

# **ENVIRONMENT, NATURAL RESOURCES AND REGIONAL DEVELOPMENT COMMITTEE**

## **Subcommittee**

### **Inquiry into the control of invasive animals on Crown land**

Sale — 6 October 2016

#### Members

Ms Bronwyn Halfpenny — Chair

Mr Tim McCurdy — Deputy Chair

Mr Simon Ramsay

Mr Tim Richardson

Mr Bill Tilley

Ms Vicki Ward

Mr Daniel Young

#### Staff

Executive officer: Dr Christopher Gribbin

#### Witnesses

Ms Jenni Reside, co-director, and

Mr Jim Reside, co-director, Wildlife Unlimited Pty Ltd.

**The CHAIR** — We will now reconvene the public hearings of the inquiry into invasive animals. I would like to welcome Ms Jenni Reside and Mr Jim Reside. Thank you for coming in to present to us today. There are just a few formalities in terms of the parliamentary committees legislation that I need to advise you of. Under the parliamentary committees legislation anything you present or say today is covered by parliamentary privilege. However, if you speak outside this hearing, what you say is not covered by parliamentary privilege. Also, what you say will be recorded. The proofs of the transcript will be sent to you prior to it being publicly available, so you can just check for any inaccuracies. The Hansard staff are very good, so I doubt that you will find any inaccuracies.

If you do not mind saying a few words first, and then we may ask some questions. If you can just start with perhaps a bit of an introduction about yourselves and your company.

**Ms RESIDE** — My name is Jenni Reside. I am co-director of a small company, Wildlife Unlimited Pty Ltd. Our company activities are based around protecting, assessing and monitoring wildlife and natural habitats. We are consultants that work on projects from various customers. These include government agencies, quasi-government agencies, private companies, landholders, non-profit organisations and educational institutions. Our activities include education research, monitoring, habitat assessment, habitat improvement and reduction of pest plants and animals.

The issue that I would like to be addressed today is the one that we are currently involved with, which is a project across several government agencies to reduce the number of feral pigs in the Alpine National Park. I was very excited with this project because pigs are such a problem, and then to my horrified surprise, on coming back to research and finding the most effective way to reduce pig populations in the area that we are baiting, I found that we are not allowed to use that most effective way in Victoria, because it is illegal, as I have been told. That involves the use of grain fermented with poison 1080. It is used extensively in other parts of Australia with good success. Then when I looked at the relevant legislation, I could not find anything that actually stated that it is not legal in Victoria.

After talking to lots of different people, I connected to a senior policy officer from the agricultural and rural division of the Department of Economic Development, Jobs, Transport and Resources. I have got it written down if you need that again. We had a long conversation, and he explained why it was not legal. I still thought I would love to have the money to actually go and present it to a court of law and get a decision on it, but time and money is an issue.

My understanding of the issues, as he explained them, was that it was because there is a commercially available bait, PIGOUT. It was because the department of health did not licence the production of poisoned grain, so already we are talking about two government departments. The legislation does not state that poisoned grain cannot be used, so if it does not say it cannot, one could I think easily assume that it could be used — and that 1080 bait should not be used off-label. He also said that the *Victoria Government Gazette* states that poisoned grain is not to be used as pig bait. The *Government Gazette* is not something that would actually come up in my research in normal terms either.

**The CHAIR** — Can I just clear something up: the 1080 poison is used but not through grain? Is that right?

**Ms RESIDE** — Yes. It is legal in Victoria, but not putting 1080 into grain to poison it.

**The CHAIR** — Okay, sorry. I just wanted clarification.

**Ms RESIDE** — No, do not be sorry. I am more than happy. That is why I have got the expert witness too if there are any other things. But he could not actually give me specific legislation that forbids the use of poisoned grain. He did give me six pieces of legislation to read, which I did, which again I felt really did not clearly state that 1080 poisoned grain should not be used. The legislation that I am most involved with is the 1080 chemical users certificate that gives you permission to use it for baits et cetera. It does not state anywhere that poisoned grain should not be used.

**The CHAIR** — Can I just ask another question: so no poisoning in grain can be used? Not just the 1080?

**Mr RESIDE** — No, you can use grain to poison rabbits.

**The CHAIR** — Okay, thank you.

**Mr RAMSAY** — And game.

**Mr RESIDE** — Yes, you can do it.

**The CHAIR** — I am from Thomastown, so I am a little bit new to some of this sort of stuff, so I apologise for basic questions.

