## **UC Agriculture & Natural Resources**

## **Proceedings of the Vertebrate Pest Conference**

### **Title**

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### **Permalink**

https://escholarship.org/uc/item/9wi1t5bx

## **Journal**

Proceedings of the Vertebrate Pest Conference, 9(9)

### **ISSN**

0507-6773

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### **Publication Date**

1980

# THE NEED FOR GOOD PUBLIC RELATIONS AND STAFF TRAINING IN THE USE OF TOXINS IN PEST DESTRUCTION

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#### INTRODUCTION

With ever-increasing environmental pressures being placed on all animal control agencies worldwide, particularly those utilizing toxins as control weapons, the time has arisen where those agencies must attempt to anticipate these pressures which are likely to become more vocal and counter them wherever possible before they happen. It is an accepted fact that the world as a whole has become extremely environmental conscious in all fields, not just pest control. This can be seen or heard most days of the week in newspapers, on television or radio. The reasons for this awareness of the environmental problem are wide and diverse but often it is simply because people, particularly young people, (a) don't understand; (b) don't want to understand; or (c) because they are anti the system generally anyway.

Many people do seem to believe that every living thing has a divine right to survive regardless if it may in turn affect another living thing. It often does not seem to matter what effect it has on the environment or the community as a whole. These people are often against any type of chemical control and, as in our field, pesticides and rodenticides are taboo. Often it appears that politicians can be swayed by these people; pressures such as environmental issues can become election winners. Sadly, also, often the decisions made do not appear the correct ones for people who know both sides of the story. Animal control personnel have learned often as a bitter experience of a political decision that created major problems for the field man.

Experienced field men know that pest animals can stay at a low static level for long periods causing little damage that will affect growers of livestock or food stuffs. However, change in weather conditions, several good breeding seasons, lessening pressure from predators, and many of the these pests can then quickly increase to the stage where growers are affected financially and in the longer term other people, and often the economics of an area or nation can suffer.

Many of the people most vocal against animal control of any type still would not worry unless the problem affected them directly or their immediate families. They would still criticize our work unless, of course, it moves into their home or surroundings; then it must be removed as soon as possible even if it is often down the road to cause problems for someone else. The time has arrived for all control agencies to concentrate on selling the need for a sensible approach to animal control.

- (1) To control animals and birds where they do become pests and cause, or are likely to cause, damage.
  - (2) To sell the need for a balanced wildlife management plan that is acceptable to most people.
- (3) To ensure that all staff employed are well trained in all aspects of control both from the safety and humane aspect.
- (4) To sell the idea that most people employed in animal control work are, in fact, environmentalists themselves doing often far more for the empironment than the vocal do-gooders that often criticize our work.

Vertebrate pest control management staff must therefore ensure that all personnel involved in this work are well trained to ensure that all acts, regulations, guidelines, etc. are strictly adhered to at all times, simply because one stupid mistake or attempting to shortcut a procedure can effectively destroy years of good public relations in a single moment. Many people have seen this happen when even an honest mistake has caused an animal control agency to come under heavy criticism often from people who appeared to support it.

Nowadays with the advent of television and, to a lesser degree, newspapers and radio, any mistake that is large enough or, in the case of a shortage of news, even a small one can become newsworthy and quickly spread across a nation. When the control agency attempts to counter a story, often they find it is no longer considered newsworthy and their side of the story is not given.

For this reason, all personnel involved in control work must be made to realize what the effect of a possible honest mistake may have on the agency as a whole, possibly nationwide or even further. The restrictions in U.S.A. on 1080, for instance, have been felt by most vertebrate control agencies in the world.

Vertebrate pest control agencies in the past usually have kept a low profile whereby most people, unless directly involved with staff or their work, would not realize what work is being done. Even if they did realize work was done, they did not know how. While it has been possible to operate this way in the past, I doubt if it is going to be possible in the future.

It would appear we are going to be forced into the situation of keeping people informed on what is proposed to be done and how it will be carried out and then be able to answer their criticism on that work. In other words, we will probably have to justify our work and our methods. Therefore, we will

need to assure people that the methods used are the most effective and humane, that they are necessary, and at all times carried out by well-trained personnel. This will increase greatly the public relations carried out by all agencies, as we will need to sell ourselves and our work to the community as a whole.

