Student 1: Low Excellence

NZQA Intended for teacher use only

VIEWPOINTS and change over time.

Department of Conservation:

DOC strongly agrees and fully supports the use of 1080 poison to control possum populations, as they believe the benefits of 1080 outweigh the negatives and view this issue from an environmental perspective. DOC has this view because they believe that 1080 is the most efficient way to cut down the numbers of predators such as possums, rats and stoats, and consequently protect the native environment... 1080 is biodegradable and does not build up in the food chain...Studies have shown that per drop of 1080 poison, 98% of possums and 90% of rats are killed. In the Tongariro Forest Park, 9 out of 10 North Island brown kiwi chicks would die from actions of these predators, but after an aerial 1080 operation survival rates increased to 70%...





1080 is also easily used in inaccessible places like Fiordland where it can be safely dropped from planes and in... This advantage of 1080 must be taken into consideration as large parts of NZ have limited accessibility. Failing to control pests in these areas would... DOC realise that 1080 has effects on other animals and birds, but as a means of protecting the environment it is the best way of eliminating the possums...

DOC have also viewed this issue from an economic perspective. They considered the bounty system ... but have found that 1080 is the "most cost effective method of providing landscape scale pest control over difficult terrain"... The average cost per hectare of aerially spreading 1080 is about \$17 Also using 1080 creates a range of employment opportunities especially in some rural areas...





Therefore, DOC currently believes their 1080 operation should continue as it is the cheapest and most effective option to be used nationwide.

Change over time:

The Department of Conservation's initial view on the issue of possum control was firmly in support of using 1080, but negative publicity and scientific research has encouraged DOC to look use a range of alternative methods.

...Studies including statistics which show large numbers of birds [25% of keas, 10% tomtits] and 50% of deer dying after some 1080 drops. This brings serious negative publicity and this evidence encouraged DOC to consider using other options. These trials have taken place mostly in more accessible areas and near areas used by the public or close to farms.



DOC's viewpoint has changed from supporting sole use of 1080 to advocating the use of biological controls and a more varied approach. This multi method approach is supported as the most effective, with research from agencies such as Landcare and other global companies producing viral infections to kill possums (stopping them breeding) These baits do not need to be used as often at 1080 and is cheaper and safer in the long run... There is statistical evidence showing that this method reduces the risk to native species and is more in line with the conservation principles of – kaitiakitanga.

RECOMMENDED course of action

I recommend keeping the status quo, maintaining the use of 1080 poison.

Maintaining the use of 1080 is not only the best course of action, but is better than the others because it is a more cost effective than other possum control ways and can be dropped in areas with limited accessibility. All spending on 1080 drops, including by the Animal Health Board, AHB, regional councils, DOC and private organisations (farmers) is estimated at \$15-\$20 million a year. DOC estimates that it only costs on average \$17 per hectare for aerial drops... DOC spending in 2009/2010 on 1080 operations was estimated to be between \$2.5 and \$3 million for both aerial and ground based control. Spending fluctuates slightly from year to year depending on operational demands, but this figure is consistent with DOC's recent annual spending on 1080 operations. With the Government tightening up its spending DOC has introduced for more cost-effective ways that will solve the possum population problem.

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Maintaining the use of 1080 means it can control possums in places that are some distance from town and hard to access like the rugged Westland and Fiordland areas. These areas are the home of many threatened birds e.g. kea... 1080 can be aerial dropped into such places controlling possum numbers therefore 1080 is a better alternative than hunting and trapping which is restricted to areas where people can regularly get to, also they can't kill as many possums as 1080. If we relied on hunting and trapping these areas would not be controlled and possum numbers would continue to grow resulting in further damage to native forests e.g. beech forest on the West Coast, and threatened species would be lost.



1080 can cause accidental poisoning of non-target species, however there are not many proven cases, I think the cost of any native wildlife being accidentally poisoned is outweighed by the protection of the habitats with the eradication of the possum. There are ways that DOC could limit any problems by using it in regions with limited accessibility and work with groups like Basically Bush who have an economic interest in the possums. So, until a better alternative is developed that works, maintaining the use of 1080 is not only the best course of action but better than hunting and trapping. Biological controls are being researched but these haven't been proven.

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