**Ms RESIDE** — That is fine. Pigs absolutely love grain. They will just do anything for it, seemingly. Okay, so it does not talk about poison grain, but it does talk about shelf-stable baits, and my understanding of poison grain is it is a shelf-stable bait. Even though it does not state that you can use the 1080 poison grain, it says you can use shelf-stable baits but does not actually describe what the shelf-stable bait is as such. The legislation is very difficult to find things in and takes a lot of time to sift through. And it is not just one piece of legislation, it is across a few departments, so it is very confusing. It also means that if it is not clarified, we might find that people will be using it with the belief that it is okay, and it is not. Also New South Wales, Queensland, Western Australia and Australian Capital Territory all use poison grain.

I will just give a bit of background about baiting and stuff. One of the biggest issues when baiting pest animals is to ensure that there are no non-target animals taking the bait. This is obviously what we want to do. We want to save native animals, and that is why we are baiting. It is also an issue because we do not know the other aspects of what is going to happen, like we do not want cats. Cats and foxes both take PIGOUT baits, and foxes, as you may already know, actually cache baits. They take it away to a little hideaway and bury it. If the fox has eaten any of the PIGOUT bait, it then can die because of the poison it has ingested, and meanwhile the baits are hidden somewhere where we cannot find them and are available to other animals to find. Cats will take the PIGOUT baits, drag the PIGOUT baits away, have a little nibble on the outside and then decide, 'I've had enough, I don't want it', and off they go, leaving it open for other animals to eat.

The PIGOUT baits are very large because for the pigs to be able to ingest enough poison you have to have a fairly big bait, and it is fairly difficult to try and stop that. The other thing is PIGOUT bait is not actually the preferred bait of pigs. Pigs will take it but not if there are other options around, which makes it very difficult in bushland. PIGOUT bait is commercially available, and it is made with fish-based emulsifier in grain and covered with sausage skin. Other people that do baiting nearly all say that PIGOUT baits are not something that they would use because of the difficulties and because it is primarily not the first choice of feed for pigs. It may be better in agricultural areas, but when we are talking about bushland areas it does not work.

The other thing is cache baits. Goannas, birds, quolls and other animals will take the PIGOUT baits or eat the PIGOUT baits if they are available. When using 1080 you must make sure that you know that your baits have been taken by the target animal and that you clean up anything that has not been taken. Of course if you have any animals taking it off, it is impossible to do it.

In my research I was looking for things, and there was a pamphlet put out by the federal Department of Sustainability, Environment, Water, Population and Communities, which comes from the *Threat abatement plan for predation, habitat degradation, competition and disease transmission by feral pigs*.

**The CHAIR** — Sorry, is this the one that you sent to us? Do we have it now? Yes, good.

**Ms RESIDE** — Yes, you would have that one.

**The CHAIR** — The feral pigs one.

**Ms RESIDE** — It recommends to use poison grain.

**The CHAIR** — Okay.

**Ms RESIDE** — You also have another document there from PestSmart. Again, it recommends to use poison grain. So you saw that in your set-ups, yes. I would just explain the procedure when it comes to feeding. The grain attracts the pigs. Basically, when feeding pigs poison grain, the first thing that we do is identify the pig's activity, so we look for the pig-rooting and other activity. We then put cameras up to identify how many pigs and what is happening. When you identify the pig activity then you identify sites for bait stations. Then you put out the free feeds, which are the non-poison bait. Then you monitor that to see what takes it and keep replacing the free feeds to encourage the pigs to keep coming back, coming back. Then once the behaviour is established, introduce covers over the free feed, so you put boxes over the grain so no other animals can get it, because the pigs will dig underneath it to get it. Again, this is monitored closely. Then when you want to put the poison wheat out, or the poison grain out, you then peg those containers down because the pigs know the wheat is there and the pigs will dig into that. After the pigs have gone through a bait station like that there is hardly any grain left, so they have ingested nearly all of it. Then after the pigs taken the bait you go back and collect all the grain and dispose as per regulations and as legislation states. So there is very limited possibility for non-target animals to access it.