If further pressure was brought to bear on the politicians to restrict toxins still further, then our efficiency must be drastically reduced.

While it could be conceded that a toxin like 1080 does destroy some nontarget species when used in some control techniques, it is so versatile that it must be possible to be utilized in another way to minimize that risk. Often though that toxin is restricted and other toxins far less humane to the target animal and even more toxic to humans are used instead; these often affect nontarget species as well. Admittedly, if an area has resident endangered species, then I believe that area should be closely restricted until a better control method is devised so the species is not jeopardized.

#### **NEW ZEALAND PEST DESTRUCTION**

New Zealand has been lucky because they have learned from what could be called other agencies' problems, particularly with toxins.

Animal control is carried out on four main animal species plus one avian species at the present time, though various government agencies have approached the Agricultural Pests Destruction Council to consider carrying out control on other rodent, avian and insect species. The currently controlled species are as follows:

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The European Rabbit - (Oryctolagus cuniculus)
Australian Opossum - (Trichosurus vulpecula)
Hare - (Lepus eurpaenus)
Two types of Australian Wallaby - The Damma or Tamma (Macropus eugini) and Red Necked or Bush (Macropus rufogrisea)
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The main toxin now used is 1080 (sodium monofluoroacetate), this having superseded both arsenic trioxide and strychnine, both of which have been withdrawn from boards. These poisons can no longer be used for animal control without special written authority from the Agricultural Pests Destruction Council and this has been granted only once in the last 2 years. Approximately two tonne of 1080 powder is used each year on carrot, oat, jam and pollard baits as well as less than a kilogram of DRC 1339 for bird control on the rook (Corvus frugilegus).

In the past there has been very little criticism of our operations; yet in the last 2 years pressure has been brought to bear on our organization, especially on toxins like 1080 by some environmental and hunting organizations. There was an attempt to get the government to produce an Environmental Impact Report on 1080 but instead three separate reports on the use of 1080 were produced.

The Agricultural Pests Destruction Council produced a 36-page report covering the use of toxins in New Zealand, particularly 1080, in which we covered the need to carry out animal control and the necessity to use 1080. The report was published as a soft-cover booklet and proved to be a very good public-relations exercise. Many thousand of copies were printed and distributed throughout New Zealand. All Members of Parliament (Government) received a copy as did hunting, conservation, acclimatization groups, libraries, schools, newspapers, etc.

The result was that, other than some minor changes to the regulations controlling 1080, the pressure eased.

Toxins in New Zealand used for animal control are restricted in such a way that only trained licensed personnel may purchase or use them. All toxins are categorized under various schedules of the Agricultural Chemicals Board (Vertebrate Pest Control) regulations. To be able to purchase or use a toxin under these regulations, a person must hold a license. These are obtained by having to pass a written examination for each toxin required plus having had practical training in the use of that toxin from a trained person. There are many restrictions, all of them workable on the placement of toxins in a public place, whereby written authority is required from the local authority and the Medical Officer of Health.

The toxin 1080 is further restricted for use by animal control authorities only and, like all other toxins, there is a maximum allowable strength that can be applied to bait. Rabbit control with 1080 is restricted to the following strengths:

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Carrot bait - 0.02% 1080 or 200 grams to the ton 0ats - 0.04% 1080 or 400 grams to the ton Pollard bait - 0.06% 1080 or 600 grams to the ton
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Opossum control with 1080 is as follows:

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Carrot - 0.06% 1080 or 600 grams to the ton Pollard Pellets - 0.06% 1080 or 600 grams to the ton
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To increase the toxic loading further, an operator does require written permission from the Agricultural Chemicals Board.

Agricultural Chemical Board inspectors monitor the bait strengths used by taking random samples for analysis from the various control authorities. This ensures that over-strength bait is not used. An authority caught using over-strength bait can be prosecuted and lose the operator's license. This will also happen if the regulations are disregarded.

