a great downturn in honey production because the trees were unhealthy. It then became what we know as dieback but it was the beekeeper who knew what was going on with the ecology, that it was not healthy, something had changed. In some senses bee activity and bee production is an excellent monitor of the ecosystem—at least the trees, the plants anyway.

**The CHAIR**—We might wind up there, Gavin and Bob. Thank you very much for your presentation. You will receive transcripts in the next couple of weeks with instructions of what to do with it. We might take a 15-minute break, so join us for morning tea. We will resume at 11.

**Witnesses withdrew.**

**Hearing suspended.**