I will not go over what damage feral pigs do because I think you probably understand that, but you can ask Jim if you like. I just would like to reiterate that it is important that feral pigs have a long-term management plan. We do not want something for 6 months or 12 months. We are talking 5 years, maybe 10 years, I am not sure, because the population within 12 months can replace itself with migration and breeding. They breed a bit like rabbits, but not quite as many. It is important that we keep the pig populations in Victoria isolated so we can eradicate them all and reduce them to very small.

It is also really important for us to be able to use a range of measures. The poison grain is not the only measure, but it is one of the tools we need if we want to eradicate pigs. There are other control measures, such as shooting, trapping, poisoning — all those sorts of things — but it depends on the habitat and what the pig's activity is and those sorts of things. I would like the committee to actually make it legal for us to use poison grain in Victoria.

**The CHAIR** — Okay, thanks. Would you like to add something or will we go straight to questions?

**Mr RESIDE** — Just to point out a little bit about the pigs in Victoria. In East Gippsland they are a bit of a sleeper. People are not really aware of the incursion of feral pigs into East Gippsland, but they seem to be coming down the Snowy River valley and then spreading out into that High Country area around Deddick-Bendoc country. They have occupied a lot that space down there. Now they are pushing further south, further down even below McKillops Bridge, so they are now down in close proximity to Wulgulmerang and the Gelantipy plateau, so they have made great inroads and they seem to be following these corridors very, very effectively. Although they are yet to have a significant impact on agricultural land, it is only a matter of time if that movement is not sort of impacted upon. If we do not do something to control these early numbers, once they get established it will be a huge problem. Once they get up onto the Gelantipy plateau they can then head south, down to the proximity of the Gippsland Lakes.

**The CHAIR** — First of all, thanks for coming in and showing real initiative to come up with a proposal, a concrete thing, that we can consider. Just a couple of questions. In terms of pig numbers we are getting an indication that there is not a lot of research being done on many of the invasive animals. Do you think it is worthwhile spending the money and the time in doing that sort of research, or do know anecdotally in terms of feral pigs to deal with the problem?

**Mr RESIDE** — DELWP, the government department, is very supportive of monitoring. They believe that is a high priority, because that is absolutely true. We do not have a real good picture on the numbers of pigs and their exact distribution. We actually started doing that this year with the camera monitoring, so we did a lot of trans-X along the Snowy and Wombargo and the Deddick areas and we set up cameras to look at how many pigs were coming through, whether they were sedentary mobs or just individual animals

moving through. Yes, getting that information is critical — absolutely critical — so we can work out where the heart of the problem is where we need to start our control works to make them most effective.

**Ms RESIDE** — Can I just add to that. There are people within the department who would also like to use poison grain, and they are unable to.

**The CHAIR** — Okay. Just in terms of the management of feral pigs, putting aside the poison grain in terms of the shooting or —

**Ms RESIDE** — Tracking.

**The CHAIR** — tracking or whatever, could you give us a bit of an overview of your thoughts on what is most effective, what is not and why?

**Mr RESIDE** — Shooting is pretty counterproductive in forested environments. It works in more open, arid range lands where they can conduct aerial shooting. But shooting in forested environments generally has the effect of dispersing groups of pigs. If shooters disturb them, they generally do not get the whole mob. They get some of the mob and the others run off and form new little subgroups somewhere else, so it ends up just moving them around all over the place.

Trapping can be quite effective, and trapping has been conducted in Victoria for a number of years, but it is very labour-intensive and you are also sort of locked into just very small areas. You cannot spread out as much.

With the baiting you can do it in a landscape approach, so you can cover the whole landscape. You can cover river corridors and track networks. Wherever you have got access you can go and deploy bait stations. The work we were doing involved remote baiting along the river itself using a canoe to actually get to these different stations, but it is still quite an effective technique because you can do 30 or 40 different sites at the one time. If they are not disturbed the pigs just do not move. They have got their own little area of the river — a few hundred metres — and they just do not move. If they have got the right habitat and the right food resources, they just stay there, and if you are just coming in quietly to check the cameras and putting bait out, they are quite happy. But as soon as there is a disturbance factor they are gone — boom, they just disappear. That makes shooting pretty ineffective as a control technique by itself. In some cases where you might be down to just the last three or four animals — you know, we know where they are — a shooter accompanied by a good scent dog can track those last handful of animals down, but otherwise you just move them all over the landscape.

Yes, trapping does work, but to trap pigs you need a very big, solid, heavy structure that once it is set up, that is where it stays, and you have got to rely on the pigs coming to it. Again, you can only deploy so many traps. It is a lot of work. And then you have got to go back and check them all the time.

