

Here in Golden Bay, you can talk amicably about sex, religion or politics, but the one topic to steer clear of at a dinner party is 1080. Sodium monofluoroacetate. This chemical is aerially applied over large areas of indigenous bush to suppress possums, which are vectors of bovine TB and which destroy vulnerable vegetation and fledglings on their nests.

On the one side, the outraged opponents of 1080 are an unlikely alliance of new-age chemophobes, dog owners, and hunters – especially pig hunters. On the other side, there is an equally unlikely coalition of bird lovers and farmers (cattle and deer), who are worried about TB in their herds and the threat this poses to their livelihoods.

For three years, this writer earned his primary income from “possum trapping” – not that traps were the preferred means of killing: cyanide was better in terms of time spent and weight to carry. I have three personal impressions to add to the debate. First, it is wrong to say that that, in many locations, possum control could be conducted by solely by ground operators; a large proportion of many New Zealand hillsides are “tiger country”: horrendously steep, full of bluffs, and festooned with bush lawyer or other impenetrable vegetation. Most people stick to the spurs and ridges and ignore the vast areas in between. I wouldn't be surprised if I was the first and the last person stupid enough to set foot in many of those places.

Second, there's my own anecdotal evidence for the effect of 1080. For 35 years, I have had lived for part of the year in a very isolated home surrounded by indigenous forest. The continuing possum-induced loss of species has been a personal source of grief. The advent of 1080 offered a ray of hope in this depressing scene. Some months after the first 1080 drop, I was delighted to discover – within 100 metres of my house – nests of weka, kea and morepork. All of these would have been expected to succumb to secondary poisoning. Half the 3000 possums I had skinned in my days as a possumer had already been scavenged by the time I could reach the carcasses – and often by weka or kea. I'm sure that there are some 1080 deaths of birds, but this must be balanced against bird losses by possums – either directly from eating the fledglings or indirectly from altering the habitat.

My third observation is that there are some potential substitutes for 1080, including those that might be more humane and also non-toxic to dogs. With such a new chemical, a large component of the powerful anti-1080 lobby would fade away, to the intense relief of the policy makers. But 1080 – and all its possible substitutes – have a major conceptual

flaw that needs to be emphasised. Possums have the tendency to become bait shy. This is not necessarily because possums learn to avoid baits as a result of sub-lethal doses, it is because kill rates of 98% or more impose a powerful selection pressure on survivors. Some of these survivors have an instinctive aversion to eating anything that they have not learnt to consume when riding around on their mother's back. In technical jargon, we are breeding a race of neophobic possums; prolonged poisoning – with any substance – is just not sustainable.

It is conceptual wrong to assume that a patch of bush can be maintained as a sort of living museum, where everything is locked in time. The bush was changing prior to the arrival of humans – we have just greatly accelerated this process. The best we can hope to do is to slow down the rate of change, particular in offshore or mainland “islands”. As for the bulk of New Zealand's indigenous forest, it will continue to remain under forested cover – the soils, rainfall and temperature dictate it – but it will be quite different to the bush we have come to love and revere. We can certainly influence the rate of change and the direction of change, but change there must be. Our resources are limited, and we must intelligently focus our efforts at controlling introduced weeds and pests.

The Acclimatisation Society once tried to introduce elephants, for Heaven's sake. But these would not have been a problem because large animals are easy to deal with. The smaller the pest, the more problematic they are to eradicate and – often – the more damage they do. Thus possums are harder to control than deer, rats harder than possums, wasps more difficult than rats, and hardest of all are micro-organisms like the fungus *Amanita muscaria*, which is spreading through the forest floor under my beech trees.

In the meantime, the debate is not helped by: starry-eyed urban idealists who abhor killing – particularly cuddly, furry creatures; those hunters who love killing, so long as they are the ones who get to do it; those scientific illiterates who are viscerally opposed to all “chemicals” (ignoring the fact that all matter consists entirely of chemicals, and 1080 is a natural substance found in Western Australian flora, from which possums from eastern Australia have no immunity); those European cultural imperialists who – like old-testament preachers – pontificate that “Nature knows best” and that mankind should not attempt to undo the disruption that mankind has caused. The truth is, for better or worse, the destiny of the world is now in our hands, and we can no longer hide in Nature's apron strings.

Piers Maclaren