The Agricultural Pests Destruction Council has also introduced a series of written competence examinations on all toxins used that staff can study for and obtain a certificate if they pass. The actual examinations range from 2 to 3 hours in length and require a 75% pass mark. If the candidate is successful, he obtains an increase in salary for each exam plus a certificate. To further assist staff to pass these exams plus to ensure that toxins are used correctly, the A.P.D.C. operates a comprehensive training program each year. This program ensures that most senior staff attend at least one seminar per year. Many pest destruction boards have now appointed staff training officers who are trained to teach staff all aspects of animal control. Each of these officers is expected to attend a week-long refresher course each year to be kept informed on all changes to Acts and Regulations plus any changes in control methods. Their basic job is to ensure that all staff are well trained in Animal Control and to make sure all safety procedures are used when using toxins and firearms.

The 1980 training program operated by the Agricultural Pest Destruction Council consists of 14 courses or seminars ranging in length from 3 days to 1 week duration.

### They include:

- A three-day senior staff seminar where the latest methods and changes in legislation, etc., are discussed.
- Training officer courses both for existing officers and newly appointed officers covering legislation changes, staff training, safety procedures, bait assessment, endangered species and their habitats.
  - 3. Cadet courses for A.P.D.C. cadets on all subjects.
  - 4. Specialized poison course on aerial and ground baiting procedures under field conditions.

This training program involves at least 15% of all staff employed in the industry attending a course or seminar this year. Further a 24 assignment correspondence course is available for all personnel interested; currently about 20% of all personnel are completing this.

To further ensure that toxins are used correctly within our industry, the A.P.D.C. now employs 6 field officers whose task it is to visit Boards to check that the correct methods are used at all times. These staff also check toxin storage areas and actual poison operations. The A.P.D.C. also supplies free of charge wall charts on the mixing of toxins on various baits, toxin symptoms and treatment, plus dye color charts to ensure that all bait is dyed the correct green for bird protection, a legal requirement now for bait used in animal control.

The two poison factories in New Zealand are Council-operated and all 1080 is diluted into a stock solution at these factories. The stock solution contains 100 grams 1080 to each liter of solution. This is the only way that approved operators can obtain the poison. The factories also produce all Pollard pellets and other poison mixtures like 1080 paste and 1080 gel for broad-leaf poisoning for animal control agencies, all of which is mixed under the watchful eye of a qualified chemist who monitors toxic loadings and is in charge of the quality control.

We are of the firm opinion that the use of toxins needs to be carried out by qualified well-trained operators who are mindful of their obligations to the industry and the public. For this reason, we concentrate on restrictions on toxic loadings and staff training to ensure that we will have the weapons needed to control animal populations when needed.

#### PUBLIC RELATIONS

The public relations part of our operation is under the watchful eye of a Public Relations Committee of the Agricultural Pests Destruction Council, a committee especially appointed for that task.

It has been realized that the only way to effectively have good public relations is to appoint somebody to keep everybody fully informed on our operations and the effects of those operations. Also there is a need to quickly answer any inquiries or possible criticisms of our work as soon as possible.

This Committee therefore reads all newspaper clippings on any subject related to animal control and answers them when needed. The Council has purchased a 5-ton truck fitted with a display unit on the back of it that opens into a large display-type caravan. This unit travels all over New Zealand visiting agricultural shows, schools, colleges, field days, etc., spreading the reason for animal control and the need to use toxins. The caravan has large display boards on it that have large colored photographs of animals and damage as well as control methods. It is also fitted with an audio visual unit that continually shows special slide tape shows on various subjects.

When the unit is set up at an agricultural show, specific equipment used in animal control in that area is also displayed. Often this will include bait-cutting equipment and various types of specially equipped vehicles. The unit is manned by staff of the local Board, though at large shows A.P.D.C. field officers are also in attendance. The unit allows the A.P.D.C. to get the message across in cities and towns often where few people realize there is animal control done in New Zealand. Also supplied with the unit are many types of handout pamphlets on various subjects relating to our operations. These are readily taken by onlookers, particularly children, who seem to collect them, but this in turn at least gets them in their homes where parents often then read them. For interested adults, the 1080 publication and other more comprehensive types of books are available free of charge from personnel manning the display.