**The CHAIR** — Okay. Then in terms of the poison grain, that would improve things by, one, the pigs like it better; and two, there is less chance of other animals moving it around to other places, and they do not like eating it, I assume.

**Ms RESIDE** — Yes.

**The CHAIR** — Okay, thank you.

**Mr RAMSAY** — Thank you for your presentation. The previous witness indicated that wild pigs may well be our biggest problem, over and above wild dogs and deer, not to mention the potential foot-and-mouth spread of disease in some of our more outback areas, given we have little control of wild pigs across the country.

Now, I am not familiar with the use of 1080 and grain used as a bait for any animal in Victoria. I could be wrong. I know that they use pindone with grain and they use 1080 with carrots and other means for rabbits, foxes, and meat and 1080 for foxes. I am not familiar with grain as such with 1080 in Victoria, but I will

stand to be corrected on that. I also understand there is a movement away from the sodium fluoroacetate, say, to a sort of sodium nitrate chemical, which is less invasive and also quicker acting. I think for 1080 they indicate about six days slow death, if you like, and for the sodium nitrate anything from one to two, so there seems to be a shift away from our traditional 1080 chemical to perhaps a less invasive chemical.

**Ms RESIDE** — I think that actually has been a push by animal activists that do not want animals to be harmed, because I think there is a misbelief that 1080 hurts the animal. I am not saying the death that animals have with 1080 is a pleasant-looking death, but it does not affect them because it actually knocks the centres out of their brain first. They go into fits and things like that, but they do not actually feel it.

**Mr RAMSAY** — I suggest we probably will have witnesses this afternoon who might have a different view about that.

**Ms RESIDE** — They may do, but that is my understanding. I have research. I mean, it is not something I have just come up with. It is something I have researched in the past.

**Mr RAMSAY** — I am not disputing the fact that baits are not effective. It is more the manner of the bait.

**Ms RESIDE** — Fair enough.

**Mr RAMSAY** — I guess that is the issue that perhaps the Victorian regulation has at the moment in relation to non-use of wheat or grains for pig bait, but I will stand corrected on that. I must say the previous witness indicated that he felt shooting was perhaps the best option for wild pigs, but you are indicating baiting — strategic station baiting, not trail baiting — is probably a better alternative.

**Ms RESIDE** — Again, it depends what area it is, because, as Jim said, in agricultural areas where you can see where the group of pigs are and things like that it would be one of the tools to use, but actually in forested areas, unless you have got it down for a population of between three to five pigs, it is not effective.

**Mr RAMSAY** — Can you just remind me again? Is the reason Victoria does not have wheat as a grain for use for 1080 is that it is non-targeted, principally?

**Ms RESIDE** — No, it was not actually stated as such. It was just that there was the PIGOUT bait commercially available, so you should sort of use that. The department of health did not license people that produced the 1080 baits to put them in grain. I do not think that is clear either, but I am not one of the producers so I am not going there. It does not say in the legislation that you can use poison grain. It does not state that you can use it, but it also does not state that you cannot really. It also states that 1080 baits should not be used off the label. My understanding is that the label does not preclude it from being put into grain. That is my understanding. There is a statement in the *Victoria Government Gazette* that does say you cannot use poison grain as pig bait, but it does not say you cannot use it for other purposes. It is very messy.

**Mr RAMSAY** — It is probably one of the areas we will look at, given your submission and your testimony this afternoon.

**Ms RESIDE** — That would be good.

**Mr RAMSAY** — It is not my expertise, but I do know that there is a reluctance by the regulators to have 1080 grain being used.

**Ms RESIDE** — I think maybe they perceive it as more readily available to non-target animals, but again, all 1080 has the potential to go to non-target animals. It is about following the strategies and procedures very, very closely to prevent that.

**Mr RAMSAY** — All right; thank you. I am sure we will hear more evidence as the day goes on about the use of baiting. Do you know what the financial impact of wild pigs is in this specific area or in the area catchment that you work in?

**Mr RESIDE** — Do you mean to the primary producers?

**Mr RAMSAY** — Yes, and the environmental costs. Has there been any work done in relation to the financial costs of wild pigs?

