

# 1080

## *what is it, and why and how we use it*

**Possoms need to be controlled to reduce the risk of Tb and to protect conservation values. The use of 1080 toxin (sodium monofluoroacetate) is the most cost-effective method available for consistently reducing possum populations in large, rugged or scrub/ bush covered areas.**

### **What is it?**

1080, or sodium monofluoroacetate is toxin which occurs naturally in plants, probably as a defence to browsing by animals. It is manufactured synthetically for use as a pesticide to kill possums

### **How does 1080 work?**

1080 is readily absorbed through the gut, respiratory tract, mucous membranes, open wounds and abrasions but is less readily absorbed through intact skin. Once absorbed 1080 stops the energy cycle of living cells, causing mammals to die of heart failure while they are semi-comatosed.

### **Why is it used?**

1080 is the only poison approved for aerial spreading so is practical and cost effective for use over large, rugged and bushy areas where ground control is unsuitable.

It is usually spread as cereal pellets, dyed bright green and flavoured with a lure, which makes them less attractive to birds. It is sometimes coated onto carrot baits, usually in association with deer repellent. It is also biodegradable and water soluble so does not build up in the environment.

### **What impact does 1080 have on:**

- **Water?**  
1080 is water soluble so any uneaten bait is dissolved into the soil or water and breaks down into non-toxic naturally occurring substances. Water monitoring programmes following aerial 1080 operations have shown no evidence of prolonged contamination in surface or ground waters. GPS technology ensures 1080 is dropped clear of waterways.
- **People?**  
There have been no recorded human deaths in New Zealand from 1080 poisoning. 1080 is much less hazardous to humans than some other poisons, like cyanide. Research shows 1080 does not cause cancer or birth defects, but those working with 1080 should follow strict safety precautions, as with all poisons.
- **Native birds?**  
Birds are less susceptible to 1080 poisoning than mammals and the bait is made less attractive to them by dyeing the pellets green and lacing them with a lure for possums. Where 1080 has been used, the drop in predator numbers means bird life can flourish, outweighing the small risk it presents to birds. Research shows significant increases in native bird numbers in areas where 1080 has been used.

- **Dogs and livestock?**  
**Dogs are ten times more vulnerable to 1080 than possums and will die if they consume 1080 pellets, or possums killed by 1080.** If there is a 1080 operation nearby, keep your dog away from the area and or on a leash and muzzled. Poisoned possum carcasses can take several months to decompose so take precautions in previously poisoned areas. 1080 is also highly toxic to livestock so they too must be kept out of treated areas.

### **How will you know if a 1080 drop is occurring near you?**

Before carrying out an aerial 1080 drop contractors:

- Get permission from the local Medical Officer of Health.
- Contact the owners of the properties to be treated and neighbouring properties with information on 1080 and how to ensure stock and pets are kept safe.
- Visit local schools and supply information.
- Place warning signs at main access ways in the area and public notices in the local newspaper to advise of the drop.

### **Future Use**

The Animal Health Board (AHB) and the Department of Conservation (DoC) have applied for reassessment of 1080 and substances containing 1080 that are used in New Zealand. They propose that current approvals for the use of 1080 be maintained pursuant to Section 63 of the HSNO Act 1996. Their application will be considered by the Environmental Risk Management Authority and a final decision will be made.

**If you would like more information on 1080 please freephone 0508 800 800.**