Another public relations exercise is the introduction this year of a new quarterly magazine called "Counterpest" that is now produced by our industry. This magazine is approximately 16 pages in length and its articles basically related to animal control. Anyone can get a story published in the magazine which already has a large mailing list. Currently it is sent free of charge to all Members of Parliament (Government), news media people, plus libraries, government departments and all Pest Destruction Boards, etc. This publication has already created a lot of interest and favorable comments from people from all walks of life.

Another area that we have had some success in the last two years has been operating odd seminars for newspaper, radio and television reporters, particularly agricultural reporters where they met members of Council over drinks and discussed animal control problems. This coupled with supplying them with copies of all available data on the use of toxins in animal control appears to have curtailed to a large degree the problem of our operations being reported incorrectly. Reporters often contact us if they have any inquiries and even have referred letters to the editor to us for comment before publishing them.

We have also attempted to keep ratepayers or farmers well informed when using toxins on their land. As well as verbal warnings of the danger, many Boards issue small cards or forms with important information on re the poisoning of pests on the properties. One such card shown below gives information before and after the poisoning is done:

# SIDE ONE AFTER POISONING HAS BEEN LAID ON YOUR PROPERTY

USE as few dogs as needed on the poisoned, as well as the surrounding, areas - keeping them under observation.

KEEP all your dogs secure - so they are not able to wander away when not being used.

TELL your musterers and any visitors that poison has been laid recently.

KEEP a record of frosts, rain days, etc.

BEFORE restocking, contact the Board to ensure that it is safe.

(The Board can arrange to have any bait left tested for toxicity).

THERE are varying times for restocking your Area Foreman will discuss this with you.

AFTER restocking, check your stock reasonably frequently.

IN THE EVENT of suspected poisoning of stock, contact the Board's Supervisor immediately and your own veterinarian to establish the cause of death and number of stock lost.

IF you have any problems, don't hesitate to contact the Board's staff.

PEST DESTRUCTION BOARD

# SIDE TWO BEFORE POISON IS LAID ON YOUR PROPERTY

PREVENT shooting of rabbits or any other pest - quiet rabbits are easier to kill.

(TRESPASS ACT gives you some rights over unauthorized people wandering over your property.)

STICK to agreed stock movements.

CHECK that fences are stock-proof - so stock can't get back to the poisoning area.

TELL your neighbors that poison is to be laid on your land.

CHECK dog kennels and chains or dog motels so your dogs stay secure.

EMETIC PILLS and biting chains are available from the Board if required.

FEED your dogs meat just before the poison is laid to prevent possible scavenging.

PEST DESTRUCTION BOARD

This rational approach to public relations by our industry I feel has benefited us greatly. No longer though could we afford to say nothing of our work and hope no one will be interested. We must come out in the open and state what we are doing and be prepared to defend the need for that work. I believe also that we should ensure that successful operations should also be reported on.

Public relations work we have planned for the future include the publication of more pamphlets on our work, particularly on the use of toxins. One currently planned shows the dangers of toxins to people in diagram form instead of just the written form, making it easier to understand. Plus it answers most of the questions asked on 1080. Two examples are shown of this booklet:

Question One: What if somebody ate an animal poisoned with 1080 using the highest toxic level

allowed with 1080?

Answer:

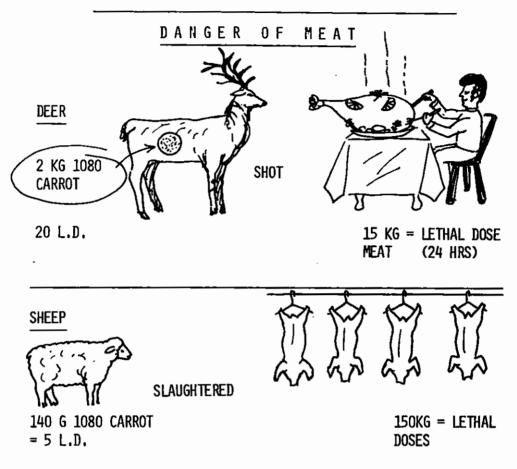
See Fig. 1.