**Mr RESIDE** — Well, that is the problem. There has not been a lot of work done to look at what they are actually doing to the environment. I suspect there are quite small amounts of damage being done to agricultural lands at the moment because they are still mostly on Crown land, but nobody has really looked, on the ground, at what they are targeting. They are incredibly destructive, as we know, and they have a preference for riparian areas — so the river flats and the damp gullies — and it does not take many pigs to destroy a whole gully. I suspect that anything small, like our orchids, herbs and regenerating riparian plants, will be doing it really, really tough.

Along the Snowy River, one of the most distressing things is that they are ripping up the reed beds that protect the river banks. You do not even have to get out of the canoe to see the damage the pigs are doing to the riverbank. They are coming right down to the water and rooting up the cumbungi and the phragmites and the smaller aquatic emerging plants. That in itself has got to be really quite damaging to anything that uses the riverbank itself or in terms of just protecting the river from erosion. It is quite damaging.

I just have another thing to add about the use of this technique for wild pigs. I have got a feeling that the legislation has not caught up with the threat. I have got a feeling that nobody is worried about feral pigs at the moment. They are there and somebody has seen them, but they are not really an issue in Victoria in a big way like they are in the ACT and New South Wales, just over our border. Nobody has really sat down to say, 'Hey, we've got a crisis here. We need to look at all the things that are being done to control feral pigs'. With the technique that we trialled using grain on the Snowy River, we got all the information from ACT, from their pest plan animal managers up there. They showed us and told us how to do it, and they have knocked their feral pig population down by about 80 to 85 per cent in the last 15 years — very, very effectively in a landscape approach across the Namadgi National Park and other areas of the ACT, using this grain-under-buckets approach. They have sent us videos and all sorts of stuff that shows how to do it, and we just went and copied their technique and trialled it and it worked really, really well. It is all on camera, so you set the footage up and you can see the response of the pigs coming into the — —

**Mr RAMSAY** — Is it just wheat that is banned or is it grain principally?

**Mr RESIDE** — Well, you can use oats for rabbits, from my understanding. Oats is a shelf-stable bait; 1080 too for rabbits. It is just not pigs. Pigs are not listed on the — —

**Mr RAMSAY** — Yes, but the grain itself. Can I mix 1080 with barley and feed it to pigs?

**Mr RESIDE** — No.

**Mr RAMSAY** — So it is any grain, not just wheat.

**Mr RESIDE** — Yes, it is any grain.

**Mr RAMSAY** — You are just focused on wheat, I assume, because it is a more attractive resource to pigs.

**Mr RESIDE** — Yes, and barley would work, I am sure. Oats might work.

**Ms RESIDE** — My understanding would be that you could use 1080 poison wheat to feed to rabbits if you wanted to. That is what I think. But it is the pig factor that is the problem, I think. That is just my interpretation of the legal bits. Like I said, I think if I had the time and energy to put it through a court of law it would be interesting when you have a lot of legal people looking at it to see what they would make of it. I have not actually spoken to any legal-type person. People have only got information from their legal departments and things like that.

**Mr RAMSAY** — It might be worth us venturing an opinion from the regulators — from chem vets, to see what their — —

**Ms RESIDE** — It might be a simple thing — somebody to say, ‘Look, it’s okay to actually do it now’. One of the first instances of when we found out that there could have been a problem with this was when somebody within the department said, ‘How come you can do it and we can’t?’. We were like, ‘What?’. Because they wanted to know what we did. With all this we were advised that we can put in for a permit through the feds to be able to use poison wheat, but it costs us \$1000 to apply for this said permit. And the permit that you apply for asks for off-label use, but for the feds it is not off-label, so you are sort of asking for something that they already do, and it just makes it more complicated, plus you could waste your \$1000 in doing so.

**Mr RAMSAY** — And the chemical users course and a few other things are attached to it.

**The CHAIR** — I think we are seeing Parks Victoria next Monday so maybe — —

**Ms RESIDE** — The chemical users course says ‘shelf-stable baits’; it does not say ‘grain’. But my understanding and interpretation of that is that grain is a shelf-stable bait, and I have not found anybody to say different, that it is not a shelf-stable bait. Even when I was having the discussion with the gentleman from the agricultural department he did not say it was not shelf stable.

**Mr RAMSAY** — Thank you. Can I reserve my right to ask a question after Daniel and you have finished?

**The CHAIR** — Of course, yes.

**Mr YOUNG** — Thanks for coming in today and talking to us. I really do not have any knowledge of how baiting is done for pigs, and you have given us good sort of brief introduction to that, so it was interesting to hear the methods. But I do have a couple questions about it. You talk about pigs living in groups and you want to target the specific areas where they habitually come to. Do you have to have a certain density of pigs or a certain number of them in a particular area for this type of method to be effective?

**Mr RESIDE** — No, because it is all done by camera monitoring, so you know the size of the mob that is hanging around and you know the sizes of the different individual animals and their sexes usually: boars, sows, piglets or young pigs. And then you deploy your bait in a manner that allows them all to spread out and feed at the same time. So the way we do it is we put out multiple piles of bait and we watch the pigs feeding and ensure that they are all able to get to the food. So if you have got three to five pigs you might put out three bait stations. In one case we had 20 pigs so we put out seven or eight bait stations and then the pigs come and they radiate out to get to the food, so you can control any number of pigs but you just change your deployment tactic accordingly.

**Mr YOUNG** — With the appropriate number and size of it?

**Mr RESIDE** — Yes. And you might start with your bait stations only 300 metres apart if there is a lot of sign, 300 to 400 metres, but then if the same mob of pigs is going to those two bait stations, or those three, you take out two and leave one so they are forced to come to one, and then the next mob of pigs is further away and you deal with them. To prevent secondary poisoning and leaving unattended bait, uneaten bait, out, you spread out your stations when it comes to the poisoning. It is a slow process, so you do not just go out and dump the poison. You go out and you do your free feeding night after night until you have got this pattern emerging. We use fish bins, plastic fish bins. Once they are putting their snouts under and lifting them out, dislodging the tent pegs that are holding them down, they are ready to be poisoned. You do all that in one or two nights.

**Mr YOUNG** — You have sort of answered my next question about the strike rate and actual efficiency of getting 100 per cent of that mob, because my thought process was, ‘Well, if I see my mate Steve eat that grain and then drop dead, I ain’t sticking around to eat it myself’.

**Mr RESIDE** — It does not seem to worry them. They come back the next night.

**Mr YOUNG** — They are repetitive like that; they do not learn their lesson?

**Mr RESIDE** — No.

**Ms RESIDE** — Also the 1080, as Simon said before, is not immediately effective. It takes a few days.

**Mr YOUNG** — Okay.

**Ms RESIDE** — And also because they like grain they do not leave much behind.

**Mr YOUNG** — Right. You said yourself that it is a long process. Has any work been done on the costing of how much it takes to get a certain amount of pigs? If you have got a mob of 40 pigs in one particular area that you want to knock off, what does this whole process cost?

**Mr RESIDE** — Well, there has not been enough work done in Victoria, but I am sure you could get that costing from interstate, from the ACT. The thing about it is that if you do set it up you set it up across the whole landscape, so you might have a mob of 40 pigs in one area but you would be doing multiple mobs of 40 pigs. You would spread your load out as far as possible. It is ground-based. All you need is one person in a four-wheel drive vehicle and the baits, and you can cover tens of kilometres of high country at the same time to do your baiting. I do not know what the costs — —

**Mr YOUNG** — You have not looked into it from other states?

**Mr RESIDE** — No. A 10-day poisoning program might cost 15 to 20 grand or something, all up.

**Mr YOUNG** — Right.

**Mr RESIDE** — It is about 10 days.

**Ms RESIDE** — The current project that we are working on was two people for 10 days because they had to canoe in, so it was the cost of their labour. A lot of it was setting up — having the drums to put the wheat in and having things like that.

**Mr RESIDE** — That cost a bit more. That cost about 15 grand, but that was labour-intensive because of having to canoe in, so having to have two people to monitor the bait stations, whereas it would be very much like what the dogmen do in the department. They just work independently — just drive around by themselves in a four-wheel drive.

**Mr YOUNG** — Yes, all right. Something else that we have heard mentioned quite a lot, because we have been talking about deer a lot, is the removal of carcasses and how that becomes an issue. Obviously with this kind of method you do not remove the carcasses, so what commentary have you got in relation to that?

**Mr RESIDE** — Not concrete evidence, but the evidence you have got is in one case I think it was 30 pigs, or 28 pigs or something, and there were 12 or something left the next night. A certain number come in every night, and then when you deploy the poison the next night there is only half the number or whatever that do not take poison that you deploy the second night to get those animals. You cannot find the carcasses. They can wander for miles, so you really cannot. A school group found a dead pig on the Snowy — so evidence — but you cannot go out and find them.