Question Two:

What danger is there of 1080 leaching out of bait applied to land?

Answer:

See Fig. 2.



THIS MEAT WOULD HAVE TO BE EATEN IN 24 HOURS.

Fig. 1. An example of an illustration to be used in a planned educational booklet to explain the dangers of toxins.

It is also intended to cover as many of the schools and colleges in New Zealand as possible explaining our work, the types of toxins and bait used and the danger to children. We are working very closely with the New Zealand Wildlife Service and other organizations interested in bird life to ensure that our baits have as little effect as possible on those species.

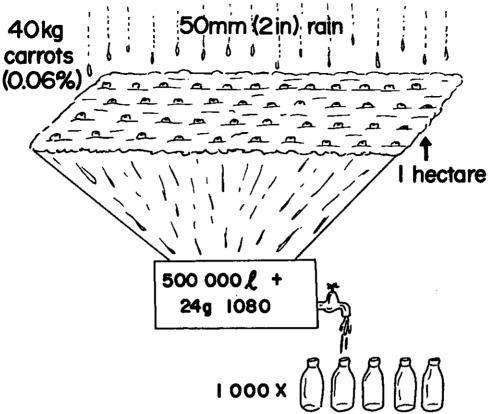
Already in the North Island of New Zealand, we have ceased to aerial sow any carrot that hasn't had all chaff (fines) removed prior to applying the toxin because these fines killed some birds. All our staff are being trained to recognize the various bird species and know where any endangered species habitat is. As well, a lot of work is being carried out with lures in an attempt to find lures that still attract animals but hopefully deter birds. Some lures have already been banned, like raspberry and juniper because they are attractive to birds.

This year sees the introduction of seminars by animal control authorities for private hunters of opossums. (Opossum skins currently are fetching up to \$20.00 NZ each and approximately twelve million dollars NZ are earned by New Zealand with exporting these furs). The seminars are planned to ensure that all the hunters realize the precautions they must take against accidental bird kills, that they understand the regulations governing the use of toxins and how to use cyanide paste correctly. The drawcard to get these people to the seminars is they will be shown how to prepare their skins better for selling.

This way hopefully the toxin they use will be used more effectively and safely.

# LEACHING DANGER

ASSUMING 40kg OF CARROT OF THE HIGHEST TOXIC LEVEL WAS APPLIED TO A HECTARE.



5,000 MILK BOTTLES FULL OF CONTAMINATED WATER WOULD CONTAIN ONE LETHAL DOSE OF 1080 TO A 70 KG MAN.

ALL OF THE WATER WOULD HAVE TO BE CONSUMED IN 24 HOURS.

WITH RABBIT BAIT IT WOULD TAKE 3 TIMES AS MUCH, OR  $15,000\,\mathrm{Milk}$  BOTTLES OF CONTAMINATED WATER.

Fig. 2. An example of an illustration to be used in a planned educational booklet to explain the potential hazards or lack thereof of toxins.

New Zealand relies on its agricultural production to survive as it produces approximately 80% of all exports. The Agricultural Pests Destruction Council's function is to protect that production from the ravages of animal pests and to do this we require the use of toxins to succeed; therefore, staff training and public relations are our two main approaches to ensure that we can use toxins with the minimum of restriction.

In conclusion, I believe that the Vertebrate Pest Control Organization must spend more time ensuring that all personnel employed in this work are well trained in the use of toxins in animal control. They must be able to explain simply and honestly their work and its benefits. In other words, sell the need of that work and the toxins used. Public relations must become a major part of all our operations both in ensuring that the rural and suburban members of our communities understand why we are required, that the work we do is carried out by well-trained competent personnel who can recognize problems, formulate the changes necessary and ensure that the nontarget species are protected as much as possible.

There is no doubt in my mind that most staff employed in vertebrate pest control do more for conservation than most of our vocal critics. Let's get out and ensure that the public understands this and not unjustifiably criticizes our work. Everybody benefits from our work in the long term, no matter in which country that work is carried out.