**Mr YOUNG** — So there is no way to remove those carcasses?

**Mr RESIDE** — No.

**Ms RESIDE** — Not in those areas, but if they are in agricultural areas where you can access them there is not a problem. But just in the bushland areas where there are no tracks to the bait stations, you have to go along the river — you know, that sort of stuff — it is just not possible. And it is very thick bush.

**Mr YOUNG** — When using 1080, is there a risk of secondary poisoning from those carcasses lying around?

**Ms RESIDE** — It is not my understanding.

**Mr RESIDE** — Yes, there could be. You cannot totally rule it out, but again, in the forest areas the animals that are attracted to it — again, Jenni and I did some research on this — it was mainly birds that were investigating the carcasses of pigs in the arid rangelands in northern New South Wales. In the forested areas most birds would not have access to the carcasses as such, because they would probably die under shelter. They were mainly ravens but sometimes birds of prey as well. The other thing up on the Snowy River would be goannas. Goannas have a huge tolerance to 1080. They can just keep eating it and eating it and eating it. It does not kill goannas. They would be the most likely animal to scavenge a carcass.

**Mr YOUNG** — Do they have a higher tolerance than pigs?

**Mr RESIDE** — Yes, a huge tolerance. Yes, it is almost impossible to poison a goanna with 1080.

**Mr YOUNG** — Really?

**Ms RESIDE** — That is one of the reasons why 1080 is good to use. There are a certain amount of native animals that have a high tolerance to it.

**Mr RAMSAY** — I think we have probably nearly covered it all. What do you think about a bounty on wild pigs to encourage greater interest from our recreational shooters, if we actually need to?

**Ms RESIDE** — I think if you are going to send people into national parks, you really need people that are licensed and know what they are doing and that are ethical et cetera. If it is talking about agricultural land, I think that is probably quite a reasonable thing, although I know of people in New South Wales, many years ago — because I have relatives up there — complaining that when pig shooters to come through their area, they use to clean up the domestic pigs and some breeding pigs and things, so I do not know.

**Mr RESIDE** — Yes, I am not in favour of it just because of that disturbance factor, not as a management tool. Once the shooters start chasing them around, they will disturb them and move them on. Professional shooters are a little bit different. They do use professional shooters in Queensland, and again they use a dog. The dog tracks the pig down, and they shoot it. They are very effective at getting pigs, particularly when they are associated with commercial enterprises, but again, they do not get the mob of pigs. If there are 15 or 20 in a mob, they only get a couple and then the others run off and break up into smaller groups.

**Ms RESIDE** — One of the reasons why pig populations increase is that of migration. If you actually spread one mob of pigs, they gather more and you might be actually attracting more mobs of pigs. That is something to be very concerned about, I suppose, if you have a bounty and have any person out looking for pigs. I think within the hunting community there is a lot of people that want to go pig hunting. I have heard anecdotally that people will go and let pigs into national parks and things like that so there is pig hunting available for hunters. I do not know whether it is true or not.

**The CHAIR** — You have made a few references to this and I cannot remember seeing anything about the ACT where 80 to 85 per cent of pigs — I am assuming in certain areas — have been eradicated and in Queensland. Is there any — —

**Ms RESIDE** — No, I do not think there is actually. I do not think that is in there.

**The CHAIR** — Yes, I just think it would be good to see that as a bit of a comparison that we could look at.

**Mr RESIDE** — Yes, we can send you that. Sure.

**The CHAIR** — You could? Okay, because that would be good for us to look at the idea of the effectiveness. In those cases has it really just been baiting or have they done other things as well?

**Mr RESIDE** — Just baiting.

**The CHAIR** — Just baiting in a particular geographically confined area, I guess.

**Mr RESIDE** — Yes, it is covered in the Namadgi National Park. It is a pretty large area, but I can certainly send you the copy of that.

**Ms RESIDE** — Should we send it to Kieran? Is that the person we send this document to?

**The CHAIR** — If you send it to the secretariat at Parliament House, we will get it through there. Thank you. It looks like there are no further questions. Thanks again for coming and presenting.

**Ms RESIDE** — Thank you for the opportunity.

**Mr RESIDE** — Thank you very much.

**Witnesses withdrew.**